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Appendix A-2

Air Quality Impact Assessment Report

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Air Quality Impact Assessment Report

Conversion of Scarborough Rapid Transit Right-of-Way to Busway – Transit and Rail Project Assessment Process

Toronto Transit Commission

60729927

August 2024

Delivering a better world

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AECOM: 2015-04-13

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Executive Summary

The Toronto Transit Commission is undertaking a Transit and Rail Project Assessment Process for the Conversion of Scarborough Rapid Transit Right-of-Way to Busway project, which, aims to convert the north-south portion of the decommissioned Line 3 Scarborough Rapid Transit corridor into a dedicated busway. As part of the Scarborough Rapid Transit decommissioning plan, two phases were developed. Phase 1 would see the Toronto Transit Commission operate an interim bus service on-street, which was planned to go into service by November 2023, however, due to the Scarborough Rapid Transit derailment in July 2023, interim bus service started in August 2023. The Toronto Transit Commission is currently advancing the detailed design of Phase 2, which involves converting the at-grade north-south portion of the Scarborough Rapid Transit right-of-way into a busway, allowing buses to operate in the converted busway between Ellesmere and Kennedy stations and continuing on existing transit priority lanes on Ellesmere Road between Ellesmere and Scarborough Centre stations, as implemented in Phase 1.

AECOM Canada Ltd. (AECOM) has been retained by the Toronto Transit Commission to assist in the completion of the Transit and Rail Project Assessment Process for Phase 2 of the Scarborough Rapid Transit decommission plan. To fulfill the conditions of the Transit and Rail Project Assessment Process, AECOM has completed an Air Quality Impact Assessment Report. The Study Area extends from the Toronto Transit Commission's Line 2 Kennedy Station, along the Line 3 right-of-way to Ellesmere Station. This Study Area includes a 500-metre buffer to capture air quality impacts and effects from traffic within the busway corridor and the surrounding area. The 500-metre buffer is recommended through the Ministry of Transportation's Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020) ("Ministry of Transportation Air Quality Guideline"). Within this Study Area, a total of 96 sensitive receptors and 17 critical receptors were identified.

Based on recommendations within the Ministry of Transportation Air Quality Guideline, the air quality impact assessment included the following contaminants of concern from vehicle emissions:

- Nitrogen dioxide, NO_2 (assessed over 1-hour, 24-hour, and annual averaging periods).
- Carbon monoxide, CO (assessed over 1-hour and 8-hour averaging periods).
- Sulphur Dioxide, SO_2 (assessed over 10-minute, 1-hour, and annual averaging periods).

- Particulate matter (<10 microns), PM_{10} (assessed over 24-hour period).
- Particulate matter (<2.5 microns), $PM_{2.5}$ (assessed over 24-hour and annual averaging periods).
- Acetaldehyde (assessed over ½ hour and 24-hour averaging periods).
- Acrolein (assessed over 1-hour and 24-hour averaging periods).
- Benzene (assessed over 24-hour and annual averaging periods).
- Benzo(a) pyrene, B(a)P (assessed over 24-hour and annual averaging periods).
- Formaldehyde (assessed over 24-hour averaging period).
- 1,3-Butadiene (assessed over 24-hour and annual averaging periods).

These contaminants of concern are considered Criteria Air Contaminants, which have the corresponding Ambient Air Quality Criteria and Federal Canadian Ambient Air Quality Standards.

The Existing Conditions scenario was represented as the Scarborough Rapid Transit operations prior to decommissioning. Therefore, Existing Conditions was not assessed as the Scarborough Rapid Transit rail operations would result in zero emissions. Only the following two conditions were assessed:

1. **Future No-Build Conditions (2028)** – Assessment of predicted future air quality impacts from vehicular emissions of identified sources within 500 metres of the Study Area. This scenario is represented as the Interim On-Street Routing along Ellesmere Road, Midland Avenue, Eglinton Avenue and Kennedy Road using buses, travelling between Kennedy Station and the Ellesmere Stop.
2. **Future Build Conditions (2028)** – Assessment of predicted future air quality impacts from vehicular emissions of identified sources within 500 metres of the Study Area. This scenario will be represented as the Busway operations, travelling between Kennedy Station and the Ellesmere Road Stop along the Scarborough Rapid Transit Right-of-Way.

The results of the Air Quality Impact Assessment show that the addition of the proposed infrastructure will have a lower impact on the majority of the sensitive and critical receptors within the Study Area in comparison to Future No-Build Conditions for most of the contaminants. This is predominately due to the reduction in the affected area since the Future Build Condition has a smaller footprint compared to Future No-Build Condition.

There are three Criteria Air Contaminants with modelled cumulative concentrations above the respective Provincial and/or Federal air quality criteria, specifically the 1-hour averaging period of Nitrogen Dioxide (NO_2), the annual averaging period of Benzene, and the 24-hour and annual averaging periods of Benzo(a)pyrene.

The exceedances of NO_2, and Benzo(a)pyrene are due predominately to elevated existing ambient air quality concentrations, which already exceed the Provincial and/or Federal air quality criteria prior to including the project contributions:

- NO_2 is at 143% (Canadian Ambient Air Quality Standards 2025) and 100% (Canadian Ambient Air Quality Standards 2020) of the Canadian Ambient Air Quality Standards limit for the 1-hr averaging period.
- Benzene is at 111% of the Ambient Air Quality Criteria limit for the annual averaging period.
- Benzo(a)pyrene is at 291% of the Ambient Air Quality Criteria limit for the 24-hr period and 1016% of the Ambient Air Quality Criteria limit for the annual averaging period.

However, even with these exceedances, when compared to Future No Build, the concentrations for these contaminants decrease significantly in the Future Build Condition.

Table ES-1 summarizes the modelled air quality impacts which are expected to result from the implementation of this project.

Table ES-1: Summary of Potential Air Quality Impacts and Mitigation Options

Air Quality Condition	Potential Effect	Mitigation Measure(s)	Monitoring
Operating Conditions: Increased Traffic Vehicular Emissions	■ Increased NO_2, CO, SO_2, particulate matter, and Volatile Organic Compounds impact levels at nearby receptors.	■ Continued promotion of increased electric vehicle purchase and infrastructure within Ontario.	■ Operating Conditions: Increased Traffic Vehicular Emissions
Construction Conditions: Vehicle Operation and Surface Particulate Disruption	■ Construction related air pollution include diesel combustion and particulate emissions. Odour and visible dust may cause public annoyance at existing sensitive receptors within the Study Area during construction phase.	■ Implementation of vegetation (such as a green dust control fence around the corridor) within the Study Area to decrease ground level dispersion of particulates. ■ Prior to commencement of construction, a comprehensive Environmental Controls and Methods Plan will be prepared for fugitive dust control, effluent water control, Polychlorinated biphenyls removal and cleanup, and will: – Ensure work does not adversely affect adjacent watercourses, groundwater, and wildlife, or contribute to excess air and noise pollution. – Ensure proper disposal procedures are maintained for waste or volatile materials including, but not limited to, mineral spirits, oil, petroleum based lubricants or toxic cleaning solutions. – Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with authorities having jurisdiction. – Prevent extraneous materials from contaminating air beyond construction area by providing temporary enclosures during demolition. ■ Prior to commencement of construction, an Emission Control Plan will be prepared for work involving asphalt application, roofing, waterproofing, diesel exhaust, odourous products. The Emission Control Plan will: – During construction, provide sufficient measures to control odours and other irritating chemical emissions including, but not limited to, the following: ▪ Exhaust from powered equipment, such as vehicles, compressors, generators. ▪ Asphalt odours. ▪ Smoke from heating kettles, paints and sealers. – Prevent odours from entering the ventilation systems through placement options, sealing or shutting down air intakes, and use of positive pressure where possible. – Where possible, schedule activities known to generate noxious or irritating odours during off-hours to minimize impact on Toronto Transit Commission employees, passengers, and neighbouring properties. – Ensure chemical Products used have been previously reviewed and approved by Toronto Transit Commission for use regarding overall flammability, chemical and environmental Hazards and irritant properties. ■ Prior to commencement of construction, a Dust Control Plan for Non-Asbestos containing material will be prepared and will: – Confirm that airborne contaminants are maintained below their respective occupational exposure limits in accordance with Occupational Health and Safety Act Revised Regulations of Ontario 1990, Regulation 833: Control of Exposure to Biological or Chemical Agents. – Provide appropriate enclosure for the Work area to prevent dust from migrating to other areas. – Provide sufficient local exhaust and ventilation. – Periodically water unpaved construction areas, stockpiles, and during concrete chipping. – Limit speed of vehicular traffic. – Use water sprays for dust generating loading and unloading of materials. – Sweep and water flush entrances to the Site. – Wash down streets within the area of Work on a weekly basis and as required in accordance with the Dust Control Plan (Non Asbestos containing materials).	■ During construction, air monitoring of contaminants should be provided, as applicable, to verify the effectiveness of dust control measures to support the Dust Control Plan. ■ In addition, relevant construction monitoring activities from the following recommended guidelines can be implemented during construction: – Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (Cheminfo Services Inc., 2005); and, – Operations Manual for Air Quality Monitoring in Ontario (Ministry of the Environment, Conservation and Parks, 2018).

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1. Overview of Undertaking

The Toronto Transit Commission is undertaking a Transit and Rail Project Assessment Process for the Conversion of Scarborough Rapid Transit Right-of-Way to Busway project, which aims to convert the decommissioned Line 3 Scarborough Rapid Transit corridor into a dedicated busway. As part of the Scarborough Rapid Transit decommissioning plan, two phases were developed. Phase 1 would see the Toronto Transit Commission operate an interim bus service on-street, which was planned to go into service by November 2023, however, due to the Scarborough Rapid Transit derailment in July 2023, interim bus service started in August 2023. The Toronto Transit Commission is currently advancing the detailed design of Phase 2, which involves converting the at-grade north-south portion of the Scarborough Rapid Transit right-of-way into a busway, allowing buses to operate in the converted busway between Ellesmere and Kennedy stations and continuing service on-street along existing transit priority lanes on Ellesmere Road between Ellesmere and Scarborough Centre stations, as implemented in Phase 1.

AECOM Canada Ltd. (AECOM) has been retained by the Toronto Transit Commission to complete the Transit and Rail Project Assessment Process for Phase 2 of the Scarborough Rapid Transit decommission plan. To fulfill the conditions of the Transit and Rail Project Assessment Process, AECOM has completed an Air Quality Impact Assessment Report. The purpose of the Air Quality Impact Assessment is to determine the impacts of the project on regional air quality and greenhouse gases with the Study Area. The Study Area extends from the Toronto Transit Commission's Line 2 Kennedy Station, along the Line 3 right-of-way to Ellesmere Station, as shown in **Figure 1-1**. This Study Area includes a 500-metre buffer to be able to capture air quality impacts and effects from traffic within the busway corridor and the surrounding area. The 500-metre buffer is recommended through the Ministry of Transportation's Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects (2020) ("Ministry of Transportation Air Quality Guideline"). Within this Study Area, a total of 96 sensitive receptors and 17 critical receptors were identified.

The analysis identified regional air quality impacts on sensitive and critical receptors present within the Study Area for two conditions (Future No-Build, Future Build). Air quality data collected from 2015 to 2022 at the nearest representative ambient air monitoring stations was used as background data. Emission rates were calculated using the Motor Vehicle Emission Simulator (MOVES 4.0) developed by the United States Environmental Protection Agency.

The analysis assessment included the following air quality contaminants of concern:

- Carbon monoxide (CO).
- Nitrogen dioxide (NO_2).
- Particulate matter with diameter less than 10 micron (PM_{10}).
- Particulate matter with diameter less than 2.5 micron ($PM_{2.5}$).
- Sulphur dioxide (SO_2).
- Formaldehyde.
- Acetaldehyde.
- Benzene.
- 1,3-Butadiene.
- Benzo(a)pyrene.
- Acrolein.

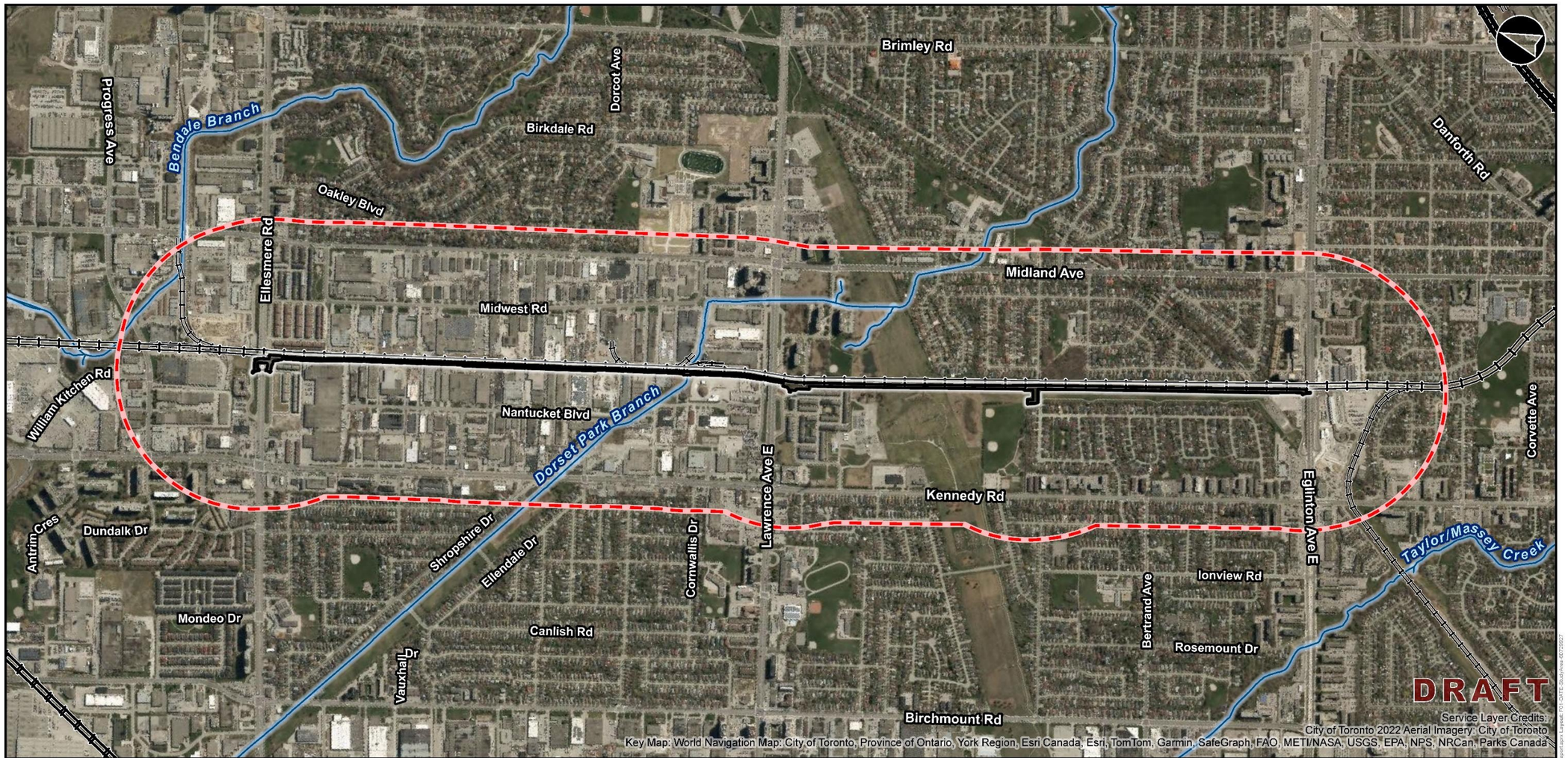
The greenhouse gas emissions included carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Regional air quality and greenhouse gas emission impacts were determined based on an emission inventory, also referred to as a burden analysis, in accordance with the "Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects"[1] ("Ministry of Transportation Air Quality Guideline").

The quantitative assessment of air quality impacts included the following additional tasks:

- Estimation of emissions of identified contaminants of concern including greenhouse gases, from the identified air emission sources within the Study Area.
- Air dispersion modelling of estimated emissions in the Future No-Build, and Future Build Conditions to model the point of impingement concentrations for each contaminant of concern.
- Regional impact assessment for specified contaminants of concern and greenhouse gases to determine the project's impacts in relation to Provincial targets and existing contributions from the Transportation Sector.
  - Specific contaminants of concern that are expected to exceed their Ambient Air Quality Criteria and/or the Canadian Ambient Air Quality Standards (values shown in brackets) are: NO_2 (83 micrograms/metre^3, 1-hour averaging period), Benzene (0.45 micrograms/metre^3, annual averaging period), and Benzo(a)pyrene (0.00005 micrograms/metre^3, 24-hour averaging period) (0.00001 micrograms/metre^3, annual averaging period).

1. Ministry of Transportation, "Environmental Guide for Assessing and Mitigating the Air Quality Impacts and Greenhouse Gas Emissions of Provincial Transportation Projects" (Environmental Policy Office, May 2020)

Figure 1-1: Study Area of Toronto Transit Commission Busway Project



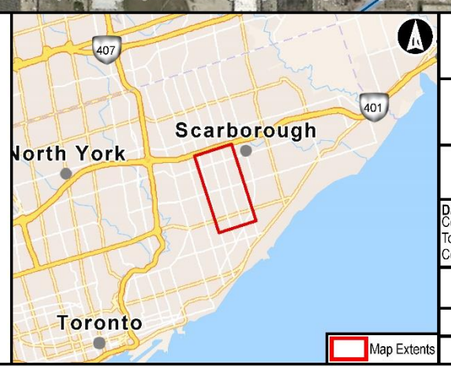
LEGEND

60% Design Project Components

- Air Quality 500m Study Area
- Construction Disturbance Area

General Features

- Main Railway
- Spur Railway
- Watercourse



TTC Scarborough
Rapid Transit Busway Conversion Project
Air Quality Report

Study Area

0 100 200 400 600 800 1,000 M

WGS 1984 UTM Zone 17N

Data Sources:
Contains Information licensed under the Open Government License Ontario and Toronto. Contains information made available under the Toronto and Region Conservation Authority (TRCA)'s Open Data Licence v 1.0

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Figure: 1-1

2. Methodology

The overall objective of the Air Quality Impact Assessment was to determine the impacts of the project on regional air quality and greenhouse gases. This was done by incorporating traffic study data combined with a configuration of traffic-links in the AERMOD model. Through this analysis, regional air quality impacts were predicted at the identified sensitive and critical receptors present within the Study Area for the two conditions (Future No-Build, Future Build). The Existing Condition was not assessed since it only considered the operation of the Scarborough Rapid Transit electrified trains, which was not expected to emit air emissions.

Impacts from vehicle traffic along arterial roads was not assessed in the Existing, Future Build and Future No-Build scenarios, as focus was given to the air quality impact solely associated with the Scarborough Rapid Transit busway and Scarborough Rapid Transit bus replacement – operating on-street as indicated during Phase 1.

Nearby existing sensitive and critical receptors were identified within the Study Area. As per the Ministry of Transportation Air Quality Guideline, sensitive receptors are defined as all permanent locations of residence (e.g., detached housing, apartments, and condominiums, etc.) and critical receptors included health care facilities, educational institutions, childcare facilities, or nursing/long-term care facilities. Within this Study Area, a total of 96 sensitive receptors and 17 critical receptors were identified.

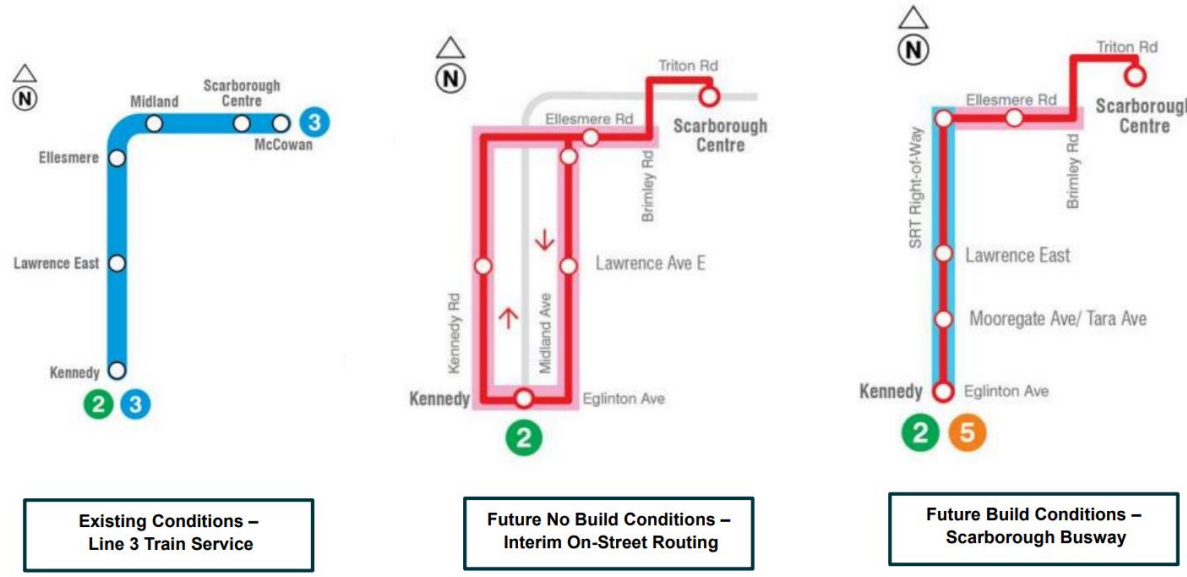
The background air quality concentrations within the Study Area were determined from existing Environment and Climate Change Canada air monitoring station data operating under the National Air Pollution Surveillance network. Five years of existing data sets were analyzed from stations within the region, and the complete data set from the closest station or most representative station for each contaminant of concern was selected to represent the background air quality for the Study Area. Monitoring stations closest to the Study Area were given preference as the one of the most representative locations for the contaminants of concern. As such, Roadside 401 West Toronto, Toronto North Downsview, Toronto East, and Wallberg Toronto (all located approximately 0.3 kilometres to 22 kilometres from the Study Area) were used. The closest monitoring station is located in Toronto East, approximately 0.3 kilometres from the Study Area. Regional meteorological data associated with Toronto suburban land use for AERMOD (Version 22112) was downloaded from Ministry of the Environment, Conservation, and Parks website[2] for use.

2. Ministry of the Environment, Conservation and Parks “Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling” accessed June 2024 Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling | ontario.ca

The Existing Conditions, as shown in **Figure 2-1** was not assessed since the electrified Scarborough Rapid Transit rail operations along the Line 3 Train Service would not be expected to result in air emissions. Therefore, the following two conditions were assessed:

- **Future No-Build Conditions (2028)** – Assessment of predicted future air quality impacts from vehicular emissions of identified sources within 500 m of the Study Area. This scenario is represented as the Interim On-Street Routing along Ellesmere Road, Midland Avenue (southbound only), Eglinton Avenue and Kennedy Road (northbound only) using buses, travelling between Kennedy Station and Ellesmere Station, as shown in **Figure 2-1.**
- **Future Build Conditions (2028)** – Assessment of predicted future air quality impacts from vehicular emissions of identified sources within 500 m of the Study Area. This scenario will be represented as the Scarborough Rapid Transit Busway operations, travelling between stops at Kennedy Road, Tara Avenue, Lawrence Avenue East, and Ellesmere Road along the Scarborough Rapid Transit Right-of-Way, as shown in **Figure 2-1.**

Figure 2-1: Illustration of Existing, Future No-Build and Future Build Conditions



The Future Build and Future No-Build scenarios for the years 2038 (10 years from inauguration and 2048 (20 years from inauguration) were not included in this assessment, as traffic projections for the Scarborough Rapid Transit buses will decrease following the opening of the Line 2 Scarborough Subway Extension (anticipated in 2031). Even though the implementation of electric buses in the future

year scenarios is a possibility, operation of hybrid buses was assumed instead in order to capture the worst-case emissions scenario. Therefore, the expected impact from emissions in 2048 should result in greater reductions, with the implementation of electric buses, than presented for the 2028 scenario.

The following sections outline the identification of the Study Area, sources of contaminants of concern for the three conditions, identified sensitive and critical receptors, Federal and Provincial ambient air quality criteria and/or standards, and guidelines applicable to the air quality contaminants, the methodology used to calculate emission estimates and complete dispersion modelling for each condition, and all assumptions made as part of the assessment.

2.1 Study Area and Representative Receptors

The Study Area contains land use zoned by the City of Toronto, within the Scarborough district. The land use is primarily zoned as industrial, commercial, or residential.

Table 2-1 lists the identified critical receptors and sensitive receptors. The location of the identified critical receptors (such as schools, day cares, and/or nursing homes) and sensitive receptors are shown in **Figures A1-1, A1-2 and A1-3**, in **Appendix A**. Existing sensitive and critical receptors were included as discrete receptors within the air dispersion modelling.

2.2 Assessment of Contaminants

The primary air emission sources within the Study Area are vehicular emissions from the Scarborough Rapid Transit operations, including both existing infrastructure and the proposed Busway. Based on recommendations within the Ministry of Transportation Air Quality Guideline, the air quality impact assessment included the following criteria air contaminants from vehicle emissions:

- Nitrogen dioxide, NO_2 (assessed over 1-hour, 24-hour, and annual averaging periods).
- Carbon monoxide, CO (assessed over 1-hour and 8-hour averaging periods).
- Sulphur Dioxide, SO_2 (assessed over 10-minute, 1-hour, and annual averaging periods).
- Particulate matter (<10 microns), PM_{10} (assessed over 24-hour period).
- Particulate matter (<2.5 microns), $PM_{2.5}$ (assessed over 24-hour and annual averaging periods).

Table 2-1: Identified Sensitive and Critical Receptors within Study Area

Receptor ID	Type	Address	Description	Universal Transverse Mercator Co-ordinates Easting (metres)	Universal Transverse Mercator Co-ordinates Northing (metres)
SR1	Sensitive	68 Zezel Way, Toronto, Ontario M1P 2X1	Single-unit Dwelling	638784	4847380
SR2	Sensitive	115 Jolly Way, Scarborough, Ontario M1P 2W7	Single-unit Dwelling	638717	4847344
SR3	Sensitive	50 Zezel Way, Toronto, Ontario M1P 2X1	Single-unit Dwelling	638798	4847329
SR4	Sensitive	89 Jolly Way, Toronto, Ontario M1P 0E2	Single-unit Dwelling	638735	4847281
SR5	Sensitive	20 Zezel Way, Toronto, Ontario M1P 2X1	Single-unit Dwelling	638820	4847262
SR6	Sensitive	154 Jenkinson Way, Scarborough, Ontario M1P 5H4	Single-unit Dwelling	639250	4845535
SR7	Sensitive	301 Prudential Drive, Scarborough, Ontario M1P 4V3	Multi-unit Dwelling	639349	4845552
SR8	Sensitive	128 Jenkinson Way, Toronto, Ontario M1P 5H4	Single-unit Dwelling	639276	4845470
SR9	Sensitive	102 Jenkinson Way, Scarborough, Ontario M1P 5H4	Single-unit Dwelling	639298	4845400
SR10	Sensitive	84 Jenkinson Way, Toronto, Ontario M1P 5H4	Single-unit Dwelling	639319	4845334
SR11	Sensitive	52 Romulus Drive, Scarborough, Ontario M1K 4C2	Single-unit Dwelling	639492	4845045
SR12	Sensitive	42 Romulus Drive, Scarborough, Ontario M1K 4C2	Single-unit Dwelling	639509	4844968
SR13	Sensitive	22 Medina Crescent, Scarborough, Ontario M1K 4B7	Single-unit Dwelling	639535	4844849
SR14	Sensitive	14 Medina Crescent, Scarborough, Ontario M1K 4B7	Single-unit Dwelling	639551	4844793
SR15	Sensitive	8 Medina Crescent, Scarborough, Ontario M1K 4B7	Single-unit Dwelling	639567	4844748
SR16	Sensitive	149 Mooregate Avenue, Scarborough, Ontario M1K 3T1	Single-unit Dwelling	639503	4844639
SR17	Sensitive	161 Treverton Drive, Scarborough, Ontario M1K 3T1	Single-unit Dwelling	639523	4844584
SR18	Sensitive	153 Treverton Drive, Scarborough, Ontario M1K 3T1	Single-unit Dwelling	639539	4844534
SR19	Sensitive	137 Lord Roberts Drive, Scarborough, Ontario M1K 3W5	Single-unit Dwelling	639645	4844503
SR20	Sensitive	135 Treverton Drive, Scarborough, Ontario M1K 3T1	Single-unit Dwelling	639574	4844426
SR21	Sensitive	121 Lord Roberts Drive, Scarborough, Ontario M1K 3W5	Single-unit Dwelling	639685	4844398
SR22	Sensitive	117 Treverton Drive, Scarborough, Ontario M1K 3T1	Single-unit Dwelling	639610	4844315
SR23	Sensitive	103 Lord Roberts Drive, Scarborough, Ontario M1K 3W5	Single-unit Dwelling	639727	4844280
SR24	Sensitive	97 Treverton Drive, Scarborough, Ontario M1K 3S5	Single-unit Dwelling	639651	4844198
SR25	Sensitive	85 Lord Roberts Drive, Scarborough, Ontario M1K 3W5	Single-unit Dwelling	639759	4844157
SR26	Sensitive	77 Treverton Drive, Scarborough, Ontario M1K 3S5	Single-unit Dwelling	639689	4844077
SR27	Sensitive	69 Lord Roberts Drive, Scarborough, Ontario M1K 3W1	Single-unit Dwelling	639794	4844050
SR28	Sensitive	59 Treverton Drive, Scarborough, Ontario M1K 3S5	Single-unit Dwelling	639725	4843970
SR29	Sensitive	55 Lord Roberts Drive, Scarborough, Ontario M1K 3W1	Single-unit Dwelling	639831	4843937
SR30	Sensitive	47 Treverton Drive., Scarborough, Ontario M1K 3S5	Single-unit Dwelling	639728	4843871
SR31	Sensitive	2460 Eglinton Avenue East, Scarborough, Ontario M1K 5J7	Multi-unit Dwelling	639878	4843851
SR32	Sensitive	6 Thrush Road, Scarborough, Ontario M1K 3S2	Single-unit Dwelling	639987	4843526
SR33	Sensitive	74 Kenmark Boulevard, Scarborough, Ontario M1K 3N7	Single-unit Dwelling	639917	4843452
SR34	Sensitive	142 Benjamin Boulevard, Toronto, Ontario M1K 3P1	Single-unit Dwelling	640009	4843460
SR35	Sensitive	88 Kenmark Boulevard, Scarborough, Ontario M1K 3N7	Single-unit Dwelling	639969	4843394
SR36	Sensitive	122 Benjamin Boulevard, Scarborough, Ontario M1K 3P1	Single-unit Dwelling	640052	4843349
SR37	Sensitive	84 Cornwallis Drive, Scarborough, Ontario M1P 1H7	Single-unit Dwelling	638787	4845780
SR38	Sensitive	1048 Kennedy Road, Scarborough, Ontario M1P 2K7	Single-unit Dwelling	638878	4845398
SR39	Sensitive	1040 Kennedy Road, Scarborough, Ontario M1P 2K6	Single-unit Dwelling	638906	4845332
SR40	Sensitive	1032 Kennedy Road, Scarborough, Ontario M1P 2K6	Single-unit Dwelling	638916	4845284
SR41	Sensitive	1022 Kennedy Road, Scarborough, Ontario M1P 2K6	Single-unit Dwelling	638935	4845230
SR42	Sensitive	1016 Kennedy Road, Scarborough, Ontario M1P 2K6	Single-unit Dwelling	638950	4845190

Receptor ID	Type	Address	Description	Universal Transverse Mercator Co-ordinates Easting (metres)	Universal Transverse Mercator Co-ordinates Northing (metres)
SR43	Sensitive	1008 Kennedy Road, Scarborough, Ontario M1P 2K6	Single-unit Dwelling	638965	4845141
SR44	Sensitive	1000 Kennedy Road, Scarborough, Ontario M1P 2K4	Single-unit Dwelling	638987	4845077
SR45	Sensitive	992 Kennedy Road, Scarborough, Ontario M1P 2K4	Single-unit Dwelling	639002	4845028
SR46	Sensitive	984 Kennedy Road, Scarborough, Ontario M1P 2K4	Single-unit Dwelling	639014	4844983
SR47	Sensitive	976 Kennedy Road, Scarborough, Ontario M1P 2K4	Single-unit Dwelling	639031	4844938
SR48	Sensitive	938 Kennedy Road, Toronto, Ontario M1P 2K4	Single-unit Dwelling	639108	4844692
SR49	Sensitive	928 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639128	4844626
SR50	Sensitive	920 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639143	4844583
SR51	Sensitive	912 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639162	4844527
SR52	Sensitive	906 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639174	4844484
SR53	Sensitive	898 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639189	4844425
SR54	Sensitive	890 Kennedy Road, Toronto, Ontario M1K 2E8	Single-unit Dwelling	639215	4844366
SR55	Sensitive	872 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639233	4844289
SR56	Sensitive	886 Kennedy Road, Scarborough, Ontario M1K 2E8	Single-unit Dwelling	639261	4844203
SR57	Sensitive	856 Kennedy Road, Scarborough, Ontario M1K 2E7	Single-unit Dwelling	639293	4844111
SR58	Sensitive	848 Kennedy Road, Scarborough, Ontario M1K 2E7	Single-unit Dwelling	639307	4844060
SR59	Sensitive	840 Kennedy Road, Scarborough, Ontario M1K 2E7	Single-unit Dwelling	639323	4844013
SR60	Sensitive	832 Kennedy Road, Toronto, Ontario M1K 2E3	Single-unit Dwelling	639339	4843963
SR61	Sensitive	822 Kennedy Road, Toronto, Ontario M1K 2C8	Single-unit Dwelling	639367	4843874
SR62	Sensitive	814 Kennedy Road, Scarborough, Ontario M1K 2C8	Single-unit Dwelling	639391	4843800
SR63	Sensitive	78 Town Haven Place, Scarborough, Ontario M1K 3P5	Single-unit Dwelling	640092	4843742
SR64	Sensitive	2 Lord Roberts Drive, Scarborough, Ontario M1K 3W1	Single-unit Dwelling	640191	4844043
SR65	Sensitive	934 Midland Avenue, Scarborough, Ontario M1K 4G3	Single-unit Dwelling	640178	4844096
SR66	Sensitive	942 Midland Avenue, Scarborough, Ontario M1K 4G3	Single-unit Dwelling	640157	4844152
SR67	Sensitive	950 Midland Avenue, Scarborough, Ontario M1K 4G3	Single-unit Dwelling	640143	4844210
SR68	Sensitive	958 Midland Avenue, Toronto, Ontario M1K 4G3	Single-unit Dwelling	640127	4844257
SR69	Sensitive	958 Midland Avenue, Toronto, Ontario M1K 4G3	Single-unit Dwelling	640105	4844326
SR70	Sensitive	991 Midland Avenue, Scarborough, Ontario M1K 4G7	Single-unit Dwelling	640123	4844416
SR71	Sensitive	990 Midland Avenue, Scarborough, Ontario M1K 4G6	Single-unit Dwelling	640038	4844501
SR72	Sensitive	1014 Midland Avenue, Scarborough, Ontario M1K 4G6	Single-unit Dwelling	640016	4844593
SR73	Sensitive	1030 Midland Avenue, Scarborough, Ontario M1K 4G8	Single-unit Dwelling	639993	4844673
SR74	Sensitive	1040 Midland Avenue, Scarborough, Ontario M1K 4G8	Single-unit Dwelling	639969	4844736
SR75	Sensitive	1058 Midland Avenue, Scarborough, Ontario M1K 4G9	Single-unit Dwelling	639928	4844851
SR76	Sensitive	1064 Midland Avenue, Scarborough, Ontario M1K 4G9	Single-unit Dwelling	639913	4844915
SR77	Sensitive	1072 Midland Avenue, Scarborough, Ontario M1K 4G9	Single-unit Dwelling	639894	4844977
SR78	Sensitive	1080 Midland Avenue, Scarborough, Ontario M1K 4G9	Single-unit Dwelling	639875	4845037
SR79	Sensitive	1088 Midland Avenue, Scarborough, Ontario M1K 4G9	Single-unit Dwelling	639851	4845107
SR80	Sensitive	1286 Midland Avenue, Scarborough, Ontario M1K 4H1	Single-unit Dwelling	639785	4845293
SR81	Sensitive	1497 Midland Avenue, Toronto, Ontario M1P 0A1	Single-unit Dwelling	639644	4845938
SR82	Sensitive	6 Norbury Crescent., Scarborough, Ontario M1P 3J6	Single-unit Dwelling	639571	4846252
SR83	Sensitive	14 Norbury Crescent, Scarborough, Ontario M1P 3J6	Single-unit Dwelling	639546	4846315
SR84	Sensitive	22 Norbury Crescent, Scarborough, Ontario M1P 3J6	Single-unit Dwelling	639526	4846371
SR85	Sensitive	40 Norbury Crescent, Scarborough, Ontario M1P 3J6	Single-unit Dwelling	639506	4846442
SR86	Sensitive	8 Brookridge Drive, Scarborough, Ontario M1P 3M1	Single-unit Dwelling	639480	4846526

Receptor ID	Type	Address	Description	Universal Transverse Mercator Co-ordinates Easting (metres)	Universal Transverse Mercator Co-ordinates Northing (metres)
SR87	Sensitive	18 Brookridge Drive, Scarborough, Ontario M1P 3M1	Single-unit Dwelling	639458	4846597
SR88	Sensitive	28 Brookridge Drive, Scarborough, Ontario M1P 3M1	Single-unit Dwelling	639436	4846667
SR89	Sensitive	8 Rosswood Crescent, Scarborough, Ontario M1P 3N2	Single-unit Dwelling	639409	4846754
SR90	Sensitive	20 Rosswood Crescent, Scarborough, Ontario M1P 3N2	Single-unit Dwelling	639399	4846845
SR91	Sensitive	32 Oakley Boulevard, Scarborough, Ontario M1P 3P3	Single-unit Dwelling	639361	4846929
SR92	Sensitive	44 Oakley Boulevard, Scarborough, Ontario M1P 3P4	Single-unit Dwelling	639327	4847024
SR93	Sensitive	54 Oakley Boulevard, Scarborough, Ontario M1P 3P4	Single-unit Dwelling	639329	4847099
SR94	Sensitive	18 Dogwood Crescent, Scarborough, Ontario M1P 3N6	Single-unit Dwelling	639282	4847185
SR95	Sensitive	40 Dogwood Crescent, Scarborough, Ontario M1P 3N6	Single-unit Dwelling	639256	4847268
SR96	Sensitive	54 Dogwood Crescent, Scarborough, Ontario M1P 3N6	Single-unit Dwelling	639232	4847344
CR1	Critical	1000 Ellesmere Road, Scarborough, Ontario M1P 5G2	Retirement Home	638637	4847470
CR2	Critical	24 Progress Avenue, Scarborough, Ontario M1P 2Y4	School	638427	4847784
CR3	Critical	3 Glamorgan Avenue, Scarborough, Ontario M1P 4N9	Day Care	638218	4847616
CR4	Critical	1939 Kennedy Road, Scarborough, Ontario M1P 2L9	Medical Centre	638351	4847584
CR5	Critical	2025 Midland Avenue, Scarborough, Ontario M1P 2Y9	Medical Centre	639164	4847634
CR6	Critical	1400 Kennedy Road, Scarborough, Ontario M1P 4V6	Retirement Home	638409	4846953
CR7	Critical	1261 Kennedy Road, Scarborough, Ontario M1P 2L4	School	638697	4846374
CR8	Critical	2500 Lawrence Avenue East, Suite #207, Scarborough, Ontario M1P 2R7	School	639458	4845746
CR9	Critical	2411 Lawrence Avenue East, Scarborough, Ontario M1P 4X1	Retirement Home	638971	4845478
CR10	Critical	165 Lord Roberts Drive, Scarborough, Ontario M1K 3W5	School	639774	4844604
CR11	Critical	2425 Eglinton Avenue East, Unit #12, Scarborough, Ontario M1K 5G8	Medical Centre	639523	4843580
CR12	Critical	21 Kenmark Boulevard, Scarborough, Ontario M1K 3N8	School	639671	4843347
CR13	Critical	2405 Eglinton Avenue East, Scarborough, Ontario M1K 2M5	Medical Centre	639462	4843522
CR14	Critical	959 Midland Avenue, Scarborough, Ontario M1K 4G4	School	640186	4844228
CR15	Critical	1051 Midland Avenue, Unit #1085, Scarborough, Ontario M1K 4G7	Day Care	640040	4844698
CR16	Critical	1125 Midland Avenue, Toronto, Ontario M1K 4H2	Day Care	639980	4844860
CR17	Critical	9 Progress Avenue, Scarborough, Ontario M1P 5A4	Medical Centre	638359	4847687

- Acetaldehyde (assessed over ½ hour and 24-hour averaging periods).
- Acrolein (assessed over 1-hour and 24-hour averaging periods).
- Benzene (assessed over 24-hour and annual averaging periods).
- Benzo(a)pyrene, B(a)P (assessed over 24-hour and annual averaging periods).
- Formaldehyde (assessed over 24-hour averaging period).
- 1,3-Butadiene (assessed over 24-hour and annual averaging periods).

Emissions of the coarse fraction of particulates (PM_{10}) are emitted mostly from tire wear, brake wear, and road dust fugitives, whereas the fine fraction ($PM_{2.5}$) is mostly attributed to vehicle emission exhausts.

In addition to the above, impacts of pollutants contributing to the regional greenhouse gas levels including carbon dioxide (CO_2), nitrous oxide (N_2O), and methane (CH_4) should be assessed within the assessment. The impacts of these pollutants are compared to the Ministry of the Environment, Conservation, and Parks projected transportation emissions for the Future Build year, in units of carbon equivalent, CO_2e, as shown in the Ontario's Climate Change Strategy[3].

2.3 Relevant Air Quality Guidelines

Provincial Ambient Air Quality Criteria and Federal Canadian Ambient Air Quality Standards for the criteria air contaminants are presented in **Table 2-2**.

The Ambient Air Quality Criteria are acceptable effects-based levels in ambient air. Limits are set based on the "limiting effect" and are the lowest concentrations at which an adverse effect may be experienced. Effects considered may be health, odour, vegetation, soiling, visibility, corrosion or others and limits have variable averaging times appropriate for the effect that they are intended to protect against. Ambient Air Quality Criteria are used for assessing general air quality and the potential for causing adverse effects. They are set at levels below which adverse health and/or environmental effects are not expected. If a contaminant has an Ambient Air Quality Criteria for more than one averaging time, all averaging times must be used for assessment purposes, as each time averaging period may represent a different type of effect.

3. Ministry of the Environment and Climate Change "Ontario's Climate Change Strategy" accessed April 2022 https://dr6j45jk9xcmk.cloudfront.net/documents/4914/climate-change-strategy-report.pdf

Table 2-2: Air Quality Criteria and Standards

Criteria Air Contaminants	Averaging Period (hour)	Limit (micrograms/metre^3)	Source
NO_2	1	400	Ambient Air Quality Criteria
NO_2	1	119	Canadian Ambient Air Quality Standards (2020)
NO_2	1	83.2	Canadian Ambient Air Quality Standards (2025)[1]
NO_2	24	200	Ambient Air Quality Criteria
NO_2	Annual	33.7	Canadian Ambient Air Quality Standards (2020)
NO_2	Annual	23.8	Canadian Ambient Air Quality Standards (2025)[1]
CO	1	36200	Ambient Air Quality Criteria
CO	8	15700	Ambient Air Quality Criteria
SO_2	1	193	Canadian Ambient Air Quality Standards (2020)
SO_2	1	179	Canadian Ambient Air Quality Standards (2025)[2]
SO_2	1	106	Ambient Air Quality Criteria
SO_2	10 minutes	178	Ambient Air Quality Criteria
SO_2	Annual	10.6	Ambient Air Quality Criteria
SO_2	Annual	13.8	Canadian Ambient Air Quality Standards (2020)
SO_2	Annual	11.0	Canadian Ambient Air Quality Standards (2025)
PM_{10}	24	50.0	Ambient Air Quality Criteria
$PM_{2.5}$	24	27.0	Canadian Ambient Air Quality Standards [3]
$PM_{2.5}$	Annual	8.80	Canadian Ambient Air Quality Standards [3]
Acetaldehyde	30 minutes	500	Ambient Air Quality Criteria
Acetaldehyde	24	500	Ambient Air Quality Criteria
Acrolein	1	4.50	Ambient Air Quality Criteria
Acrolein	24	0.40	Ambient Air Quality Criteria
Benzene	24	2.30	Ambient Air Quality Criteria
Benzene	Annual	0.45	Ambient Air Quality Criteria
Benzo(a)pyrene	24	5.00E-05	Ambient Air Quality Criteria
Benzo(a)pyrene	Annual	1.00E-05	Ambient Air Quality Criteria
1,3-Butadiene	24	10.0	Ambient Air Quality Criteria
1,3-Butadiene	Annual	2.00	Ambient Air Quality Criteria
Formaldehyde	24	65.0	Ambient Air Quality Criteria

Notes: (1) Standard value from Canadian Ambient Air Quality Standards for NO_2 is 42 parts per billion for the 1-hour averaging period and 12 parts per billion for the Annual averaging period. Standard converted to micrograms/metre^3 using a temperature of 10°C and pressure of 1 atmosphere. The statistical form of the 1-hour standard is based on a 3-year average of the 98th percentile of the daily maximum 1-hour average concentrations. The annual standard is based on an average over a single calendar year of all 1-hour average concentrations.

(2) Standard value from Canadian Ambient Air Quality Standards for SO_2 is 65 parts per billion for the 1-hour averaging period and 4.0 parts per billion for the Annual averaging period. Standard converted to micrograms/metre^3 using a temperature of 10°C and pressure of 1 atmosphere. The statistical form of the 1-hour standard is based on a 3-year average of the 99th percentile of the daily maximum 1-hour average concentrations.

(3) The statistical form of the $PM_{2.5}$ 24-hour Canadian Ambient Air Quality Standards standard is based on a 3-year average of the 98th percentile of the daily 24-hour average concentrations. The annual Canadian Ambient Air Quality Standards standard is based on a 3-year average of the daily 24-hour average concentrations.

The Canadian Council of Ministers of the Environment has developed Canada-wide standards for a variety of contaminants. These standards are developed jointly by various Provincial jurisdictions based on a scientific and risk-based approach. The Canadian Council of Ministers of the Environment has developed standards for fine particulate matter ($PM_{2.5}$), nitrogen dioxide (NO_2) and sulphur dioxide (SO_2), under the Canadian Ambient Air Quality Standards. The Canadian Ambient Air Quality Standards are established as voluntary objectives under the Canadian Environmental Protection Act, 1999.

2.4 Emissions Inventory Assessment Methodology

Emission inventories estimate the quantities (in mass units) of Criteria Air Contaminants emitted over a given period and provide information about contributions from various sources. Emissions are estimated by multiplying emission factors by source activity levels. An emission factor represents the emissions from a single source for a unit of time or distance (e.g., grams of CO per vehicle mile traveled). The source activity is the number of vehicle-miles-traveled on a roadway segment in a given time period, such as one day.

The emissions inventory for this air quality impact assessment was prepared in accordance with the Ministry of Transportation Air Quality Guideline. Annual emissions inventories were prepared for each Criteria Air Contaminant for the Future No-Build (2028) and Future Build Conditions horizon year (2028). A copy of the emission inventory tables is included in **Appendix C** and the MOVES.4.0 output is provided in **Appendix D**.

The motor vehicle emission inventory was developed using available project design details, traffic data for identified sources within the Study Area, and emission factors produced from the United States Environmental Protection Agency emissions modelling software MOVES.4.0 for the Future Conditions horizon year (2028). This software provides emission rates for a wide variety of source types (i.e., passenger cars, motorcycles, long-haul trucks, etc.), speed bins, road types, and emission types (i.e., running emissions, idling emissions, tire wear, brake wear, etc.). Emission rates were developed for all contaminants of concern and greenhouse gas compounds from passenger vehicle, and heavy vehicle source types shown in **Table 2-3**.

Table 2-3: MOVES Source IDs

MOVES Source ID	Assessment Source Type Classification	Source Description
11	Motorcycle	Motorcycle
21	Passenger Car	Passenger Car
31	Light-Duty Truck	Passenger Truck
32	Light-Duty Truck	Light Commercial Truck
41	Heavy-Duty Vehicle	Other Buses
42	Heavy-Duty Vehicle	Transit Bus
43	Heavy-Duty Vehicle	School Bus
51	Heavy-Duty Vehicle	Refuse Truck
52	Heavy-Duty Vehicle	Single Unit Short-haul Truck
53	Heavy-Duty Vehicle	Single Unit Long-haul Truck
54	Heavy-Duty Vehicle	Motor Home
61	Heavy-Duty Vehicle	Combination Short-haul Truck
62	Heavy-Duty Vehicle	Combination Long-haul Truck

Source: United States Environmental Protection Agency emissions modelling software MOVES.4.0

The United States Environmental Protection Agency emissions modelling software *MOVES* calculates emissions from mobile sources using a variety of factors: time span, geographic bounds, vehicle type, road type, and emission or process type. The time span calculates emission using default fleet composition and fuel criteria specific to a pre-selected year, month, hour, and weekday/weekend profile. Fleet composition and fuel criteria are also specific to geographic location, with default database data provided for each county in the United States.

For Canada, the closest US County to the Study Area is expected to provide fleet and fuel characteristics as close of a match as possible; therefore, Niagara County in New York State was selected. Since MOVES is developed in the U.S., Canadian-specific county data are not available. It is typical for Canadian air quality transportation environmental assessment projects to assume a similar vehicle fleet and fuel characteristics to that of the closest U.S. based county. This approach has been accepted by the Ministry of the Environment, Conservation, and Parks.

There are thirteen vehicle types and five fuel types in MOVES. The various vehicle types encompass passenger vehicles (motorcycles, cars, and trucks); light, medium and heavy commercial trucks; buses (intercity, transit, and school); and other vehicle types such as refuse trucks and motor homes. The fuels include diesel (ID 2), gasoline (ID 1), electricity (ID 9), compressed natural gas (for transit buses only) (ID 3), and ethanol (E-85) fuel (ID 5). The percentage of E-85 fuel used by the project fleet was eliminated in emissions estimation for this project as flex-fuel cars and fuelling stations are not as readily available in Ontario as they are in the United States. MOVES does not directly

categorize hybrid vehicles under a specific fuel type. Hybrid vehicles use a combination of fuel types (typically gasoline or diesel combined with electric power). Therefore, gasoline, electric, and diesel fuels were selected as fuel types for vehicles travelling along the Scarborough Rapid Transit Right-of-Way. A reduction of 50% was assumed in the emission rates for each contaminant (except for PM_{10} and $PM_{2.5}$ since the impacts from these two contaminants may not decrease due to tire and brake wear) to account for hybrid vehicle operations.

Emissions in MOVES are divided into four major categories:

- Running emissions.
- Start emissions.
- Evaporative emissions.
- Particulate emissions from brake wear and tire wear.

Vehicular emissions from the project were estimated using the MOVES.4.0 County Scale methodology. An averaged 24-hour emission profile was generated for each pollutant, for each vehicle type (passenger car and heavy vehicle). The maximum emissions from January and July were compared and the higher of the two was selected for inclusion in air dispersion modelling, to capture the worst-case emissions from both the coldest (January) and warmest (July) ambient temperatures.

Evaporative emissions include the following sub-categories: evaporative permeation, fuel vapour venting, fuel leaks, refuelling displacement vapour loss, refuelling spillage loss, vapour loss during running emissions, and vapour loss during idling. All types of evaporative emissions were included within the calculated MOVES running and idling emission factors used in the assessment. The applicable emissions factors for all vehicle classes generated by MOVES in the Future Build Condition year (2028) with appropriate speed bins for the Study Area are provided in **Appendix D**.

A range of emission rates depending on posted vehicle speed are designated by seventeen ‘speed bins’ (Speed Bin ID 0 through 16). This assessment included:

- Speed Bin ID 0, representing idling emissions for all source types (within signalized interchange queues and parking lots).
- Speed Bin ID 8, representing vehicles travelling at 60 kilometres/hour.

2.5 Dispersion Modelling Assessment Methodology

The calculated emission inventory for all Criteria Air Contaminants were modelled using the United States Environmental Protection Agency gaussian dispersion model, AERMOD (version 22112). The model can predict impacts from a variety of source types, including stationary sources (e.g., stacks), line sources (e.g., traffic emissions along roads), stationary volume sources (e.g., pile unloading), and area sources (e.g., parking lots).

AERMOD predicts contaminant impacts using the Gaussian dispersion model in conjunction with hourly meteorological data. Regional meteorological and terrain data closest to the Study Area were pre-processed by the Ministry of the Environment, Conservation and Parks for direct use in AERMOD.

Emission sources identified within the model were based on road traffic and idling emissions from vehicle emission sources within the Study Area, including:

- Transit bus travel along the identified Toronto Transit Commission bus routes.
- Transit buses idling at signalized intersections within the identified Toronto Transit Commission bus routes.
- Passenger vehicles idling for a maximum of five minutes per hour at the surface parking lots at Lawrence East Station and Ellesmere Station.

For each link and source, an hourly profile of emissions and traffic data was input into the model, along with other pertinent information such as road width per link. Release heights and plume widths were calculated in accordance with United States Environmental Protection Agency's recommended methodologies.

2.6 Assumptions

The Air Quality Impact Assessment was conducted using several assumptions, which are specified in detail within the Air Quality Assumptions Report, provided in **Appendix B**.

3. Ambient Existing Conditions

3.1 Existing Ambient Air Quality

The baseline ambient air quality levels were based on publicly available historical data from ambient air quality monitoring stations within Ontario. Data utilized is the most recent publicly available at the time of the preparation of this assessment (June 2024). The following National Air Pollution Surveillance air quality monitoring stations were selected as representative of the ambient air quality within the Study Area:

- Roadside 401 West Toronto (National Air Pollution Surveillance ID 60438).
- Toronto North Downsview (National Air Pollution Surveillance ID 60440).
- Toronto East (National Air Pollution Surveillance ID 60410).
- Wallberg Toronto (National Air Pollution Surveillance ID 60439).

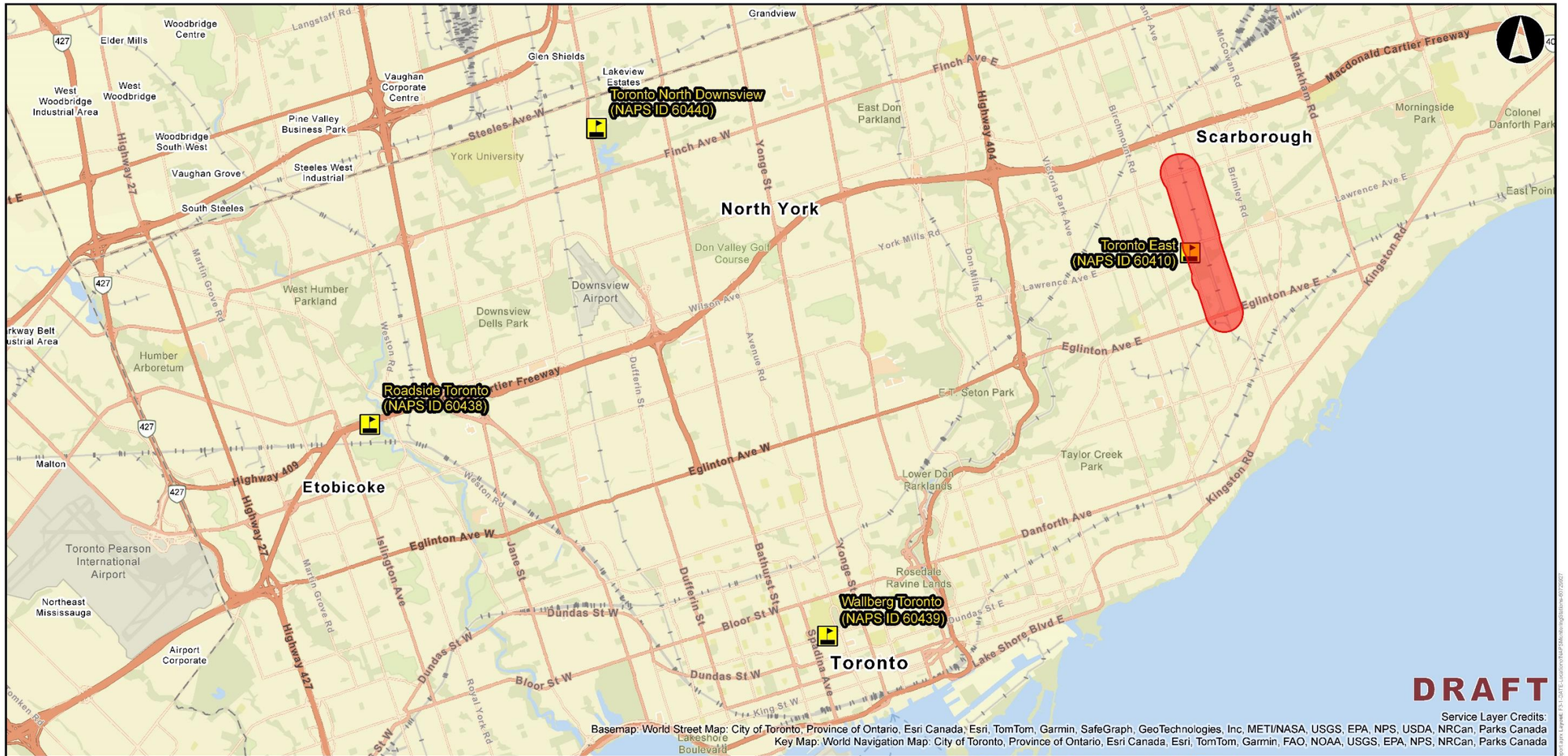
These stations are located nearest to the Study Area and monitored (in combination) all relevant Criteria Air Contaminants for the assessment, since one station is unable to monitor all Criteria Air Contaminants. Where multiple stations were found to monitor a common Criteria Air Contaminants, the closest representative station was selected for the assessment.

Details of the air quality monitoring stations closest to the Study Area for each station are provided in **Table 3-1** and their locations with respect to the Study Area are shown on **Figure 3-1**. A copy of the air quality monitoring data are provided in **Appendix D**.

Table 3-1: Air Quality National Air Pollution Surveillance Monitoring Stations' Information

Station Information	Roadside 401 West Toronto	Toronto North Downsview	Toronto East	Wallberg Toronto
National Air Pollution Surveillance ID	■ 60438	■ 60440	■ 60410	■ 60439
Address	■ 125 Resources Road	■ 4905 Dufferin Street	■ Lawrence Avenue East & Kennedy Road	■ 200 College Street
Years of Data Available	■ 2017-2019 ■ 2018-2022	■ 2018-2022	■ 2018-2022	■ 2015-2016
Latitude	■ 43.7111	■ 43.7804	■ 43.7479	■ 43.6590
Longitude	■ -79.5434	■ -79.4675	■ -79.2741	■ -79.3954
Station Type	■ Urban	■ Urban	■ Urban	■ Urban
Criteria Air Contaminants Measured	■ Acrolein, Acetaldehyde, Formaldehyde ■ Benzene,1,3-Butadiene, Benzo(a)pyrene	■ CO, SO_2	■ NO_2, $PM_{2.5}$, Ozone	■ Acrolein, Acetaldehyde, ■ Formaldehyde
Distance from Study Area	■ 21.90 kilometres	■ 14.92 kilometres	■ 0.3 kilometres	■ 12.96 kilometres

Figure 3-1: Location of National Air Pollution Surveillance Monitoring Stations in Proximity to Study Area



LEGEND

60% Design Project Components

Air Quality 500m Study Area

Air Quality

Monitoring Station

TTC Scarborough Rapid Transit Busway Conversion Project Air Quality Report

Location of N.A.P.S. Monitoring Stations

0 0.5 1 2 3 4 5 6 7 km

WGS 1984 UTM Zone 17N

Data Sources:
Contains Information licensed under the Open Government License Ontario.

AECOM

Jun, 2024	1:100,000
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Figure: 3-1

Ambient monitoring data was collected for all contaminants from the most recent data available, as per the averaging period(s) listed in **Table 3-2** through **Table 3-6**, and the following methodology was used for the calculations:

- 1 hour, 8 hour, and 24 hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from the representative air monitoring stations (the average value was calculated from the available years).
- Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative air monitoring station:
  - The average value was calculated from the available years, when compared to the Ambient Air Quality Criteria.
  - The average of the most recent 3 years used for $PM_{2.5}$, when compared to Canadian Ambient Air Quality Standards.
  - The maximum annual average value from the available years used for NO_2 and SO_2, when compared to the Canadian Ambient Air Quality Standards.

Table 3-2: 90th Percentile Background Concentrations (2018-2022)

Criteria Air Contaminant	Station ID	Averaging Period [1] (hour)	90th Percentile Concentrations (micrograms/metre^3) 2018	90th Percentile Concentrations (micrograms/metre^3) 2019	90th Percentile Concentrations (micrograms/metre^3) 2020	90th Percentile Concentrations (micrograms/metre^3) 2021	90th Percentile Concentrations (micrograms/metre^3) 2022	90th Percentile Concentrations (micrograms/metre^3) 5-Year Average
NO_2	60410	1	43.6	43.6	35.6	37.6	39.6	39.6
NO_2	60410	24	36.5	35.6	29.1	32.5	31.8	33.5
NO_2	60410	Annual[1]	20.9	20.3	16.7	18.8	19.7	19.3
PM_{10} [2]	60410	24	23.6	23.0	21.8	23.8	21.0	22.8
$PM_{2.5}$	60410	24	12.8	12.4	11.8	12.9	11.4	12.3
$PM_{2.5}$	60410	Annual	7.18	6.99	6.65	7.41	6.64	6.97
CO	60440	1	0.36	0.35	0.33	0.35	0.34	0.35
CO	60440	8	0.35	0.35	0.31	0.35	0.33	0.34
SO_2	60440	1	1.38	0.83	1.10	1.10	1.10	1.10
SO_2	60440	10 minutes	2.28	1.37	1.82	1.82	1.82	1.82
Ozone	60410	1	84.7	80.6	82.6	84.7	80.6	82.6
Ozone	60410	24	74.9	70.0	75.2	75.5	72.1	73.2
Ozone	60410	Annual[1]	52.1	50.7	53.9	54.0	51.9	52.5
Benzene	60438	24	0.799	0.638	0.583	0.696	0.627	0.690
Benzene	60438	Annual	0.550	0.484	0.478	0.507	0.438	0.491
1,3-Butadiene	60438	24	0.081	0.072	0.051	0.080	0.076	0.079
1,3-Butadiene	60438	Annual	0.054	0.050	0.040	0.053	0.047	0.049
Benzo(a)pyrene	60438	24	1.32E-04	1.14E-04	4.95E-04	6.70E-05	1.07E-04	1.17E-04
Benzo(a)pyrene	60438	Annual	8.23E-05	7.18E-05	2.31E-04	4.62E-05	6.33E-05	9.89E-05

Notes: (1) Annual values were based on average of all available data and was not based on 90th percentile concentration for all contaminants.
(2) PM_{10} was not included in National Air Pollution Surveillance Station measurements, and therefore was estimated using $PM_{2.5}$ measurements, assuming a ratio of 1 milligrams/metre^3 PM_{10} per 0.54 milligrams/metre^3 of $PM_{2.5}$ as per Lall et. al, "Estimation of historical annual $PM_{2.5}$ exposures for health effects assessment", Atmospheric Environment 38 (2004). [4]

Table 3-3: 90th Percentile Background Concentrations (2015-2019)

Criteria Air Contaminant	Station ID	Averaging Period [1] (hour)	90th Percentile Concentrations (micrograms/metre^3) 2015	90th Percentile Concentrations (micrograms/metre^3) 2016	90th Percentile Concentrations (micrograms/metre^3) 2017	90th Percentile Concentrations (micrograms/metre^3) 2018	90th Percentile Concentrations (micrograms/metre^3) 2019	90th Percentile Concentrations (micrograms/metre^3) 5-Year Average
Acetaldehyde	60438 & 60439	0.5	5.88	4.88	11.4	7.72	8.93	8.38
Acetaldehyde	60438 & 60439	24	1.99	1.65	3.85	2.61	3.02	2.83
Formaldehyde	60438 & 60439	24	3.80	2.60	4.20	2.43	2.87	3.15
Acrolein	60438 & 60439	1	0.169	0.159	0.234	0.149	ND	0.197
Acrolein	60438 & 60439	24	0.070	0.065	0.096	0.061	ND	0.081

Non-Detect – Non-detect; value was below detection limit

4. Lall, R., M. Kendall, K. Ito and G.D. Thurston, 2004: Estimation of historical annual PM2.5 exposures for health effects assessment (Atmospheric Environment. 38, 2004), 5217-5226.

Table 3-4: 98th Percentile Background Concentrations (2018-2022)

Criteria Air Contaminant	Station ID	Averaging Period [1] (hour)	90th Percentile Concentrations (micrograms/metre^3) 2018	90th Percentile Concentrations (micrograms/metre^3) 2019	90th Percentile Concentrations (micrograms/metre^3) 2020	90th Percentile Concentrations (micrograms/metre^3) 2021	90th Percentile Concentrations (micrograms/metre^3) 2022	3-Year Average (1-Hour / 24-Hour) or Max Annual [1]
NO_2	60410	1	93.1	104	83.2	93.1	93.1	96.8
NO_2	60410	Annual	20.9	20.3	16.7	18.8	19.7	20.9
$PM_{2.5}$	60410	24	19.5	18.7	18.8	22.5	16.3	20.3
$PM_{2.5}$	60410	Annual	7.2	7.0	6.7	7.4	6.6	7.19

Table 3-5: 99th Percentile Background Concentrations (2018-2022)

Criteria Air Contaminant	Station ID	Averaging Period [1] (hour)	90th Percentile Concentrations (micrograms/metre^3) 2018	90th Percentile Concentrations (micrograms/metre^3) 2019	90th Percentile Concentrations (micrograms/metre^3) 2020	90th Percentile Concentrations (micrograms/metre^3) 2021	90th Percentile Concentrations (micrograms/metre^3) 2022	Annual Maximum
SO_2	60440	1	14.9	14.9	11.6	16.9	17.1	16.3

The background concentrations for each contaminant were also compared to the applicable Provincial Ambient Air Quality Criteria and Federal Canadian Ambient Air Quality Standards for the time averaging periods, as shown in **Table 3-6.**

Table 3-6: Comparison of Background Ambient Air Quality Data to Ambient Air Criteria/Standard

Criteria Air Contaminants	Station ID	Averaging Period (hour)	Years	Average of Background Data (10°C & 1 atmosphere) (micrograms/metre^3)	Percentile	Threshold (micrograms/metre^3)	Source	% of Standard Limit
NO_2	60410	1	2018-2022	39.6	90th	400	Ambient Air Quality Criteria	10%
NO_2	60410	1	2018-2022	96.8	98th	119	Canadian Ambient Air Quality Standards (2020)	82%
NO_2	60410	1	2018-2022	96.8	98th	83.2	Canadian Ambient Air Quality Standards (2025)	**116%**
NO_2	60410	24	2018-2022	33.5	90th	200	Ambient Air Quality Criteria	17%
NO_2	60410	Annual	2018-2022	20.9	Mean	33.7	Canadian Ambient Air Quality Standards (2020)	62%
NO_2	60410	Annual	2018-2022	20.9	Mean	23.8	Canadian Ambient Air Quality Standards (2025)	88%
CO	60440	1	2018-2022	350	90th	36200	Ambient Air Quality Criteria	1%
CO	60440	8	2018-2022	339	90th	15700	Ambient Air Quality Criteria	2%
SO_2	60440	1	2018-2022	16.3	99th	193	Canadian Ambient Air Quality Standards (2020)	8%
SO_2	60440	1	2018-2022	16.3	99th	179	Canadian Ambient Air Quality Standards (2025)	9%
SO_2	60440	1	2018-2022	1.10	90th	106	Ambient Air Quality Criteria	1%
SO_2	60440	10 minutes	2018-2022	1.82	90th	178	Ambient Air Quality Criteria	1%
SO_2	60440	Annual	2018-2022	0.490	Mean	10.6	Ambient Air Quality Criteria	5%
SO_2	60440	Annual	2018-2022	0.72	Mean	13.8	Canadian Ambient Air Quality Standards (2020)	5%
SO_2	60440	Annual	2018-2022	0.72	Mean	11.0	Canadian Ambient Air Quality Standards (2025)	7%
PM_{10}	60410	24	2018-2022	22.8	90th	50.0	Ambient Air Quality Criteria	46%
$PM_{2.5}$	60410	24	2018-2022	20.3	98th	27.0	Canadian Ambient Air Quality Standards	75%
$PM_{2.5}$	60410	Annual	2018-2022	7.19	Mean	8.80	Canadian Ambient Air Quality Standards	82%
Acetaldehyde	60438/60439	30 minutes	2015-2019	8.38	90th	500	Ambient Air Quality Criteria	2%
Acetaldehyde	60438/60439	24	2015-2019	2.83	90th	500	Ambient Air Quality Criteria	1%
Acrolein	60438/60439	1	2015-2019	0.197	90th	4.50	Ambient Air Quality Criteria	4%
Acrolein	60438/60439	24	2015-2019	0.081	90th	0.40	Ambient Air Quality Criteria	20%
Benzene	60438	24	2018-2022	0.690	90th	2.30	Ambient Air Quality Criteria	30%
Benzene	60438	Annual	2018-2022	0.490	Mean	0.45	Ambient Air Quality Criteria	**109%**
Benzo(a)pyrene	60438	24	2018-2022	1.17E-04	90th	5.00E-05	Ambient Air Quality Criteria	**234%**
Benzo(a)pyrene	60438	Annual	2018-2022	9.89E-05	Mean	1.00E-05	Ambient Air Quality Criteria	**989%**
1,3-Butadiene	60438	24	2018-2022	8.00E-02	90th	10.0	Ambient Air Quality Criteria	1%
1,3-Butadiene	60438	Annual	2018-2022	5.00E-02	Mean	2.00	Ambient Air Quality Criteria	3%
Formaldehyde	60438/60439	24	2015-2019	3.15	90th	65.0	Ambient Air Quality Criteria	5%
Ozone	60410	1	2018-2022	82.6	90th	-	-	-
Ozone	60410	24	2018-2022	73.2	90th	-	-	-

Notes: (1) Exceedances to Air Quality criteria are shown in **red**.

(2) Standard value from Canadian Ambient Air Quality Standards for NO_2 is 42 parts per billion for the 1-hour averaging period and 12 parts per billion for the Annual averaging period. Standard converted to micrograms/metre^3 using a temperature of 10°C and pressure of 1 atmosphere. The statistical form of the 1-hour background concentration is presented as a 3-year average of the 98th percentile of the daily maximum 1-hour average concentrations. The annual background concentration is presented as an average over a single calendar year of all 1-hour average concentrations.

(3) Standard value from Canadian Ambient Air Quality Standards for SO_2 is 65 parts per billion for the 1-hour averaging period and 4.0 parts per billion for the Annual averaging period. Standard converted to micrograms/metre^3 using a temperature of 10°C and pressure of 1 atmosphere. The statistical form of the 1-hour background concentration is presented as a 3-year average of the 99th percentile of the daily maximum 1-hour average concentrations.

(4) The statistical form of the $PM_{2.5}$ 24-hour background concentration is presented as a 3-year average of the 98th percentile of the daily 24-hour average concentrations. The annual background concentration is presented as a 3-year average of the daily 24-hour average concentrations.

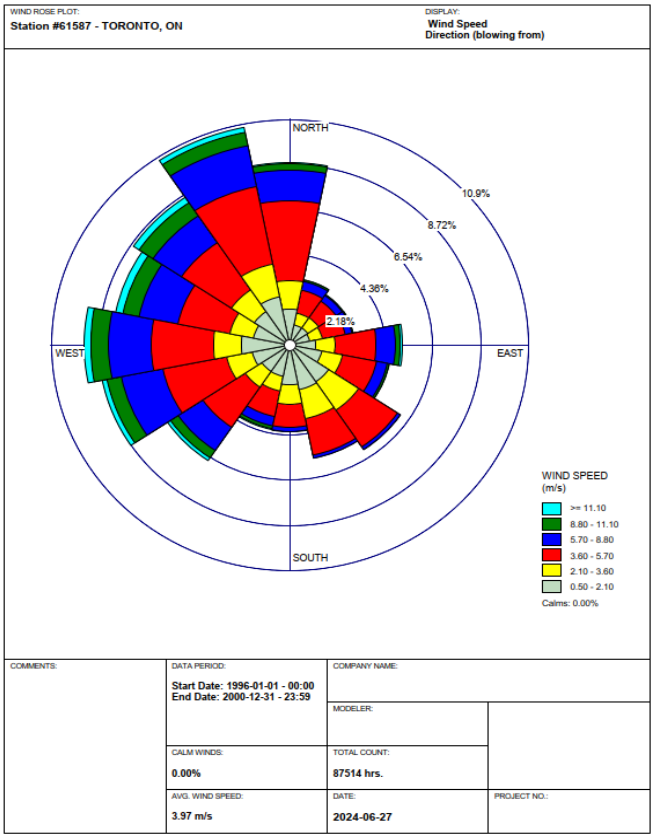
As noted in red font above in **Table 3-6**, two contaminants were found to exceed the Provincial Ambient Air Quality Criteria in the existing ambient air levels. The exceedances for NO_2 and Benzo(a)pyrene are based on the existing background levels measured within the Study Area.

3.2 Meteorological Conditions

Pre-processed meteorological data of Toronto Suburban was downloaded from the Ministry of the Environment, Conservation, and Parks website[5] for use in dispersion modelling with advanced air dispersion modelling software, AERMOD version 22112, with upper air data from the U.S. National Weather Service's Buffalo station (#725280) and surface data from the Toronto Station (#61587).

The wind rose for the five-year meteorological period (1996-2000) showing the wind direction (blowing from) and wind speed is presented in **Figure 3-2**. The wind rose shows that the predominant wind direction is blowing from the North-northwest and West.

Figure 3-2: Wind Rose for Toronto Meteorological Station



5. Ministry of the Environment, Conservation and Parks "Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling" accessed June 2024 Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling | ontario.ca

4. Emission Inventory

4.1 Traffic Assessment

Two conditions were modelled for this assessment: Future No-Build Conditions and Future Build Conditions.

The Future No-Build includes sources of traffic emissions from the current interim bus route. The Future Build Conditions includes new sources of traffic emission from the proposed project infrastructure, the Busway.

Current and projected future Turning Movement Count data and processed Annual Averaged Daily Traffic volumes were provided by the Toronto Transit Commission and AECOM's traffic engineering modelling for 2019. The Toronto Transit Commission has no anticipated changes from current traffic volumes, therefore the future projected data remains the same for both Future Conditions in 2028.

The raw data and data summary tables for traffic volumes are provided within **Appendix E**.

4.2 Emissions Modelling (United States Environmental Protection Agency MOVES.4.0)

The input data required to run MOVES in County Scale are presented in **Table 4-1**. Vehicle emission modelling was limited to internal combustion engine exhaust emissions (tailpipe exhaust only), except for particulates which also included emissions from brake wear and tire wear. Where default data included in MOVES.4.0 was deemed appropriate for the Study Area, the MOVES default data was used. The default data are from Niagara County, NY, due to the relative proximity to the Study Area.

Emission factors for Future No-Build and Future Build conditions were modelled based on a 2028 horizon year. The applicable emissions factors for all vehicle classes generated by MOVES, running as County Scale, for the projected build years (2028) with appropriate speed bins for the Study Area are summarized in **Appendix D**.

Table 4-1: MOVES.4.0 Input Data

Parameter	Input	Reference
Scale	County Scale	-
Representative County	Niagara, New York	-
Calculation Type	Emission Rates	-
Years of Evaluation	2028	-
Months of Evaluation	January and July	-
Temperature (°C)	Full set of average hourly temperatures for the months of January and July	Environment Canada Historical Climate Data – Toronto International Airport
Humidity	Full set of average hourly temperatures for the months of January and July	Environment Canada Historical Climate Data – Toronto International Airport
Fuel Types	Default Fuel Type ID 1, 2, 3, and 9. ID 5 (Ethanol) was not considered.	MOVES.4.0 Default Data
Vehicle Types	Source ID 21, 31, 32, 42	MOVES.4.0 Default Data
Vehicle Age Distribution	Default Age Fraction Data	MOVES.4.0 Default Data

Note: (1) As previously discussed, the maximum emissions from January and July were chosen to capture the worst-case emissions from the coldest (January) and warmest (July) ambient temperatures.

The emission factors output by MOVES were used to calculate an appropriate emission rate to be input into the AERMOD model for assessment, in grams per vehicle-mile-g/ vehicle-miles-traveled). Traffic data for each identified source (segment of road) within the Study Area was identified for the two assessment conditions (Future No-Build, and Future Build) to be input into AERMOD. The Annual Averaged Daily Traffic distribution representative of Toronto Transit Commission busses was used to anticipate 24-hour variable distribution of emissions for busses. Annual Averaged Daily Traffic data of Kennedy Rd was used to represent the community to be used for the parking lots, respectively. This Annual Averaged Daily Traffic 24-hour distribution is shown in **Appendix G**.

The associated AERMOD emission rates derived from the MOVES output is shown in **Table C.1** through **Table C.3** of **Appendix C** for the modelled sources of cars and busses.

The individual vehicle type emissions from MOVES were combined to create a representative vehicle emission for two classes of vehicle: passenger vehicles (Source ID 11, 21, 31, and 32), heavy vehicles (Source ID 41, 42, 43, 51, 52, 53, 61 and 62). Passenger vehicles are categorized under Category ID Passenger Vehicles; heavy vehicles are under Category ID Heavy Vehicles, representing Trucks and Buses. The vehicle fractions for the relevant vehicle types used for this assessment are shown in **Table 4-2**. The source identification tables for the Future No-Build, and Future Build Conditions are shown in **Appendix H.**

Table 4-2: Source Type Fractions (MOVES.4.0)

Description	Fraction ID	Category ID	Source Type ID	2019 Fraction	2028 Fraction
Motorcycle	Passenger Vehicle 11	Passenger Vehicles	11	-	-
Passenger Car	Passenger Vehicle 21	Passenger Vehicles	21	0.42767	0.32829
Passenger Truck	Passenger Vehicle 31	Passenger Vehicles	31	0.52290	0.61369
Light Commercial Truck	Passenger Vehicle 32	Passenger Vehicles	32	0.04943	0.05801
Sum	-	-	-	1	1
Refuse Truck	Heavy Vehicle 51	Heavy Vehicles	51	-	-
Single Unit Short-haul Truck	Heavy Vehicle 52	Heavy Vehicles	52	-	-
Single Unit Long-haul Truck	Heavy Vehicle 53	Heavy Vehicles	53	-	-
Motor Home	Heavy Vehicle 54	Heavy Vehicles	54	-	-
Combination Short-haul Truck	Heavy Vehicle 61	Heavy Vehicles	61	-	-
Combination Long-haul Truck	Heavy Vehicle 62	Heavy Vehicles	62	-	-
Intercity Bus	Heavy Vehicle 41	Heavy Vehicles	41	-	-
Transit Bus	Heavy Vehicle 42	Heavy Vehicles	42	1	1
School Bus	Heavy Vehicle 43	Heavy Vehicles	43	-	-
Sum	-	-	-	1	1

Notes: (1) Fractions are based on MOVES4 default database for each year.

4.3 Annual Greenhouse Gas and Criteria Air Contaminants Inventory

Annual emissions from all sources within the Study Area were estimated using the emission rates (g/ vehicle-miles-traveled), multiplied by the predicted annual traffic volumes and source lengths (miles).

Table 4-3 shows the predicted annual emissions for the four highest Criteria Air Contaminants assessed during the Future Build Conditions (2028).

Table 4-4 shows the predicted annual ***greenhouse gas*** emissions assessed during the Future Build Conditions (2028).

Table 4-3: Annual Criteria Air Contaminants Emissions from All Sources of the Project, Future Build Conditions (2028)

Criteria Air Contaminants	Total Annual Emissions - Future Build (tonnes)
CO	14.0
NOx	1.66
SO_2	0.0063
$PM_{2.5}$	2.60

Table 4-4: Annual Greenhouse Gas Emissions from All Sources of the Project, Future Build Conditions (2028)

Greenhouse Gases	Total Annual Emissions - Future Build (Megatonnes)
CO_2	0.452
Methane	2.22E-05
Nitrous Oxide	2.20E-05
CO_2 Equivalent	0.458

5. Dispersion Modelling

Dispersion modelling was conducted with the modelling software AERMOD, version 21112, and AERMET 21112. The air dispersion modelling was set-up using guidance provided in the "Air Dispersion Modelling Guideline for Ontario, Guideline A-11, version 3.0" published by the Ministry of the Environment Conservation and Parks.

For each link and source in both Conditions, an hourly profile of emissions and traffic data was input into the model, along with other pertinent information such as road width per link, and queue lengths of the road vehicles. Release heights and plume widths were calculated in accordance with U.S. Environmental Protection Agency's recommended methodologies.

5.1 Modelling Inputs

5.1.1 Meteorology

Regional meteorological data associated with Toronto suburban land use for AERMOD (Version 22112) was downloaded from Ministry of the Environment, Conservation, and Parks website[6] for use.

5.1.2 Terrain

Terrain data are publicly available from the Ministry of the Environment, Conservation, and Parks via their website[5] for the Study Area in the form of GeoTiff files. The GeoTiff file used for the modelling input was cdem_dem_030M.tiff.

5.1.3 Identified Receptors

The receptors identified within the Study Area have been listed in **Table 2-1**, under **Section 2.1** of this Report.

In addition to these sensitive and critical receptors identified, the AERMOD models were created with a grid of 50 metres x 50 metres receptor points within the Study Area, excluding areas overlapping with the volume source exclusion zone surrounding line volume sources to prevent the overestimation of road impacts.

6. Ministry of the Environment, Conservation and Parks "Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling", https://www.ontario.ca/page/map-regional-meteorological-and-terrain-data-air-dispersion-modelling

5.2 NO_2 Assessment using Ozone Limiting Method

The concentration of nitrogen dioxide (NO_2) in the atmosphere is affected by the reaction of nitrous oxide (NO) with ozone (O_3), which is a by-product of mobile vehicle fuel combustion. The atmospheric reaction of NO with ozone is demonstrated as follows:

$$\mathbf{NO + O_3 \rightarrow NO_2 + O_2}$$

It is assumed that the rate of conversion of NO to NO_2 is controlled by the availability of ozone in the ambient atmosphere. This principle is called the “ozone limiting method”. Using the same principles, given a high enough concentration of ozone in the ambient atmosphere, all the emitted NO emissions will convert to NO_2 and disperse in the same way as other inert combustion products from mobile vehicles.

According to NOx studies done by the United States Environmental Protection Agency, emissions of NOx from combustion are primarily in the form of NO (United States Environmental Protection Agency, 1999).

Modelled concentrations of NOx were therefore used along with ambient measured concentrations of background ozone levels from nearby Ministry of the Environment, Conservation, and Parks and Environment and Climate Change Canada monitoring stations to calculate the concentrations of NO_2 at a given sensitive or critical receptor.

The Québec Ministry of the Sustainable Development, Environment, and Parks published a technical guide for calculating atmospheric concentration of NO_2 using the ozone limiting method (Couture, 2008), described as follows:

- If the concentration (part per million) of NO is lower than that of ozone ([NO] < [O_3] or, more precisely, [O_3 > 0.9 [NOX]), then we assume that all of NO was converted to NO2: [NO_2] = [NO_X]
- If the concentration (parts per million) of NO is greater than that of ozone ([NO] > [O_3]), then the concentration of NO equal to the concentration (parts per million) of ozone is converted to NO_2: [NO_2] = [O_3] + 0.1* [NO_X]

The concentration of ambient ozone was taken as the average of the maximum 90th percentile values (2018 to 2022) for measured ozone concentrations at the National Air Pollution Surveillance Toronto East Station (National Air Pollution Surveillance ID 60410) as shown in **Table 5-1**.

The National Air Pollution Surveillance Toronto East is located approximately 0.3 kilometres of the Study Area. Based on proximity and data availability, it was chosen as the most representative station to provide the concentrations for the ozone background level assessment.

Table 5-1: Local Ambient Ozone Levels (90th Percentile Concentrations, micrograms/metre^3)

Contaminant	Averaging Period (hour)	Data Source	2018	2019	2020	2021	2022	5-Year Average
O_3	1	National Air Pollution Surveillance	84.7	80.6	82.6	84.7	80.6	82.6
O_3	24	National Air Pollution Surveillance	74.8	70.0	75.2	75.5	72.1	73.2
O_3	Annual	National Air Pollution Surveillance	52.1	50.7	53.9	54.0	51.9	52.5

The modelled maximum receptor grid and discrete receptor concentrations of NO_X for the Future No-Build Conditions (2028) and Future Build Conditions (2028) and the calculated NO_2 concentration using the ozone limiting method are shown below in **Table 5-2,** with the most impacted receptor results shown in **Table 5-3, Table 5-4** and **Table 5-5**. The resulting calculated NO_2 concentration using the ozone limiting method for all sensitive receptors are shown in **Appendix I**.

Table 5-2: Output NO_2 Calculation Using Ozone Limiting Method: Maximum Concentration

Condition: Year [1]	Averaging Period (hour)	Maximum Modelled NOx Concentration (parts per billion) [2]	Ambient O_3 (parts per billion)	Ozone Limiting Method NO_2 (parts per billion)	Ozone Limiting Method NO_2 (micrograms/metre^3)	Receptor Location at Maximum Concentration
Future No Build: 2028	1	90.1	40.0	49.0	97.0	SR48
Future No Build: 2028	24	30.0	35.4	30.0	59.5	CR11
Future No Build: 2028	Annual	7.81	25.4	7.81	15.5	CR11
Future Build: 2028	1	11.0	40.0	11.0	21.8	SR7
Future Build: 2028	24	3.21	35.4	3.21	6.35	SR7
Future Build: 2028	Annual	0.340	25.4	0.340	0.674	SR7

Notes: (1) Future No Build – Future No-Build Conditions; Future Build - Future Build Conditions

(2) Conversion from micrograms/metre^3 to parts per billion uses the molecular weight of nitrogen dioxide (46 grams/mole), gas constant (8.314 metres^3 Pascal mole^{-1} kelvin^{-1}), and standard temperature and pressure of 101.325 Pascal and 10 degrees Celsius.

Table 5-3: Output NO2 Calculation Using Ozone Limiting Method: Sensitive Receptor No. 48

Condition: Year [1]	Averaging Period (hour)	Maximum Modelled NOx Concentration (parts per billion) [2]	Ambient O_3 (parts per billion)	Ozone Limiting Method NO_2 (parts per billion)	Ozone Limiting Method NO_2 (micrograms/ metre^3)	Receptor Location at Maximum Concentration
Future No Build: 2028	1	90.1	40.0	49.0	97.0	SR48
Future No Build: 2028	24	28.5	35.4	28.5	56.4	SR48
Future No Build: 2028	Annual	6.93	25.4	6.9	13.7	SR48
Future Build: 2028	1	1.15	40.0	1.15	2.3	SR48
Future Build: 2028	24	0.129	35.4	0.129	0.255	SR48
Future Build: 2028	Annual	0.02	25.4	0.0190	0.04	SR48

Notes: (1) Future No Build – Future No-Build Conditions; Future Build - Future Build Conditions

(2) Conversion from micrograms/metre^3 to parts per billion uses the molecular weight of nitrogen dioxide (46 grams/mole), gas constant (8.314 metres^3 Pascal mole^{-1} kelvin^{-1}), and standard temperature and pressure of 101.325 Pascal and 10 degrees Celsius.

Table 5-4: Output NO_2 Calculation Using Ozone Limiting Method: Critical Receptor No. 11

Condition: Year [1]	Averaging Period (hour)	Maximum Modelled NOx Concentration (parts per billion) [2]	Ambient O_3 (parts per billion)	Ozone Limiting Method NO_2 (parts per billion)	Ozone Limiting Method NO_2 (micrograms/metre^3)	Receptor Location at Maximum Concentration
Future No Build: 2028	1	86.1	40.0	48.6	96.3	CR11
Future No Build: 2028	24	30.0	35.4	30.0	59.5	CR11
Future No Build: 2028	Annual	7.81	25.4	7.81	15.5	CR11
Future Build: 2028	1	0.424	40.0	0.424	0.840	CR11
Future Build: 2028	24	0.0816	35.4	0.0816	0.162	CR11
Future Build: 2028	Annual	0.0119	25.4	0.0119	0.0237	CR11

Notes: (1) Future No Build – Future No-Build Conditions; Future Build - Future Build Conditions
(2) Conversion from micrograms/metre^3 to parts per billion uses the molecular weight of nitrogen dioxide (46 grams/mole), gas constant (8.314 metres^3 Pascal mole^{-1} kelvin^{-1}), and standard temperature and pressure of 101.325 Pascal and 10 degrees Celsius.

Table 5-5: Output NO_2 Calculation Using Ozone Limiting Method: Sensitive Receptor No. 7

Condition: Year [1]	Averaging Period (hour)	Maximum Modelled NOx Concentration (parts per billion) [2]	Ambient O_3 (parts per billion)	Ozone Limiting Method NO_2 (parts per billion)	Ozone Limiting Method NO_2 (micrograms/metre^3)	Receptor Location at Maximum Concentration
Future No Build: 2028	1	5.40	40.0	5.40	10.7	SR7
Future No Build: 2028	24	1.57	35.4	1.57	3.11	SR7
Future No Build: 2028	Annual	0.298	25.4	0.298	0.589	SR7
Future Build: 2028	1	11.0	40.0	11.0	21.8	SR7
Future Build: 2028	24	3.21	35.4	3.21	6.35	SR7
Future Build: 2028	Annual	0.340	25.4	0.340	0.674	SR7

Notes: (1) Future No Build – Future No-Build Conditions; Future Build - Future Build Conditions
(2) Conversion from micrograms/metre^3 to parts per billion uses the molecular weight of nitrogen dioxide (46 grams/mole), gas constant (8.314 metres^3 Pascal mole^{-1} kelvin^{-1}), and standard temperature and pressure of 101.325 Pascal and 10 degrees Celsius.

6. Air Quality Impact Assessment

6.1 Assessment of Modelling Results through a Comprehensive Analysis

6.1.1 Predicted Cumulative Concentrations: Future No-Build Conditions

The highest predicted contaminant emissions for the Future No-Build Conditions were modelled in AERMOD using a receptor grid, including identified sensitive and critical receptors. The results of the dispersion modelling identified the location of the maximum concentration at the most impacted receptor within the Study Area.

The maximum concentrations for sensitive and critical receptors within the Study Area are summarized in **Table 6-1**. Results are presented with the background concentrations for each contaminant per averaging period to determine the cumulative concentrations. The cumulative concentrations were compared to the applicable Provincial and Federal Standards and the predicted exceedances are noted in red in **Table 6-1.**

The maximum concentration cumulative impacts at each identified sensitive and critical receptor is included in **Appendix J**. The isopleth figures showing maximum impact for all contaminants within Future No-Build Conditions are shown in **Appendix K.**

6.1.2 Predicted Cumulative Concentrations: Future Build Conditions

The highest predicted contaminant emissions for the Future Build Conditions were modelled in AERMOD using a receptor grid, including identified sensitive and critical receptors. The results of the dispersion modelling identified the location of the maximum concentration at the most impacted receptor within the Study Area.

The maximum concentrations for sensitive and critical receptors within the Study Area are summarized in **Table 6-2**. Results are presented with the background concentrations for each contaminant per averaging period to determine the cumulative concentrations. The cumulative concentrations were compared to the applicable Provincial and Federal Standards and the predicted exceedances are noted in red.

The maximum concentration cumulative impacts at each identified sensitive and critical receptor is included in **Appendix J**. The isopleth figures showing maximum impact for all contaminants within Future Build Conditions are shown in **Appendix K**.

Table 6-1: Summary of Future No-Build Conditions Cumulative Concentration: Maximum Concentration

Contaminant	Averaging Period (hour)	Percentile	Background Concentration (micrograms/ metre^3)	Maximum Modelled Concentration (micrograms/ metre^3)	Sensitive / Critical Receptor	Cumulative Concentration (micrograms/ metre^3)	Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards (micrograms/metre^3)	Standard Source	Max Point of Impingement % of Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards	Cumulative% of Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards
NO_2	1	90th	39.6	97.0	SR48	137	400	Ambient Air Quality Criteria	24%	34%
NO_2	1	98th	96.8	97.0	SR48	194	119	Canadian Ambient Air Quality Standards (2020)	82%	163%
NO_2	1	98th	96.8	97.0	SR48	194	83	Canadian Ambient Air Quality Standards (2025)	117%	233%
NO_2	24	90th	33.5	59.5	CR11	93.0	200	Ambient Air Quality Criteria	30%	46%
NO_2	Annual	Mean	20.9	15.5	CR11	36.4	34	Canadian Ambient Air Quality Standards (2020)	46%	108%
NO_2	Annual	Mean	20.9	15.5	CR11	36.4	24	Canadian Ambient Air Quality Standards (2025)	65%	153%
CO	1	90th	350	1695	SR48	2044	36200	Ambient Air Quality Criteria	5%	6%
CO	8	90th	339	1670	SR48	2010	15700	Ambient Air Quality Criteria	11%	13%
SO_2	1	99th	16.3	0.292	SR48	16.6	193	Canadian Ambient Air Quality Standards (2020)	0.15%	9%
SO_2	1	99th	16.3	0.292	SR48	16.6	179	Canadian Ambient Air Quality Standards (2025)	0.16%	9%
SO_2	1	90th	1.10	0.292	SR48	1.39	106	Ambient Air Quality Criteria	0.27%	1%
SO_2	10 min	90th	1.82	0.482	SR48	2.30	178	Ambient Air Quality Criteria	0.27%	1%
SO_2	Annual	Mean	0.49	0.025	CR11	0.515	10.6	Ambient Air Quality Criteria	0.24%	5%
SO_2	Annual	Mean	0.72	0.025	CR11	0.745	13.8	Canadian Ambient Air Quality Standards (2020)	0.18%	5%
SO_2	Annual	Mean	0.72	0.025	CR11	0.745	11.0	Canadian Ambient Air Quality Standards (2025)	0.23%	7%
PM_{10}	24	90th	22.8	162	SR64	185	50.0	Ambient Air Quality Criteria	324%	370%
$PM_{2.5}$	24	98th	20.3	39.3	SR64	59.6	27.0	Canadian Ambient Air Quality Standards	146%	221%
$PM_{2.5}$	Annual	Mean	7.19	10.2	SR64	17.4	8.80	Canadian Ambient Air Quality Standards	116%	197%
Acetaldehyde	30 min	90th	8.38	5.28	CR11	13.7	500	Ambient Air Quality Criteria	1.06%	3%
Acetaldehyde	24	90th	2.83	1.45	CR11	4.3	500	Ambient Air Quality Criteria	0.29%	0.86%
Acrolein	1	90th	0.197	0.0158	SR48	0.21	4.5	Ambient Air Quality Criteria	0.35%	5%
Acrolein	24	90th	0.081	0.005	CR11	0.0863	0.40	Ambient Air Quality Criteria	1.31%	22%
Benzene	24	90th	0.690	0.0637	CR11	0.754	2.30	Ambient Air Quality Criteria	3%	33%
Benzene	Annual	Mean	0.490	0.0166	CR11	0.507	0.45	Ambient Air Quality Criteria	4%	113%
Benzo(a)pyrene	24	90th	1.17E-04	3.91E-05	CR11	1.56E-04	5E-05	Ambient Air Quality Criteria	78%	312%
Benzo(a)pyrene	Annual	Mean	9.89E-05	1.02E-05	CR11	1.09E-04	1E-05	Ambient Air Quality Criteria	102%	1091%
1,3-Butadiene	24	90th	0.0490	1.01E-03	CR11	8.10E-02	10	Ambient Air Quality Criteria	0.01%	0.81%
1,3-Butadiene	Annual	Mean	0.0278	2.62E-04	CR11	5.03E-02	2	Ambient Air Quality Criteria	0.01%	3%
Formaldehyde	24	90th	3.15	1.74	CR11	4.89	65	Ambient Air Quality Criteria	3%	8%

Notes: (1) NO_2 is represented using the MOVES emissions rate for NO_x, converted to NO_2 using the ozone limiting method.
(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards. The Canadian Ambient Air Quality Standards are voluntary objectives.
(3) 1 hour, 8 hour, and 24 hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative Air Quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative Air Quality monitoring stations.
(4) The annual maximum impacts presented in **Appendix J** reflect the average of all five years of meteorological data, rather than the highest predicted impact of each of the five year's individual annual average. The same is reflected in **Table 6-1**. The locations of maximum concentration impacts are shown in isopleth figures compiled in **Appendix K**.
(5) Exceedances to Air Quality thresholds are shown in **red**.

Table 6-2: Summary of Future Build Conditions Cumulative Maximum Concentration

Contaminant	Averaging Period (hour)	Percentile	Background Concentration (micrograms/ metre^3)	Maximum Modelled Concentration (micrograms/ metre^3)	Sensitive / Critical Receptor	Cumulative Concentration (micrograms/ metre^3)	Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards (micrograms/metre^3)	Standard Source	Max Point of Impingement % of Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards	Cumulative% of Ambient Air Quality Criteria / Canadian Ambient Air Quality Standards
NO_2	1	90th	39.6	21.8	SR7	61.4	400	Ambient Air Quality Criteria	5%	15%
NO_2	1	98th	96.8	21.8	SR7	119	119	Canadian Ambient Air Quality Standards (2020)	18%	100%
NO_2	1	98th	96.8	21.8	SR7	119	83	Canadian Ambient Air Quality Standards (2025)	26%	143%
NO_2	24	90th	33.5	6.35	SR7	39.9	200	Ambient Air Quality Criteria	3%	20%
NO_2	Annual	Mean	20.9	0.674	SR7	21.6	34	Canadian Ambient Air Quality Standards (2020)	2%	64%
NO_2	Annual	Mean	20.9	0.674	SR7	21.6	24	Canadian Ambient Air Quality Standards (2025)	3%	91%
CO	1	90th	350	65.1	SR21	415	36200	Ambient Air Quality Criteria	0.18%	1%
CO	8	90th	339	24.8	SR9	364	15700	Ambient Air Quality Criteria	0.16%	2%
SO_2	1	99th	16.3	3.82E-02	SR7	16.4	193	Canadian Ambient Air Quality Standards (2020)	0.02%	8%
SO_2	1	99th	16.3	3.82E-02	SR7	16.4	179	Canadian Ambient Air Quality Standards (2025)	0.02%	9%
SO_2	1	90th	1.10	3.82E-02	SR7	1.14	106	Ambient Air Quality Criteria	0.04%	1%
SO_2	10 minutes	90th	1.82	6.30E-02	SR7	1.88	178	Ambient Air Quality Criteria	0.04%	1%
SO_2	Annual	Mean	0.49	9.48E-04	SR7	0.491	10.6	Ambient Air Quality Criteria	0.01%	5%
SO_2	Annual	Mean	0.72	9.48E-04	SR7	0.721	13.8	Canadian Ambient Air Quality Standards (2020)	0.01%	5%
SO_2	Annual	Mean	0.72	9.48E-04	SR7	0.721	11.0	Canadian Ambient Air Quality Standards (2025)	0.01%	7%
PM_{10}	24	90th	22.8	15.8	SR12	38.6	50.0	Ambient Air Quality Criteria	32%	77%
$PM_{2.5}$	24	98th	20.3	3.81	SR12	24.1	27.0	Canadian Ambient Air Quality Standards	14%	89%
$PM_{2.5}$	Annual	Mean	7.19	1.00	SR12	8.19	8.80	Canadian Ambient Air Quality Standards	11%	93%
Acetaldehyde	30 minutes	90th	8.38	0.180	SR7	8.56	500	Ambient Air Quality Criteria	0.04%	2%
Acetaldehyde	24	90th	2.83	3.61E-02	SR7	2.87	500	Ambient Air Quality Criteria	0.01%	0.57%
Acrolein	1	90th	0.197	1.21E-02	SR7	0.209	4.5	Ambient Air Quality Criteria	0.27%	5%
Acrolein	24	90th	0.081	3.34E-03	SR7	0.0843	0.4	Ambient Air Quality Criteria	0.84%	21%
Benzene	24	90th	0.690	4.39E-02	SR5	0.734	2.3	Ambient Air Quality Criteria	2%	32%
Benzene	Annual	Mean	0.490	1.16E-02	SR5	0.502	0.45	Ambient Air Quality Criteria	3%	111%
Benzo(a)pyrene	24	90th	1.17E-04	2.87E-05	SR7	1.46E-04	5E-05	Ambient Air Quality Criteria	57%	291%
Benzo(a)pyrene	Annual	Mean	9.89E-05	2.74E-06	SR7	1.02E-04	1E-05	Ambient Air Quality Criteria	27%	1016%
1,3-Butadiene	24	90th	0.0490	1.01E-03	SR7	8.10E-02	10	Ambient Air Quality Criteria	0.01%	0.81%
1,3-Butadiene	Annual	Mean	0.0278	8.62E-05	SR7	5.01E-02	2	Ambient Air Quality Criteria	0.004%	3%
Formaldehyde	24	90th	3.15	5.88E-02	SR7	3.21	65	Ambient Air Quality Criteria	0.09%	5%

Notes: (1) NO_2 is represented using the MOVES emissions rate for NOx, converted to NO_2 using the ozone limiting method.

(2) Air Quality Threshold for fine particulate ($PM_{2.5}$) is based on the 98th percentile ambient measurement (24-hour), annually averaged over three years. This standard is referenced from the appropriate year of the Canadian Ambient Air Quality Standards. The Canadian Ambient Air Quality Standards are voluntary objectives.

(3) 1 hour, 8 hour, and 24 hour ambient concentrations for the contaminants were obtained from the 90th percentile of hourly measurements from representative Air Quality monitoring stations. Annual ambient concentrations for the contaminants were obtained from the mean measurements from the representative Air Quality monitoring stations.

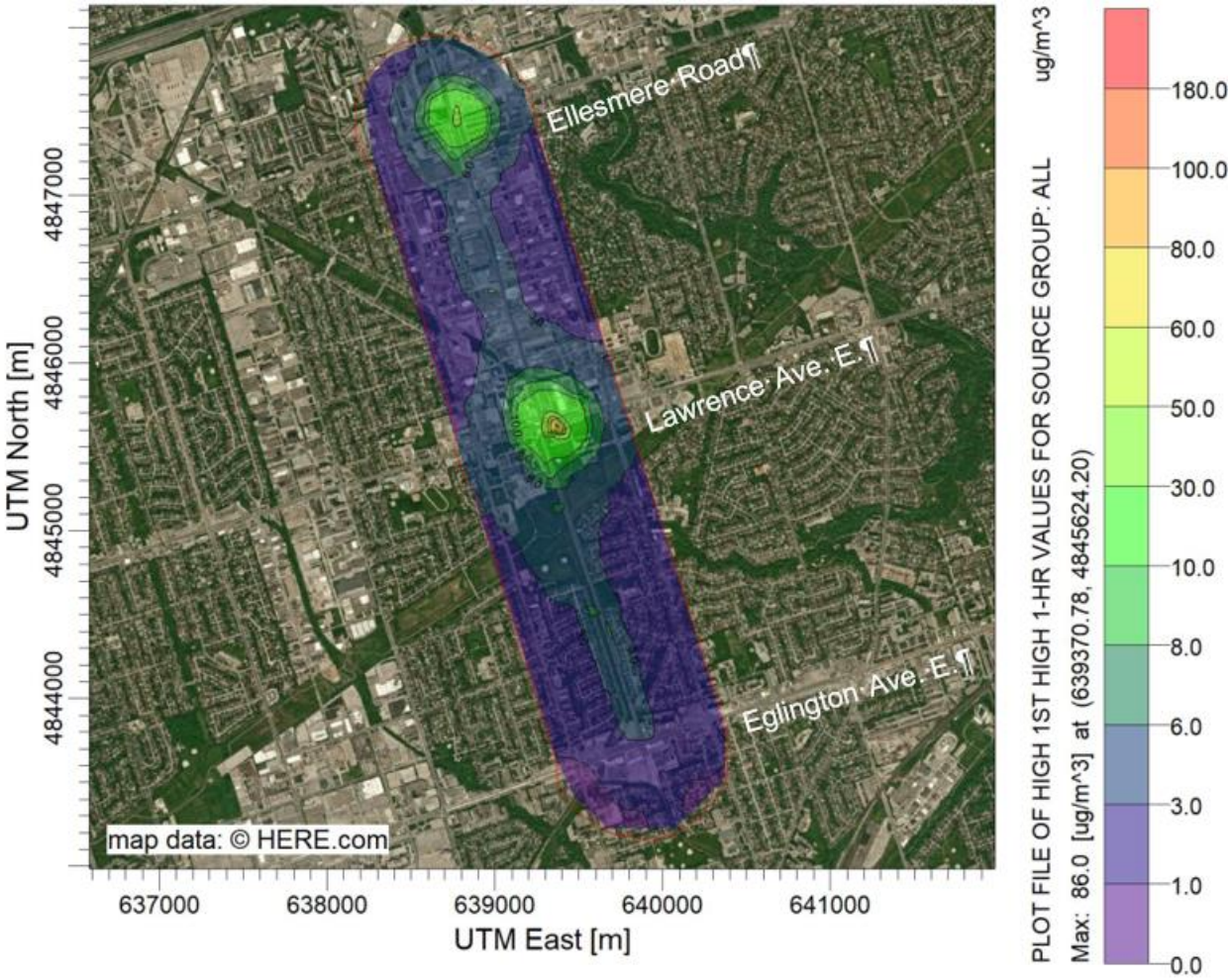
(4) The annual maximum impacts presented in **Appendix J** reflect the average of all five years of meteorological data, rather than the highest predicted impact of each of the five year's individual annual average. The same is reflected in **Table 6-2**. The locations of maximum concentration impacts are shown in isopleth figures compiled in **Appendix K**.

(5 Exceedances to Air Quality thresholds are shown in **red**. The exceedances presented in this table are the maximum modelled point of impingement concentrations at SR5 (located along the Busway, 160 metres south of Ellesmere Road) and at SR7 (located along the Busway near Lawrence Avenue East).

6.1.3 Predicted Cumulative Concentrations: Results Discussion

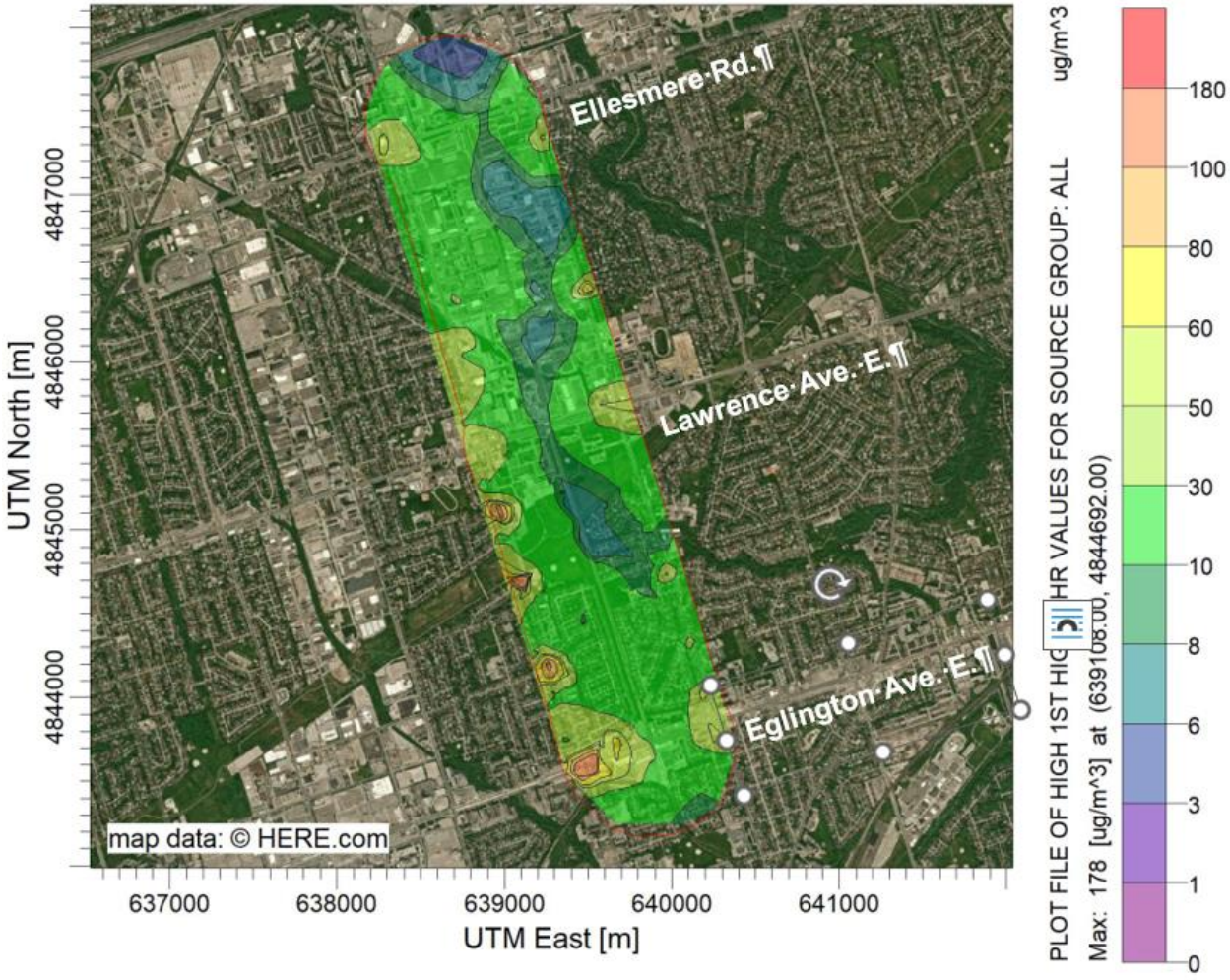
The following contaminants are predicted to exceed the Federal and/or Provincial Standards within the Future Build Conditions: nitrogen dioxide (NO_2) at the 1-hour, benzene at the annual averaging period and benzo(a)pyrene at the 24-hour and annual averaging periods. **Figure 6-1** and **Figure 6-2** show the isopleth contour map for NO_2 at the 1-hour averaging period in the Future Build scenario, and NO_2 at the 1-hour averaging period in the Future No-Build scenario, respectively.

Figure 6-1: Isoconcentration Contours for NO_2 in the Future Build Scenario



Note: Concentration contours from modelled sources only; concentration units of micrograms/metre^3.

Figure 6-2: Isoconcentration Contours for NO_2 in the Future No-Build Scenario



Note: Concentration contours from modelled sources only; concentration units of micrograms/metre^3.

To see variations in highest impact locations throughout the Study Area, side by side comparison of each contaminant isopleth contours for Future No-Build and Future Build conditions are displayed in **Appendix K**.

Figure 6-1 and **Figure 6-2**, as well as the isopleth figures in **Appendix K** show that areas with the highest impact remain concentrated along the Busway, from Lawrence Avenue East to Eglinton Avenue East.

A general comparison is shown in **Table 6-3** to highlight the variance in impacts for all contaminants due to the Future Build Conditions compared to Future No-Build Conditions. The maximum concentrations at the most impacted receptors were considered for each contaminant to demonstrate the change in impact from one condition to another.

Table 6-3: Comparison of Maximum Concentration for Future No Build and Future Build Conditions

Contaminant	Averaging Period (hour)	Future No-Build Conditions (micrograms/metre^3)	Sensitive / Critical Receptor	Future Build Conditions (micrograms/metre^3)	Sensitive / Critical Receptor	% Change from Future No-Build Conditions
NO_2[1]	1	97.0	SR48	21.8	SR7	-77%
NO_2[1]	24	59.5	CR11	6.35	SR7	-89%
NO_2[1]	Annual	15.5	CR11	0.67	SR7	-96%
CO[2]	1	1695	SR48	65.1	SR21	-96%
CO[2]	8	1670	SR48	24.8	SR9	-99%
SO_2[3]	1	0.292	SR48	0.0382	SR7	-87%
SO_2[3]	10 minutes	0.482	SR48	0.0630	SR7	-87%
SO_2[3]	Annual	0.0253	CR11	0.000948	SR7	-96%
PM_{10}[4]	24	162	SR64	15.8	SR12	-90%
$PM_{2.5}$[5]	24	39.3	SR64	3.81	SR12	-90%
$PM_{2.5}$[5]	Annual	10.2	SR64	1.00	SR12	-90%
Acetaldehyde[6]	30 minutes[11]	5.28	CR11	0.180	SR7	-97%
Acetaldehyde[6]	24	1.45	CR11	0.0361	SR7	-98%
Acrolein[7]	1	0.0158	SR48	0.0121	SR7	-24%
Acrolein[7]	24	0.00525	CR11	0.00334	SR7	-36%
Benzene[8]	24	0.0637	CR11	0.0439	SR5	-31%
Benzene[8]	Annual	0.0166	CR11	0.0116	SR5	-30%
Benzo(a)Pyrene[9]	24	3.91E-05	CR11	2.87E-05	SR7	-26%
Benzo(a)Pyrene[9]	Annual	1.02E-05	CR11	2.74E-06	SR7	-73%
1,3-Butadiene[10]	24	1.01E-03	CR11	1.01E-03	SR7	-0.26%
1,3-Butadiene[10]	Annual	2.62E-04	CR11	8.62E-05	SR7	-67%
Formaldehyde[11]	24	1.74	CR11	0.0588	SR7	-97%

The modelled results at the four most impacted sensitive and critical receptors: SR7, SR12, CR11, and SR48, from the Future Build and Future No-Build Conditions are compared in **Table 6-4**, **Table 6-5**, **Table 6-6**, and **Table 6-7** for a direct comparison of maximum concentrations at the same receptors.

The main findings from the dispersion modelling results are summarized below:

- Impacts from the Future Build Condition within the Air Quality Study Area significantly decreases for the majority of the sensitive and critical receptors in comparison to the Future No-Build Condition for most contaminants and their respective averaging periods. This is due to the reduced project footprint, since the Future Build Condition is limited to the Busway.
- The maximum predicted impacts are modelled at receptor locations closest to Busway (SR7, SR12) in the Future Build Condition and along the Toronto Transit Commission Interim On-Street Route (SR48, CR11) in the Future No-Build Condition. In the Future Build Condition, the most impacted receptors for the majority of the contaminants are concentrated along the Busway between Lawrence Avenue East and Eglinton Avenue East in close proximity to the proposed parking lot at Lawrence Avenue East.

6.1.4 Cumulative Frequency Analysis

A cumulative frequency analysis was conducted to estimate the potential for exposure during the predicted 1-hour and 24-hour averaging periods, at the worst-case impacted sensitive receptor. The contaminants of NO_2 (1-hour) and benzo(a)pyrene (24-hour) are predicted to exceed their respective Provincial limit at the most impacted sensitive or critical receptor in the Future Build Conditions.

Each of the following figures show the percentage of time that the highest impacted receptor is experiencing concentrations of NO_2, and benzo(a)pyrene from both the project's contribution and the contribution from the background ambient air quality, in relation to the respective Federal or Provincial limit. These figures should be viewed as a visual aid representing the relative impacts from each of the contributing sources.

Table 6-4: Comparison of Maximum Concentration (Future No Build and Future Build Conditions) for Sensitive Receptor No. 7 (10 metre Distance from Busway)

Contaminant	Averaging Period (hour)	Future No-Build Conditions (micrograms/metre^3)	Future Build Conditions (micrograms/metre^3)	% Change from Future No-Build Conditions
NO_2	1	10.7	21.8	104%
NO_2	24	3.11	6.35	105%
NO_2	Annual	0.589	0.674	14%
CO	1	92.3	39.4	-57%
CO	8	91.8	22.0	-76%
SO_2	1	0.019	0.038	104%
SO_2	10 minutes	0.03	0.06	104%
SO_2	Annual	0.0011	0.0009	-14%
PM_{10}	24	30.5	8.54	-72%
$PM_{2.5}$	24	7.38	2.07	-72%
$PM_{2.5}$	Annual	1.547	0.494	-68%
Acetaldehyde	30 minutes	0.32	0.14	-56%
Acetaldehyde	24	0.076	0.036	-53%
Acrolein	1	0.00096	0.01206	1161%
Acrolein	24	0.00028	0.00334	1094%
Benzene	24	0.0036	0.0266	642%
Benzene	Annual	0.00069	0.00688	893%
Benzo(a)pyrene	24	2.38E-06	2.87E-05	1105%
Benzo(a)pyrene	Annual	4.70E-07	2.74E-06	483%
1,3-Butadiene	24	1.82E-04	1.01E-03	452%
1,3-Butadiene	Annual	1.01E-05	8.62E-05	753%
Formaldehyde	24	0.092	0.059	-36%

Note: (1) SR7 is located 60 metres from the proposed Lawrence Avenue East parking lot.

Table 6-5: Comparison of Maximum Concentration (Future No-Build and Future Build Conditions) for Critical Receptor No. 11 (380 metre Distance from Busway)

Contaminant	Averaging Period (hour)	Future No-Build Conditions (micrograms/metre^3)	Future Build Conditions (micrograms/metre^3)	% Change from Future No-Build Conditions
NO_2	1	96.3	0.840	-99%
NO_2	24	59.5	0.162	-100%
NO_2	Annual	15.5	0.0237	-100%
CO	1	1560	6.63	-100%
CO	8	1552	2.59	-100%
SO_2	1	0.278	0.001	-100%
SO_2	10 minutes	0.46	0.00	-100%
SO_2	Annual	0.0253	0.0000	-100%
PM_{10}	24	92.3	1.30	-99%
$PM_{2.5}$	24	22.56	0.31	-99%
$PM_{2.5}$	Annual	4.664	0.059	-99%
Acetaldehyde	30 minutes	5.05	0.019	-100%
Acetaldehyde	24	1.450	0.003	-100%
Acrolein	1	0.01506	0.00028	-98%
Acrolein	24	0.00525	0.00004	-99%
Benzene	24	0.0637	0.0037	-94%
Benzene	Annual	0.01657	0.00070	-96%
Benzo(a)pyrene	24	3.91E-05	5.03E-07	-99%
Benzo(a)pyrene	Annual	1.02E-05	6.20E-08	-99%
1,3-Butadiene	24	1.01E-03	1.12E-05	-99%
1,3-Butadiene	Annual	2.62E-04	8.00E-07	-100%
Formaldehyde	24	1.74	0.004	-100%

Table 6-6: Comparison of Maximum Concentration (Future No-Build and Future Build Conditions) for Sensitive Receptor No. 48 (400 metre distance from Busway)

Contaminant	Averaging Period (hour)	Future No-Build Conditions (micrograms/metre^3)	Future Build Conditions (micrograms/metre^3)	% Change from Future No-Build Conditions
NO_2	1	97.0	2.29	-98%
NO_2	24	56.4	0.255	-100%
NO_2	Annual	13.7	0.038	-100%
CO	1	1695	13.7	-99%
CO	8	1670	4.15	-100%
SO_2	1	0.292	0.003	-99%
SO_2	10 minutes	0.482	0.0053	-99%
SO_2	Annual	0.0227	0.00002	-100%
PM_{10}	24	65.7	2.9	-96%
$PM_{2.5}$	24	16.16	0.71	-96%
$PM_{2.5}$	Annual	3.915	0.089	-98%
Acetaldehyde	30 minutes	5.28	0.0393	-99%
Acetaldehyde	24	1.38	0.006	-100%
Acrolein	1	0.01577	0.00100	-94%
Acrolein	24	0.00499	0.00008	-98%
Benzene	24	0.0608	0.0078	-87%
Benzene	Annual	0.01482	0.0011	-93%
Benzo(a)pyrene	24	3.77E-05	8.84E-07	-98%
Benzo(a)pyrene	Annual	9.19E-06	1.00E-07	-99%
1,3-Butadiene	24	9.57E-04	2.28E-05	-98%
1,3-Butadiene	Annual	2.33E-04	1.41E-06	-99%
Formaldehyde	24	1.65	0.008	-100%

Table 6-7: Comparison of Maximum Concentration (Future No-Build and Future Build Conditions) for Sensitive Receptor No. 12 (42 metre distance from Busway)

Contaminant	Averaging Period (hour)	Future No-Build Conditions (micrograms/metre^3)	Future Build Conditions (micrograms/metre^3)	% Change from Future No-Build Conditions
NO_2	1	6.42	5.10	-21%
NO_2	24	2.08	1.28	-39%
NO_2	Annual	0.452	0.348	-23%
CO	1	76.6	42.7	-44%
CO	8	76.2	20.6	-73%
SO_2	1	0.0124	0.00473	-62%
SO_2	10 minutes	0.0204	0.00781	-62%
SO_2	Annual	0.0009	0.0002	-80%
PM_{10}	24	33.7	15.8	-53%
$PM_{2.5}$	24	8.16	3.81	-53%
$PM_{2.5}$	Annual	1.432	1.005	-30%
Acetaldehyde	30 minutes	0.19	0.12	-38%
Acetaldehyde	24	0.051	0.033	-35%
Acrolein	1	0.00059	0.00143	144%
Acrolein	24	0.00019	0.00025	32%
Benzene	24	0.0025	0.0409	1509%
Benzene	Annual	0.00055	0.0108	1878%
Benzo(a)pyrene	24	1.78E-06	3.55E-06	100%
Benzo(a)pyrene	Annual	3.80E-07	8.71E-07	129%
1,3-Butadiene	24	3.60E-05	6.12E-05	70%
1,3-Butadiene	Annual	7.78E-06	8.88E-06	14%
Formaldehyde	24	0.062	0.041	-34%

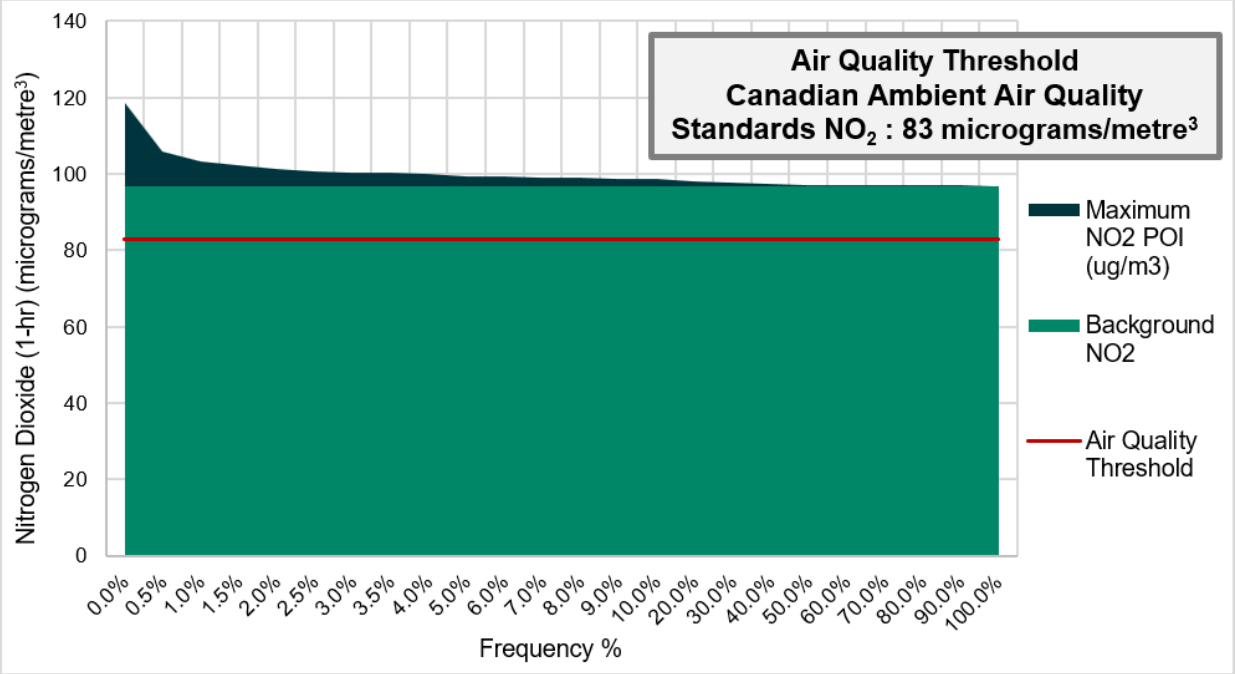
6.1.4.1 1-Hour Average NO_2 Impacts for Future Build Conditions

Figure 6-3 shows the cumulative frequency analysis curve representing the percentage of time at which the most impacted sensitive receptor (SR7) is experiencing a concentration of NO_2 averaged over 1-hour, in relation to the Federal Canadian Ambient Air Quality Standards limit.

The figure also illustrates the separate contribution from the project sources and from the background air quality. The figure highlights the following points:

- 100% of the hours have a cumulative concentration above the Canadian Ambient Air Quality Standards limit.
- The background level of NO_2 (1-hour) contributes approximately 117% of the Canadian Ambient Air Quality Standards.

Figure 6-3: Future Build Cumulative Frequency Analysis (SR7) 1-hr NO_2



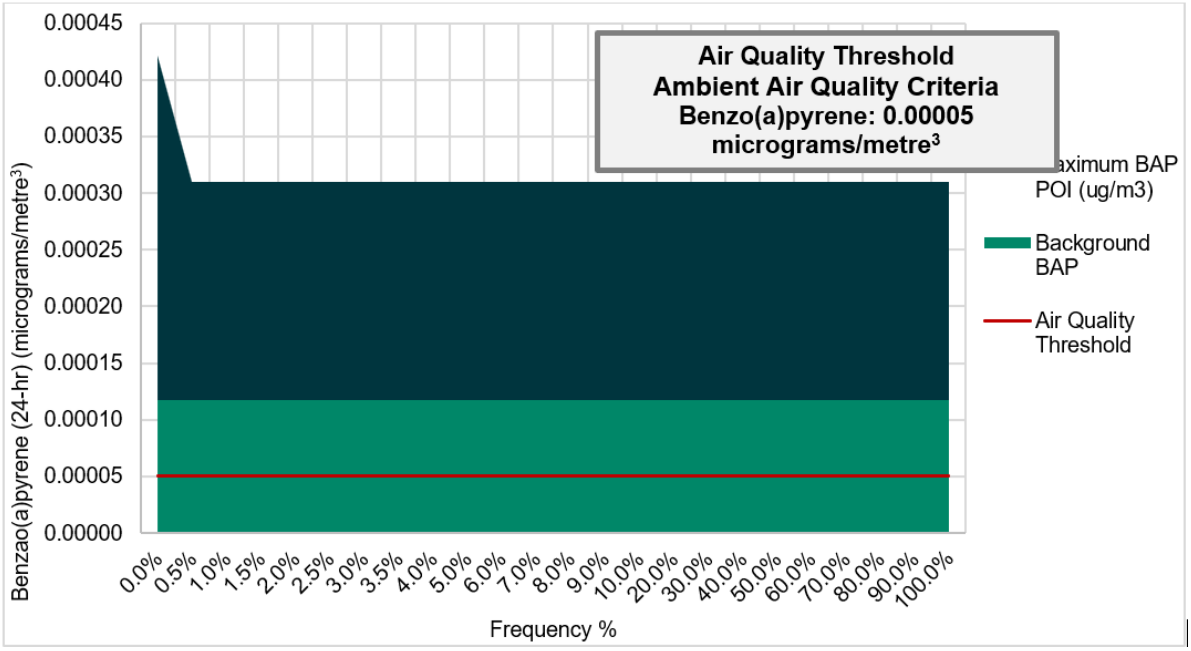
6.1.4.2 24-Hour Average Benzo(a)pyrene Impacts for Future Build Conditions

Figure 6-4 shows the cumulative frequency analysis curve representing the percentage of time at which the most impacted receptor (SR7) is experiencing a concentration of Benzo(a)pyrene averaged over 24-hour, in relation to the Ambient Air Quality Criteria limit.

The figure also illustrates the separate contribution from the project sources and from the background air quality. The figure shows the following:

- 100% of hours have a cumulative concentration above the Ambient Air Quality Criteria.
- The background level of Benzo(a)pyrene (24-hour) contributes approximately 234% of the Ambient Air Quality Criteria.

Figure 6-4: Future Build Cumulative Frequency Analysis (SR7) 24-hr Benzo(a)pyrene



6.2 Assessment of Modelling Results through a Regional Analysis

An emission burden analysis was conducted to estimate the total annual amount of Criteria Air Contaminants and greenhouse gas emissions from the Future Build Condition to determine the project's regional impact. This analysis was conducted by comparing the net emissions from the Study Area to the transportation sector emissions in Ontario and Canada. The analysis focused on criteria air contaminants NO_2, CO, SO_2, and $PM_{2.5}$ which are contributors to smog, as well as greenhouse gases. **Table 6-8** provides a comparison of the criteria air contaminants' contributions from the project to the Ontario and Canada transportation sector, excluding Air Transportation, Domestic Marine Navigation, Rail Transportation, and Off-Road Vehicles as defined by the Environment Canada Air Pollutant Emission Inventory.

Table 6-8: Regional Emissions Criteria Air Contaminants Burden Analysis

Contaminant	Annual Emissions Future Build (2028) (Tonnes)	Ontario Emissions 2021 (Tonnes)[1]	Canada Emissions 2021 (Tonnes)[1]	Ontario Project Contributions (%)	Canada Project Contributions (%)
CO	14.0	305,573	974,792	0.005%	0.0014%
NO_2	1.66	42,474	163,696	0.004%	0.0010%
SO_2	0.0063	183	516	0.003%	0.0012%
PM2.5	2.60	1,706	6,228	0.15%	0.04%

Notes: Canada's air pollutant emissions inventory - Open government Portal. Available electronically at: https://open.canada.ca/data/en/dataset/fa1c88a8-bf78-4fcb-9c1e-2a5534b92131

6.2.1 Greenhouse Gas Assessment

Mobile vehicles emit the following greenhouse gases in significant amounts:

- Carbon dioxide (CO_2).
- Methane (CH_4).
- Nitrous oxide (N_2O).

Total greenhouse gas emissions were calculated using a combination of MOVES emission rates and total annual vehicle usage projections for the project sources of air quality contaminant emissions. MOVES can calculate atmospheric carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O) emissions varying with vehicle class, speed, and emission process type (i.e., running emissions, starting emissions, etc.).

Annual total greenhouse gas emissions were calculated by combining the grams per vehicle-mile-travelled (g/vehicle-miles-traveled) emission rates derived from MOVES County Scale output for each of the greenhouse gas pollutants with the projected annual source vehicle usage and source length (in miles) to extrapolate an annual emission.

Individual greenhouse gases have differing abilities to absorb heat in the atmosphere. These varying heat absorption properties are quantified by an individual global warming potential factor for each contaminant which converts the mass of a greenhouse gases to the representative equivalent mass of CO_2 ($CO_{2\,eq}$).

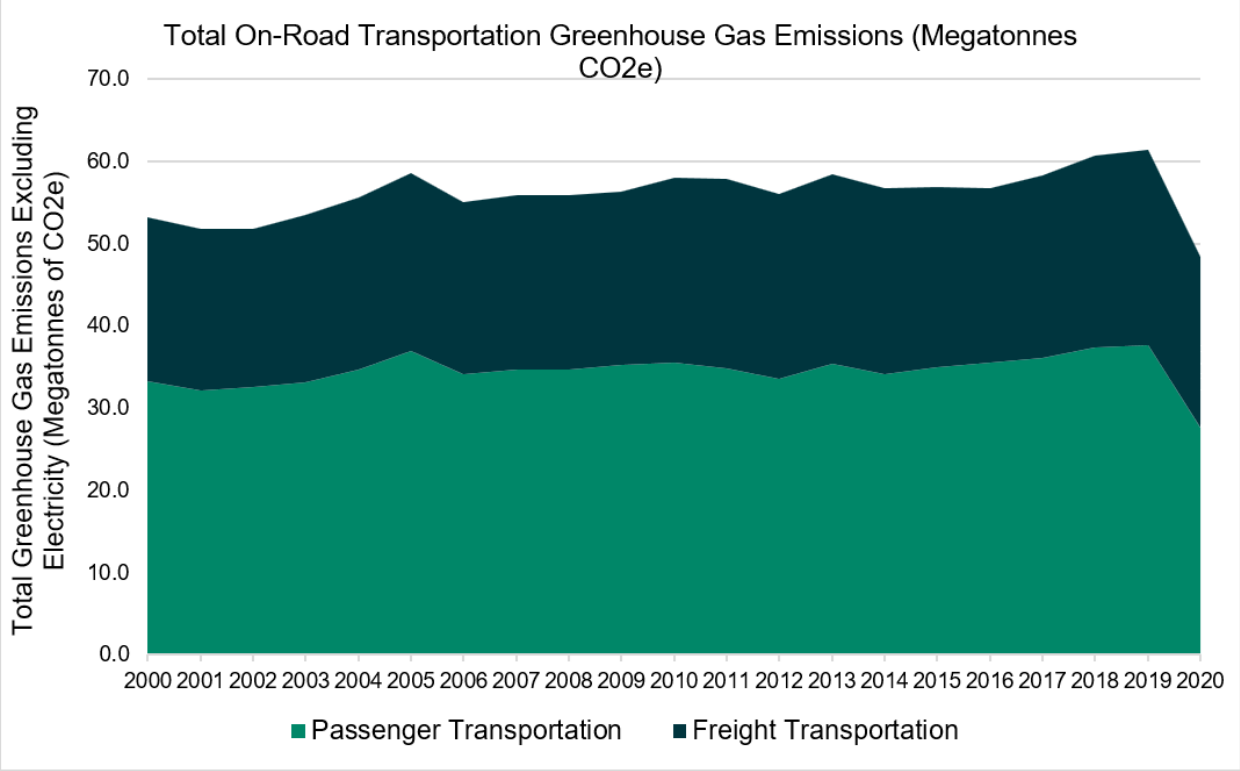
The global warming potentials are calculated based on the amount of heat trapping potential that would result from the emission of 1 kilogram of a given greenhouse gas to the emission of 1 kilogram of CO_2. global warming potentials for various greenhouse gas compounds are defined by Environment Canada in their *Technical Guidance on Reporting Greenhouse Gas Emissions* (2023) document, summarized for compounds of interest below in **Table 6-9**.

Table 6-9: Greenhouse Gas 100-year Global Warming Potentials

Greenhouse Gas	100-year Global Warming Potential
Carbon dioxide (CO_2)	1
Methane (CH_4)	28
Nitrous oxide (N_2O)	265

Currently, there are no greenhouse gas emission standards in Canada or the United States on a per-source basis. However, National Resources Canada reports annual greenhouse gas emissions for various industrial sectors, including the Transportation sector. **Figure 6-5** below shows historical annual trend of greenhouse gas emissions from the transportation sector from 2000 to 2020, in Megatonnes of $CO_{2\ eq}$.

Figure 6-5: Trends in Greenhouse Gas Ontario Transportation Sector Emissions (2000-2020), National Resources Canada



Source: National Resources Canada - Comprehensive Energy Use Database: Table 8: Greenhouse Gas Emissions by Transportation Mode[7]

7. Table 8 “Greenhouse Gas Emissions by Transportation Mode” from Natural Resource Canada’s Transportation Sector (Ontario) annual reporting database (2000 – 2020). Available electronically at: https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/showTable.cfm?type=CP&sector=tran&juris=on&rn=8&page=0

The project contributions of greenhouse gases in the Future Build year (2028) were compared to the 2021 $CO_{2\ eq}$ contributions from the Ontario Transportation sector, shown below in **Table 6-10**.

Table 6-10: Greenhouse Gas Project Contribution Regional Assessment

Contaminant	Future Build (Year 2028) (Megatonnes)[1]	Ontario 2021 Reported Greenhouse Gas Emissions for the Transportation Sector[3] (Megatonnes CO_2 eq.)	% Future Build Project Contribution
Carbon dioxide (CO_2)	0.452	-	-
Methane (CH_4)	2.22E-05	-	-
Nitrous Oxide (N_2O)	2.20E-05	-	-
CO_2 equivalent [2]	0.458	45.1[3]	1%

Notes: (1) Megatonnes = Megatonnes
(2) CO_2 equivalent was calculated for the Future Build Condition using global warming potential conversion for N_2O and CH_4 (265 and 28, respectively.
(3) National Resource Canada: Table 8 “Greenhouse Gas Emissions by Transportation Mode”, Comprehensive Energy Use Database (accessed January 2024), excluding off-road, air, rail, and marine emissions.

As shown above, the project greenhouse gas contributions are approximately 1% compared to the total Transportation 2021 CO_2eq emissions.

6.3 Construction Air Quality Impacts

Construction activity creates and releases fine particulates (fugitive dust) and other vapours into the surrounding community, including diesel combustion exhaust, asphalt volatile contaminant emissions, etc. Emissions from construction activity are temporary and unlikely to have long-lasting effects on the surrounding area.

Fugitive dust emissions can result from movement of construction equipment and transport of materials to and from a construction site. Fugitive dust would generally be a problem during periods of intense construction activity and would be accentuated by windy and/or dry conditions.

Construction activities which potentially prove most impactful to the local air quality include, but are not limited to:

- Clearing and grubbing.
- Grading and rock blasting.
- Road and surface paving.
- Storage of granular material.

- Structure construction/deconstruction.
- Mobile on-site equipment.

Construction activities will result in temporary traffic disruption and detour, which can lead to increased traffic congestion, thereby increasing motor vehicle exhaust emissions on nearby roadways, and could result in elevated localized pollutant concentrations.

Construction equipment operating by diesel fuel combustion or other fuel type combustion emit exhaust contaminants during their operation. Compared with emissions from other motor vehicle sources in the Study Area, emissions from construction equipment and trucks are generally insignificant with respect to compliance with the Provincial and Federal ambient air quality standards.

6.3.1 Construction Equipment and Vehicle Exhaust

Environment Canada adopted amendments to the Off-Road Compression-Ignition Engine Emission Regulations which align Canadian emission standards with the United States Environmental Protection Agency Tier 4 standards for non-road engines, including the emission limits, testing methods and effective dates.

The Regulations Amending the Off-Road Compression-Ignition Engine Emission Regulations (the Amendments) impose stricter standards and new requirements starting with engines of the 2012 and later model years.

All equipment and vehicles should be kept properly maintained and repaired to minimize exhaust emissions, including odours.

Excessive idling of vehicles and equipment (greater than five minutes) should be minimized. Other potential mitigation measures may include the use of alternative-fuelled or electric equipment where feasible.

6.3.2 Fugitive Dust

Implementing good practices including wetting exposed earth areas; covering dust-producing materials during transport; and limiting construction activities during high wind conditions will minimize the impacts of fugitive dust. Potential mitigation measures that may be employed by the construction contractor to reduce fugitive dust issues include:

- Seeding, paving, covering, wetting, or otherwise treating disturbed soil surfaces.
- Minimizing storage and unnecessary transfers of spoils and debris on-site.
- Using wind screens or fences.

- Covering all truckloads of dust-producing material.
- Removing all loose or unsecured debris or materials from empty trucks prior to leaving the site.
- Reducing traffic speeds on any unpaved surfaces.
- Vacuum sweeping or water truck spraying of all paved surfaces and roadways on which equipment and truck traffic enter and leave the construction areas.
- Using wheel washes and truck washes at site egresses.
- Modifying work schedules when weather conditions could lead to adverse impacts (e.g., very dry soil and high winds).

Fugitive dust from construction activities can be managed through implementation of an Air Quality Management Plan, where mitigation measures are specified for the planned construction activities and implemented on an as-needed basis.

6.4 Summary of Mitigation Measures

Table 6-11 summarizes the potential mitigation measures for the modelled air quality impacts which are expected to result from the implementation of this project.

6.4.1 Proposed Mitigation for Construction Activity

Exposure to construction-related emissions can be mitigated by the following:

- Determining that mobile equipment is in good condition, properly and regularly maintained, and compliant with applicable Federal and Provincial Regulations for off-road diesel engines.
- Determining that all machinery is maintained and operated in accordance with manufacturer's specification.
- Locating stationary equipment (generators, compressors, etc.) as far away from sensitive receptors as practical.
- Minimizing idling time and posting signage to this effect around the construction site.
- Determining that stationary and mobile equipment are not operated during early morning (before 6:00 am, or sunrise) or evening periods (after 8:00 pm, or sunset) as often as practical.

Table 6-11: Summary of Potential Effects and Mitigation Measures

Air Quality Condition	Potential Effect	Mitigation Measure(s)	Monitoring
Operating Conditions: Increased Traffic Vehicular Emissions	■ Increased NO_2, CO, SO_2, particulate matter, and Volatile Organic Compounds impact levels at nearby receptors.	■ Continued promotion of increased electric vehicle purchase and infrastructure within Ontario.	■ Operating Conditions: Increased Traffic Vehicular Emissions
Construction Conditions: Vehicle Operation and Surface Particulate Disruption	Construction related air pollution include diesel combustion and particulate emissions. Odour and visible dust may cause public annoyance at existing sensitive receptors within the Study Area during construction phase.	■ Implementation of vegetation (such as a green dust control fence around the corridor) within the Study Area to decrease ground level dispersion of particulates. ■ Prior to commencement of construction, a comprehensive Environmental Controls and Methods Plan will be prepared for fugitive dust control, effluent water control, Polychlorinated biphenyls removal and cleanup, and will: – Ensure work does not adversely affect adjacent watercourses, groundwater, and wildlife, or contribute to excess air and noise pollution. – Ensure proper disposal procedures are maintained for waste or volatile materials including, but not limited to, mineral spirits, oil, petroleum based lubricants or toxic cleaning solutions. – Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with authorities having jurisdiction. – Prevent extraneous materials from contaminating air beyond construction area by providing temporary enclosures during demolition. ■ Prior to commencement of construction, an Emission Control Plan will be prepared for work involving asphalt application, roofing, waterproofing, diesel exhaust, odourous products. The Emission Control Plan will: – During construction, provide sufficient measures to control odours and other irritating chemical emissions including, but not limited to, the following: ▪ Exhaust from powered equipment, such as vehicles, compressors, generators. ▪ Asphalt odours. ▪ Smoke from heating kettles, paints and sealers. – Prevent odours from entering the ventilation systems through placement options, sealing or shutting down air intakes, and use of positive pressure where possible. – Where possible, schedule activities known to generate noxious or irritating odours during off-hours to minimize impact on Toronto Transit Commission employees, passengers, and neighbouring properties. – Ensure chemical Products used have been previously reviewed and approved by Toronto Transit Commission for use regarding overall flammability, chemical and environmental Hazards and irritant properties. ■ Prior to commencement of construction, a Dust Control Plan for Non-Asbestos containing material will be prepared and will: – Confirm that airborne contaminants are maintained below their respective occupational exposure limits in accordance with Occupational Health and Safety Act Revised Regulations of Ontario 1990, Regulation 833: Control of Exposure to Biological or Chemical Agents. – Provide appropriate enclosure for the Work area to prevent dust from migrating to other areas. – Provide sufficient local exhaust and ventilation. – Periodically water unpaved construction areas, stockpiles, and during concrete chipping. – Limit speed of vehicular traffic. – Use water sprays for dust generating loading and unloading of materials. – Sweep and water flush entrances to the Site. – Wash down streets within the area of Work on a weekly basis and as required in accordance with the Dust Control Plan (Non Asbestos containing materials).	■ During construction, air monitoring of contaminants should be provided, as applicable, to verify the effectiveness of dust control measures to support the Dust Control Plan. ■ In addition, relevant construction monitoring activities from the following recommended guidelines can be implemented during construction: – Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (Cheminfo Services Inc., 2005); and, – Operations Manual for Air Quality Monitoring in Ontario (Ministry of the Environment, Conservation and Parks, 2018).

- Implementing the use of non-chloride dust suppressants.
- Temporary seeding or mulching and compression of bare soil and storage piles to reduce erosion.
- Air monitoring of contaminants, as applicable, to verify the effectiveness of dust control measures to support the Dust Control Plan.
- Explicit commitment to the implementation of all applicable best practices identified in the Environment Canada document, Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (2005).
- Assessing that the areas most impacted by particulate levels are vegetated (e.g., tree planting) or other types of screening/barriers may be considered where possible between the source of emission and the impacted receptor(s) to reduce the cumulative particulate impacts.

Site supervisors during the construction phase should monitor the site for wind direction and weather conditions to ensure that high-impact activities be reduced when the wind is blowing consistently towards nearby sensitive receptors. The site supervisor should also monitor for visible fugitive dust and take action to determine the root-cause to determine proper mitigation. Specific details to this effect should be included in the Air Quality Management Plan.

It is further recommended that mitigation measures detailed in "*Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities (March 2005)"* prepared by Cheminfo for Environment Canada be implemented, where practical.

6.4.2 Potential Mitigation for Project Contribution

The individual impacts from the proposed project emissions on the local air quality are a result of contributions from both idling vehicles and travelling vehicles within the Study Area. These emissions from roadways and idling vehicles are released with little upward dispersion capacity and are therefore expected to dissipate with increasing distance from the emission source. Areas of concentrated emission impact are influenced by traffic volumes along a given segment of roadway.

Potential mitigation actions to counteract the project emission impacts include the introduction of electric buses and/or more fuel-efficient vehicles to provide significant Criteria Air Contaminant and greenhouse gas reductions. The increasing popularity and affordability of hybrid and full electric vehicles, as well as transit authority led initiatives to increase the percentage of fuel efficient and hybrid vehicles will continue to reduce emission impacts from vehicles in the future.

As suggested within **Section 6.4.1**, areas affected by airborne particulates may be benefited by introducing vegetation (e.g., trees, shrubbery, etc.) or other types of screening/barriers may be considered to help reduce cumulative particulate impacts during the operational phase. Vegetation would be best placed, where feasible, between sources of emission (i.e., roadways) and impacted receptor(s).

7. Conclusion and Recommendations

The results of the Air Quality Impact Assessment show that the addition of the proposed infrastructure will have a lower impact on the majority of the sensitive and critical receptors within the Study Area in comparison to Future No-Build Conditions for most of the contaminants. This is predominately due to the reduction in the affected area since the Future Build Condition has a smaller footprint compared to Future No-Build Condition.

The sensitive and critical receptors along the Busway between Lawrence Avenue East and Eglinton Avenue East and in close proximity to the proposed parking lot at Lawrence Avenue East are expected to be the most impacted by the Busway, specifically on Lawrence Avenue East. (SR7, SR12). The Air Quality Impact Assessment is limited to the boundaries of the Study Area, thus any additional alleviated congestion experienced outside the bounds of the Study Area have not been captured in these results.

Air quality mitigation measures during the construction and operational phase include the following:

- Implementation of vegetation along the busway during construction (such as a green dust control fence around the corridor), where feasible, within the Study Area primarily for the highest impact receptors mentioned above, to decrease ground level dispersion of particulates.
- Continued promotion of increased electric vehicle purchase and infrastructure within Ontario.

There are three Criteria Air Contaminants with modelled cumulative concentrations above the respective Provincial and/or federal air quality criteria, specifically the 1-hour averaging period of Nitrogen Dioxide (NO_2), the annual averaging period of Benzene, and the 24-hour and annual averaging periods of Benzo(a)pyrene. The exceedances of NO_2, Benzene and Benzo(a)pyrene are due to elevated existing ambient air quality concentrations, which alone exceed the Provincial and/or federal air quality criteria prior to including the project contributions:

- NO_2 is at 143% (Canadian Ambient Air Quality Standards 2025) and 100% (Canadian Ambient Air Quality Standards 2020) of the Canadian Ambient Air Quality Standards limit for the 1-hr averaging period.
- Benzene is at 111% of the Ambient Air Quality Criteria limit for the annual averaging period.

- Benzo(a)pyrene is at 291% of the Ambient Air Quality Criteria limit for the 24-hr period and 1016% of the Ambient Air Quality Criteria limit for the annual averaging period.

However, even with these exceedances, the concentrations for these contaminants are significantly lower in the Future Build Condition when compared to Future No Build Condition.

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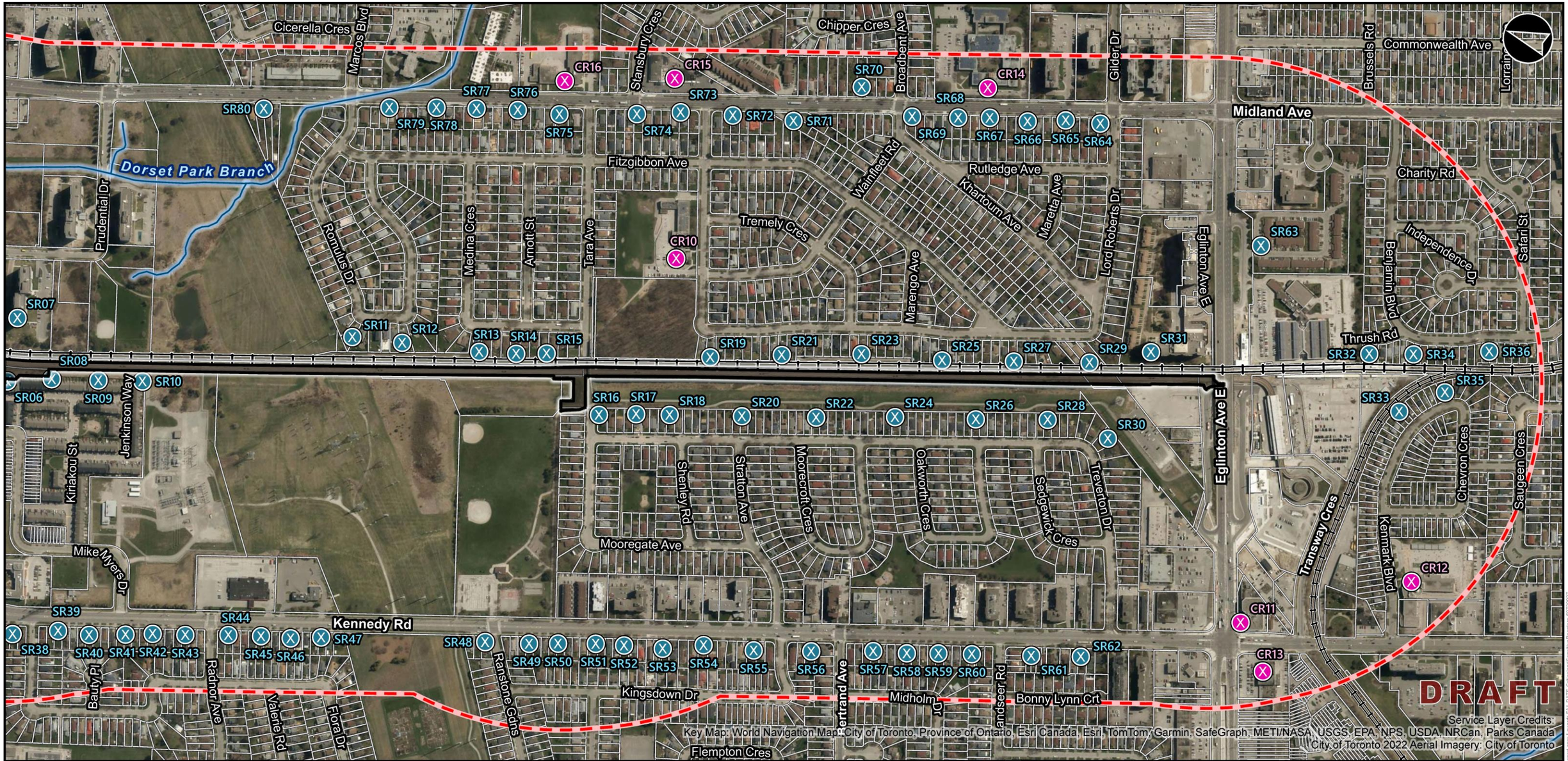
Appendix A

Critical and Sensitive Receptors within Study Area



LEGEND

60% Design Project Components

- Air Quality 500m Study Area
- Construction Disturbance Area

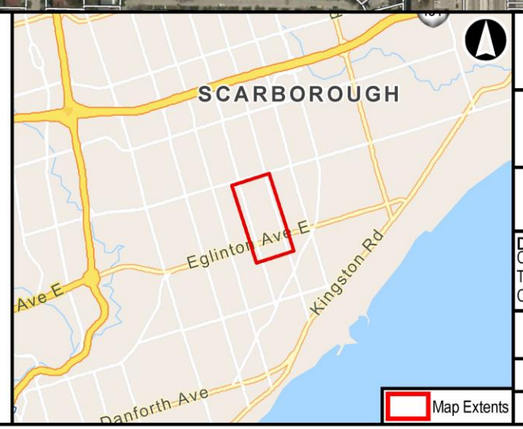
Air Quality

Receptors by Type

- Critical Receptor
- Sensitive Receptor

General Features

- Main Railway
- Spur Railway
- Watercourse
- Property Boundary



TTC Scarborough
Rapid Transit Busway Conversion Project
Air Quality Report

Critical and Sensitive Receptors

0 100 200 400 M

WGS 1984 UTM Zone 17N

Data Sources:
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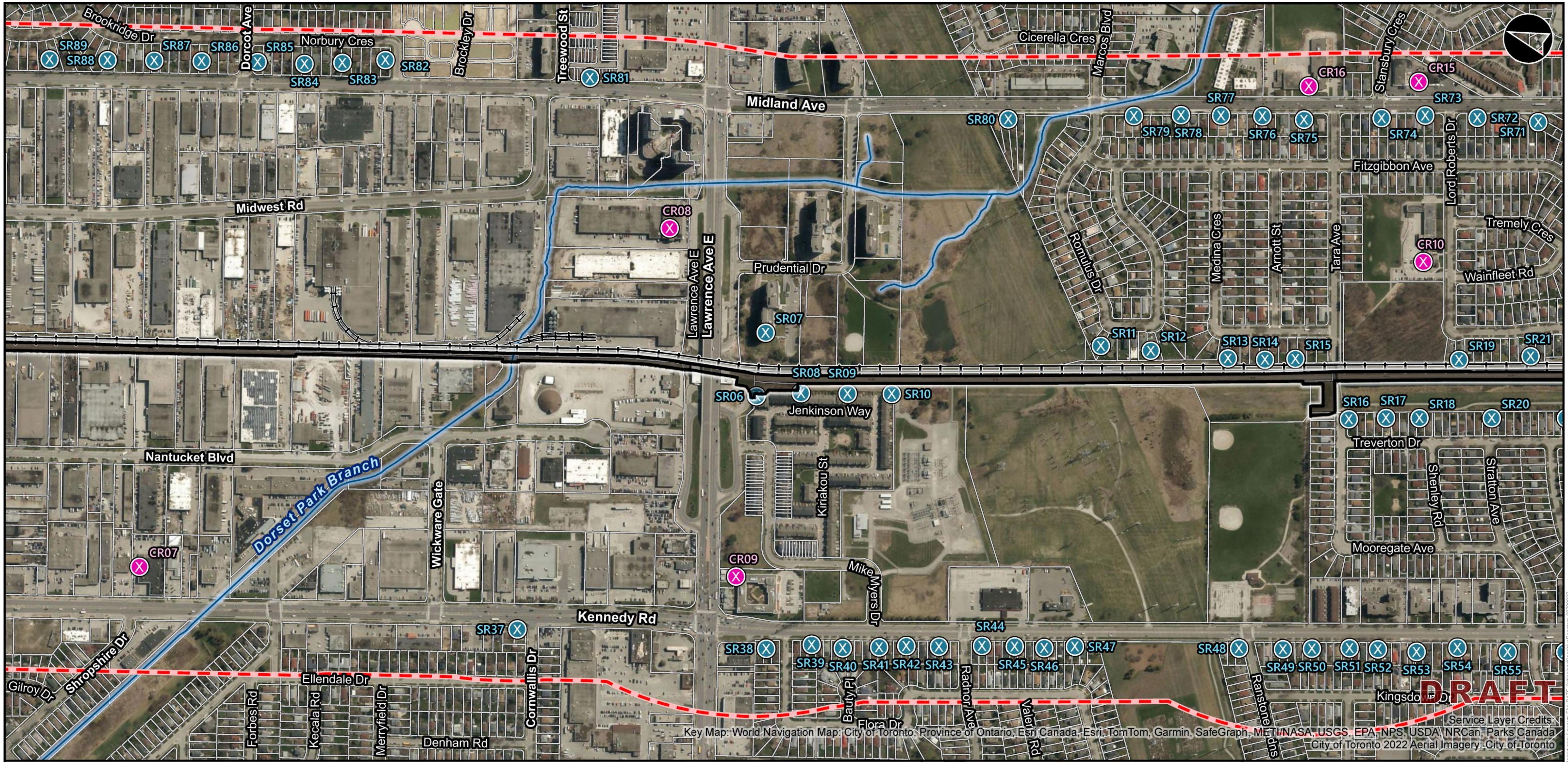

LEGEND

60% Design Project Components

Air Quality 500m Study Area

Construction Disturbance Area

Air Quality

Receptors by Type

Critical Receptor

Sensitive Receptor

General Features

Main Railway

Spur Railway

Watercourse

Property Boundary

TTC Scarborough Rapid Transit Busway Conversion Project Air Quality Report

Critical and Sensitive Receptors

0 100 200 400 M

WGS 1984 UTM Zone 17N

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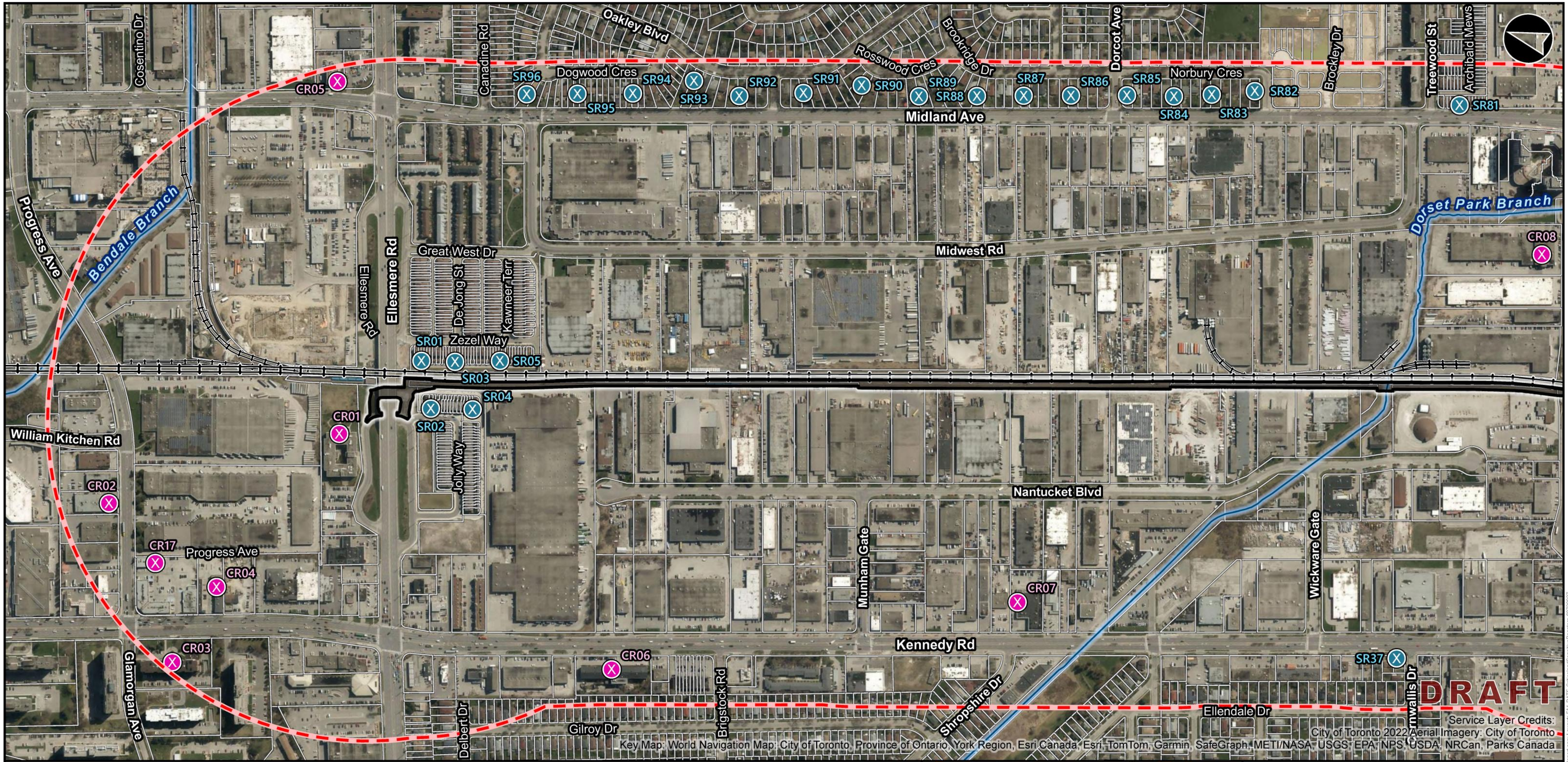


LEGEND

60% Design Project Components

- Air Quality 500m Study Area
- Construction Disturbance Area

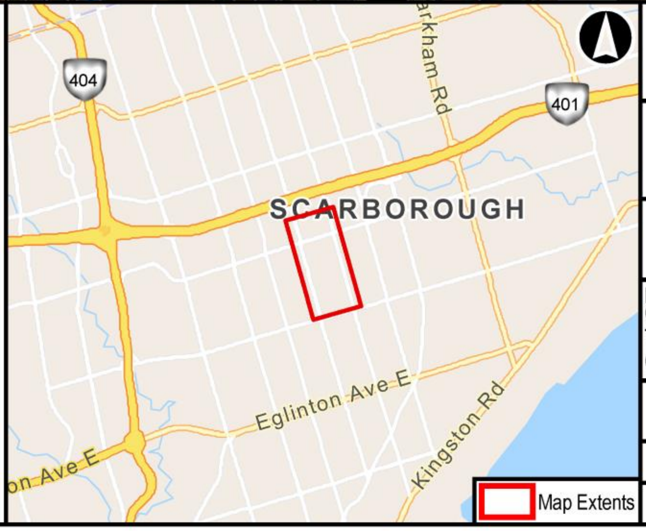
Air Quality

Receptors by Type

- Critical Receptor
- Sensitive Receptor

General Features

- Main Railway
- Spur Railway
- Minor Railway
- Watercourse
- Property Boundary



TTC Scarborough Rapid Transit Busway Conversion Project Air Quality Report

Critical and Sensitive Receptors

0 100 200 400 M

WGS 1984 UTM Zone 17N

Data Sources:
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Appendix B

Air Quality Assumptions Report

1. Assumptions for Air Quality Assessment

The following assumptions have been made for the air quality impact assessment:

1. The following contaminants were selected to represent potential impacts from the study area:
    a) Criteria Air Contaminants: nitrogen dioxide (NO_2), carbon monoxide (CO), sulphur dioxide (SO_2), respirable particulate matter (PM_{10}), fine particulate ($PM_{2.5}$), acetaldehyde, acrolein, benzene, benzo(a)pyrene, 1,3-butadiene, and formaldehyde.
    b) Greenhouse Gases: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).
2. Background air quality concentrations for the Criteria Air Contaminants were estimated using five years of data, based on data availability, collected from the following National Air Pollution Surveillance (NAPS) air quality monitoring stations:
    a) Toronto East (NAPS ID 60410),
    b) Toronto North Downsview (NAPS ID 60440),
    c) Roadside 401W Toronto (NAPS ID 60438), and
    d) Roadside Wallberg Toronto (NAPS ID 60439).
3. Pre-processed regional meteorological and terrain data from MECP will be representative of the conditions within the study area.
4. The Existing Conditions scenario will be represented as the Scarborough Rapid Transit (SRT) operations prior to decommissioning, travelling between Kennedy Station and Ellesmere Station along the SRT Line 3.
5. The Future No-Build scenario will be represented as the Interim On-Street Routing along Ellesmere Road, Midland Avenue, Eglinton Avenue and Kennedy Road using buses, travelling between Kennedy Station and Ellesmere Station.
6. The Future Build scenario will be represented as the Scarborough Busway operations, travelling between Kennedy Station and Ellesmere Station along the SRT Right-of-Way.
7. Impacts from vehicle traffic along arterial roads will not be assessed in the Existing, Future Build and Future No-Build scenarios, as focus will be given to the air quality impact solely associated with the SRT busway and SRT buses.

8. Stationary sources such as building comfort heating or standby power will be considered negligible and will not be included in the air dispersion modelling assessment.
9. The commuter parking lot at Kennedy Station will not be assessed for air quality impacts, as no functional change is expected from the existing conditions scenario. However, the assessment will include two surface parking lots at Lawrence East Station and Ellesmere Station.

2. Assumptions for Traffic Modelling

The following assumptions have been made for the traffic modelling within the air quality impact assessment:

1. Existing Conditions will not be assessed as the SRT rail operations would result in zero emissions.
2. Future Conditions will be assessed for the year 2028, as SRT Right-of-Way construction is expected to be completed in 2027.
3. Bus volumes and road traffic data will be provided by TTC. Traffic on existing roadways will not be included in the assessment.
4. The annual average daily traffic (AADT) predicted is assumed to have a year-specific vehicular distribution, according to the MOVES 4.0.1 input database.
5. Implementation of electric buses in the future is a possibility; however, operation of hybrid and diesel buses will be assumed instead, in order to capture the worst-case emissions scenario.

3. Assumptions for Emission Rate Calculations

The following inputs and assumptions were used for the modelling of emission factors and calculating emission rates for the TTC Busway Conversion Project:

1. The emission factor modelling software that will be used for this assessment is the U.S. EPA Motor Vehicle Emissions Simulator (MOVES) version 4.0.1.
2. The months of January and July are modelled to simulate worst-case conditions for both cold and hot temperature extremes and humidity conditions.

3. Future Conditions will be assessed for the year 2028, as SRT Right-of-Way construction is expected to be completed in 2027.
4. Weekday emission profiles will be selected as a representation of worst-case peak traffic conditions.
5. Niagara County in New York state will be used as the nearest geographic location within MOVES 4.0.1 to the Project for selection of fuel compositions.
6. Meteorological conditions will be based on historical data from the Toronto International Airport Station. These are publicly available on: Historical Data - Climate - Environment and Climate Change Canada (weather.gc.ca)
7. Vehicle types assumed to travel along the SRT Right-of-Way for the Future No-Build and Future Build Condition include:
    a) Transit Bus (MOVES Source ID 42)
8. Vehicle types assumed to use the parking lots at the two surface parking lots at Lawrence East Station and Ellesmere Station are expected to include:
    a) Passenger Car (MOVES Source ID 21)
    b) Passenger Truck (MOVES Source ID 31)
    c) Light Commercial Truck (MOVES Source ID 32)
9. MOVES does not directly categorize hybrid vehicles under a specific fuel type. Hybrid vehicles use a combination of fuel types (typically gasoline or diesel combined with electric power). Therefore, gasoline, electric, and diesel fuels were selected as fuel types for vehicles travelling along the SRT Right-of-Way. It was assumed that the MOVES 4.0.1 fuel category of ethanol-based fuel (fuel type “E85”) would not be applicable for this project as vehicles operating using this type of fuel are not as prevalent or supported in Canada.
10. The road type selected for estimating emissions using MOVES 4.0.1 will include urban unrestricted access, which is defined as urban based roadways which are not accessed through on/off ramps (i.e. non-highway urban roads).
11. Pollutants included within the emissions modelling are categorized as follows:
    a) Greenhouse Gases (GHG): methane (CH_4), nitrous oxide (N_2O), carbon dioxide (CO_2), and carbon dioxide equivalent (CO_2e)

b) Criteria Air Contaminants (CAC): carbon monoxide (CO), nitrogen oxides (NOx), fine particulate matter ($PM_{2.5}$), respirable particulate matter (PM_{10}), and sulphur dioxide (SO_2)
c) Volatile Organic Compounds (VOC): benzene, 1,3-butadiene, formaldehyde, acetaldehyde, and acrolein
d) Polycyclic Aromatic Hydrocarbons (PAH): represented as benzo(a)pyrene (BaP, particle & volatile)

12. Processes included within the emissions modelling are as follows:
    a) Running
    b) Crankcase running
    c) Brake-wear
    d) Tire-wear
    e) Evaporation Permeation
    f) Evaporation Fuel Vapour Venting
    g) Evaporation Fuel Leaks
13. Output Units of the emissions modelling are metric, as follows:
    a) Grams
    b) Kilojoules
    c) Kilometres

4. Assumptions for Dispersion Modelling

The following assumptions will be utilized for the air dispersion modelling assessment using U.S. EPA AERMOD (version 22112):

1. The study area includes the project footprint, with an additional 500 metre buffer.
2. Traffic flow emissions are represented by separated Line Volume source types in AERMOD, where:
    a) Plume Height, Release Height, and Plume Width will be determined using the “Haul Roads” calculation tool of AERMOD View (by Lakes Environmental Software). This tool is based of the US EPA’s “Haul Road Workgroup Final Report” (March 2012).
    b) Road Width is assumed to be measured from curbside to curbside, where individual links are separated based on significant road width parameters (e.g. additional lanes).

3. Traffic idling emissions for signalized intersections will be modelled as single volume sources.
4. If the calculated length of queue for the AM/PM Peak hour approach volume is greater than the combined lateral dimension of a single Volume source, a Line Volume source will be included. This Line Volume source will use the same release height, initial, and lateral dimensions as the proposed single Volume source, where the length of queue is equal to the length of the Line Volume source, where:
    a) Release Height for single volume sources representing approach volume idling = weighted average release height of vehicular exhaust.
    b) The associated Plume Height is equal to twice the Release Height.
    c) Plume Width is equal to the width of approach combined idling lanes.
    d) Source type is indicated as Elevated (Release Height > 0).
5. The assessment will include two surface parking lots at Lawrence East Station and Ellesmere Station. Capacity for Ellesmere Station and Lawrence East Station are 68 stalls and 90 stalls, respectively. Each parking lot will be modelled as an area source, assuming all vehicles within the maximum capacity will enter or exit each parking lot, per hour (e.g. half of the vehicles will enter, half of the vehicles will leave in a one hour period).
6. Regional meteorological and terrain data will be used for running the AERMOD air dispersion model. GeoTIFF files were selected for the Study Area. These are preprocessed by the MECP and are publicly available on the MECP website: Map: Regional Meteorological and Terrain Data for Air Dispersion Modelling | ontario.ca

Appendix C

Traffic Assessment & Emission Summary Tables

TTC Scarborough Busway - Sources		
Source Location	**Description**	**Modeling ID**
Eglinton Avenue	Between Midland Ave and Transway Crescent	S1
Eglinton Avenue	Between Transway Crescent and Kennedy Rd	S2
Kennedy Road	Between Eglinton Ave and Bertrand Ave	S3
Kennedy Road	Between Bertrand Ave and Ranstone Gardens	S4
Kennedy Road	Between Ranstone Gardens and Radnor Ave	S5
Kennedy Road	Between Radnor Ave and Lawrence Ave E	S6
Kennedy Road	Between Lawrence Ave E and Wickware Gate	S7
Kennedy Road	Between Wickware Gate and Forbes Rd	S8
Kennedy Road	Between Forbes Rd and Munham Gate	S9
Kennedy Road	Between Munham Gate and Ellesmere Rd	S10
Ellesmere Road	Between Kennedy Rd and Midland Ave	S11
Midland Avenue	Between Ellesmere Rd and Midwest Rd	S12
Midland Avenue	Between Midwest Rd and Dorcot Ave	S13
Midland Avenue	Between Dorcot Ave and Lawrence Ave E	S14
Midland Avenue	Between Lawrence Ave E and Prudential Dr	S15
Midland Avenue	Between Prudential Dr and Romulus Dr	S16
Midland Avenue	Between Romulus Dr and Stansbury Crescent	S17
Midland Avenue	Between Stansbury Crescent and Broadbent Ave	S18
Midland Avenue	Between Broadbent Ave and Gilder Dr	S19
Midland Avenue	Between Gilder Dr and Eglinton Ave E	S20
Future Build - SRT		
SRT Busway	Between Eglinton Ave and Tara Ave	S21
SRT Busway	Between Tara Ave and Lawrence Ave E	S22
SRT Busway	Between Lawrence Ave E and Ellesmere Rd	S23
Signalized Intersections - Future No Build		
Eglinton Avenue	At intersection of Eglinton Ave E and Midland Ave - Eastbound	S24
Eglinton Avenue	At intersection of Eglinton Ave E and Midland Ave - Westbound	S25
Midland Avenue	At intersection of Eglinton Ave E and Midland Ave - Northbound	S26
Midland Avenue	At intersection of Eglinton Ave E and Midland Ave - Southbound	S27
Eglinton Avenue	At intersection of Eglinton Ave E and Transway Crescent - Eastbound	S28
Eglinton Avenue	At intersection of Eglinton Ave E and Transway Crescent - Westbound	S29
Eglinton Avenue	At intersection of Eglinton Ave E and Kennedy Rd - Eastbound	S30
Eglinton Avenue	At intersection of Eglinton Ave E and Kennedy Rd - Westbound	S31
Kennedy Road	At intersection of Eglinton Ave E and Kennedy Rd - Northbound	S32
Kennedy Road	At intersection of Eglinton Ave E and Kennedy Rd - Southbound	S33
Kennedy Road	At intersection of Bertrand Ave and Kennedy Rd - Northbound	S34
Kennedy Road	At intersection of Bertrand Ave and Kennedy Rd - Southbound	S35
Kennedy Road	At intersection of Ranstone Garden and Kennedy Rd - Northbound	S36
Kennedy Road	At intersection of Ranstone Garden and Kennedy Rd - Southbound	S37
Kennedy Road	At intersection of Radnor Ave and Kennedy Rd - Northbound	S38
Kennedy Road	At intersection of Radnor Ave and Kennedy Rd - Southbound	S39
Lawrence Ave E	At intersection of Lawrence Ave E and Kennedy Rd - Eastbound	S40
Lawrence Ave E	At intersection of Lawrence Ave E and Kennedy Rd - Westbound	S41

Kennedy Road	At intersection of Lawrence Ave E and Kennedy Rd - Northbound	S42
Kennedy Road	At intersection of Lawrence Ave E and Kennedy Rd - Southbound	S43
Kennedy Road	At intersection of Wickware Gate and Kennedy Rd - Northbound	S44
Kennedy Road	At intersection of Wickware Gate and Kennedy Rd - Southbound	S45
Kennedy Road	At intersection of Forbes Rd and Kennedy Rd - Northbound	S46
Kennedy Road	At intersection of Forbes Rd and Kennedy Rd - Southbound	S47
Kennedy Road	At intersection of Munham Gate and Kennedy Rd - Northbound	S48
Kennedy Road	At intersection of Munham Gate and Kennedy Rd - Southbound	S49
Ellesmere Road	At intersection of Ellesmere Rd and Kennedy Rd - Eastbound	S50
Ellesmere Road	At intersection of Ellesmere Rd and Kennedy Rd - Westbound	S51
Kennedy Road	At intersection of Ellesmere Rd and Kennedy Rd - Northbound	S52
Kennedy Road	At intersection of Ellesmere Rd and Kennedy Rd - Southbound	S53
Ellesmere Road	At intersection of Ellesmere Rd and Midland Ave - Eastbound	S54
Ellesmere Road	At intersection of Ellesmere Rd and Midland Ave - Westbound	S55
Midland Avenue	At intersection of Ellesmere Rd and Midland Ave - Northbound	S56
Midland Avenue	At intersection of Ellesmere Rd and Midland Ave - Southbound	S57
Midland Avenue	At intersection of Midwest Rd and Midland Ave - Northbound	S58
Midland Avenue	At intersection of Midwest Rd and Midland Ave - Southbound	S59
Midland Avenue	At intersection of Dorcot Ave and Midland Ave - Northbound	S60
Midland Avenue	At intersection of Dorcot Ave and Midland Ave - Southbound	S61
Midland Avenue	At intersection of Lawrence Ave E and Midland Ave - Northbound	S62
Midland Avenue	At intersection of Lawrence Ave E and Midland Ave - Southbound	S63
Lawrence Ave E	At intersection of Lawrence Ave E and Midland Ave - Eastbound	S64
Lawrence Ave E	At intersection of Lawrence Ave E and Midland Ave - Westbound	S65
Midland Avenue	At intersection of Prudential Dr and Midland Ave - Northbound	S66
Midland Avenue	At intersection of Prudential Dr and Midland Ave - Southbound	S67
Midland Avenue	At intersection of Romulus Dr and Midland Ave - Northbound	S68
Midland Avenue	At intersection of Romulus Dr and Midland Ave - Southbound	S69
Midland Avenue	At intersection of Stansbury Crescent and Midland Ave - Northbound	S70
Midland Avenue	At intersection of Stansbury Crescent and Midland Ave - Southbound	S71
Midland Avenue	At intersection of Broadbent Ave and Midland Ave - Northbound	S72
Midland Avenue	At intersection of Broadbent Ave and Midland Ave - Southbound	S73
Midland Avenue	At intersection of Gilder Dr and Midland Ave - Northbound	S74
Midland Avenue	At intersection of Gilder Dr and Midland Ave - Southbound	S75

TTC Scarborough Busway - Parking Lots	
Source Location	**Modeling ID**
Ellesmere Lot	P1
Lawrence East Lot	P2

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S1	60	1	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S1	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S1	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S1	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S1	60	6	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S1	60	7	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S1	60	8	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S1	60	9	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S1	60	10	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	11	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	12	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	13	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	14	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	15	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	16	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S1	60	17	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S1	60	18	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S1	60	19	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S1	60	20	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S1	60	21	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S1	60	22	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S1	60	23	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S1	60	24	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S2	60	1	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S2	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S2	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S2	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S2	60	6	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	7	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	8	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	9	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	10	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	11	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	12	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	13	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	14	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	15	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	16	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	17	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	18	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	19	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	20	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	21	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	22	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	23	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S2	60	24	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S3	60	1	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S3	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S3	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S3	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S3	60	6	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	0.0000	0.0004	0.0003	0.0000000	0.0000013
S3	60	7	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	0.0000	0.0004	0.0003	0.0000000	0.0000013
S3	60	8	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	0.0000	0.0004	0.0003	0.0000000	0.0000013
S3	60	9	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	0.0000	0.0004	0.0003	0.0000000	0.0000013
S3	60	10	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	11	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	12	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	13	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	14	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	15	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	16	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S3	60	17	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S3	60	18	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S3	60	19	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S3	60	20	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S3	60	21	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S3	60	22	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S3	60	23	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S3	60	24	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S4	60	1	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S4	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S4	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S4	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S4	60	6	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S4	60	7	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S4	60	8	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S4	60	9	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S4	60	10	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	11	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	12	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	13	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	14	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	15	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	16	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S4	60	17	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S4	60	18	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S4	60	19	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S4	60	20	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S4	60	21	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S4	60	22	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S4	60	23	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S4	60	24	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S5	60	1	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S5	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S5	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S5	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S5	60	6	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000009
S5	60	7	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000009
S5	60	8	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000009
S5	60	9	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000009
S5	60	10	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	11	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	12	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	13	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	14	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	15	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	16	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S5	60	17	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S5	60	18	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S5	60	19	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S5	60	20	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S5	60	21	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S5	60	22	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S5	60	23	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S5	60	24	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	1	5	50%	0.0259	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S6	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S6	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S6	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S6	60	6	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S6	60	7	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S6	60	8	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S6	60	9	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000007
S6	60	10	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	11	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	12	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	13	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	14	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	15	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	16	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S6	60	17	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S6	60	18	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S6	60	19	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S6	60	20	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S6	60	21	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S6	60	22	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S6	60	23	5	50%	0.0259	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S6	60	24	5	50%	0.0259	0.0022	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	1	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S7	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S7	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S7	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S7	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S7	60	6	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S7	60	7	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S7	60	8	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S7	60	9	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S7	60	10	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	11	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	12	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	13	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	14	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	15	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	16	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S7	60	17	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S7	60	18	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S7	60	19	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S7	60	20	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S7	60	21	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S7	60	22	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S7	60	23	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S7	60	24	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S8	60	1	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S8	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S8	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S8	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S8	60	6	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S8	60	7	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S8	60	8	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S8	60	9	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S8	60	10	5	50%	0.0202	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	11	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	12	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	13	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	14	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	15	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	16	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S8	60	17	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S8	60	18	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S8	60	19	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S8	60	20	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S8	60	21	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S8	60	22	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S8	60	23	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S8	60	24	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S9	60	1	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S9	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S9	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S9	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S9	60	6	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S9	60	7	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S9	60	8	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S9	60	9	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000009
S9	60	10	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	11	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	12	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	13	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	14	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	15	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	16	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S9	60	17	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S9	60	18	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S9	60	19	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S9	60	20	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S9	60	21	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S9	60	22	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S9	60	23	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S9	60	24	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S10	60	1	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000

AECOM

C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S10	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S10	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S10	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S10	60	6	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	0.0000	0.0004	0.0004	0.0000000	0.0000016
S10	60	7	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	0.0000	0.0004	0.0004	0.0000000	0.0000016
S10	60	8	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	0.0000	0.0004	0.0004	0.0000000	0.0000016
S10	60	9	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	0.0000	0.0004	0.0004	0.0000000	0.0000016
S10	60	10	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	11	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	12	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	13	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	14	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	15	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	16	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S10	60	17	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S10	60	18	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S10	60	19	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S10	60	20	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000011
S10	60	21	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000011
S10	60	22	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000011
S10	60	23	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S10	60	24	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S11	60	1	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S11	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S11	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S11	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S11	60	6	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S11	60	7	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S11	60	8	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S11	60	9	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	0.0000	0.0003	0.0003	0.0000000	0.0000012
S11	60	10	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	11	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	12	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	13	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	14	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	15	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	16	5	50%	0.0604	0.0052	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S11	60	17	5	50%	0.0604	0.0052	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S11	60	18	5	50%	0.0604	0.0053	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S11	60	19	5	50%	0.0604	0.0053	0.0000	0.0012	0.0002	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000006
S11	60	20	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S11	60	21	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S11	60	22	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S11	60	23	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S11	60	24	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S12	60	1	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S12	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S12	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S12	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S12	60	6	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S12	60	7	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S12	60	8	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S12	60	9	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S12	60	10	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	11	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	12	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	13	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	14	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	15	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	16	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	17	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	18	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	19	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	20	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	21	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	22	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	23	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S12	60	24	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S13	60	1	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S13	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S13	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S13	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S13	60	6	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000010
S13	60	7	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000010
S13	60	8	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000010
S13	60	9	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	0.0000	0.0003	0.0002	0.0000000	0.0000010
S13	60	10	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	11	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	12	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	13	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	14	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	15	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	16	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S13	60	17	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S13	60	18	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S13	60	19	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S13	60	20	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000007
S13	60	21	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000007
S13	60	22	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	0.0000	0.0002	0.0001	0.0000000	0.0000007
S13	60	23	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S13	60	24	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	1	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S14	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S14	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S14	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S14	60	6	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S14	60	7	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S14	60	8	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S14	60	9	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	0.0000	0.0002	0.0002	0.0000000	0.0000008
S14	60	10	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	11	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	12	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	13	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	14	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	15	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	16	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S14	60	17	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S14	60	18	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S14	60	19	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S14	60	20	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S14	60	21	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S14	60	22	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000005
S14	60	23	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S14	60	24	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S15	60	1	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S15	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S15	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S15	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S15	60	6	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S15	60	7	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S15	60	8	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S15	60	9	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S15	60	10	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	11	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	12	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	13	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	14	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	15	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	16	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	17	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	18	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	19	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	20	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	21	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	22	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	23	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S15	60	24	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	1	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S16	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S16	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000

AECOM

C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S16	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S16	60	6	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S16	60	7	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S16	60	8	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S16	60	9	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S16	60	10	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	11	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	12	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	13	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	14	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	15	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	16	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S16	60	17	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S16	60	18	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S16	60	19	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S16	60	20	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000002
S16	60	21	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000002
S16	60	22	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000002
S16	60	23	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S16	60	24	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	1	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S17	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S17	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S17	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S17	60	6	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S17	60	7	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S17	60	8	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S17	60	9	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S17	60	10	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	11	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	12	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	13	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	14	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	15	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	16	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S17	60	17	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S17	60	18	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S17	60	19	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S17	60	20	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S17	60	21	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S17	60	22	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S17	60	23	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S17	60	24	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	1	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S18	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S18	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S18	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S18	60	6	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S18	60	7	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S18	60	8	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S18	60	9	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000004
S18	60	10	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	11	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	12	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	13	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	14	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	15	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	16	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S18	60	17	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S18	60	18	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S18	60	19	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S18	60	20	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S18	60	21	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S18	60	22	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S18	60	23	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S18	60	24	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	1	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S19	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S19	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S19	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S19	60	6	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S19	60	7	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S19	60	8	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S19	60	9	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000000	0.0000003
S19	60	10	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	11	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	12	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	13	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	14	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	15	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	16	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S19	60	17	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S19	60	18	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S19	60	19	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000002
S19	60	20	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S19	60	21	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S19	60	22	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000000	0.0000002
S19	60	23	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S19	60	24	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	1	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S20	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S20	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S20	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000000
S20	60	6	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	7	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	8	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	9	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	10	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	11	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	12	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	13	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	14	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	15	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	16	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	17	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	18	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	19	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	20	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	21	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	22	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	23	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001
S20	60	24	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.0000001

Note: Electrification % was not applied to PM10 nor PM2.5.

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S1	60	1	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	3.69E-08	0.0001	0.0000	0.0000000	0.000000	2.9996	0.0139572	0.0002
S1	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S1	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S1	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S1	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S1	60	6	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	1.01E-07	0.0002	0.0001	0.0000000	0.000001	8.1932	0.0381228	0.0005
S1	60	7	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	1.01E-07	0.0002	0.0001	0.0000000	0.000001	8.1932	0.0381228	0.0005
S1	60	8	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	1.01E-07	0.0002	0.0001	0.0000000	0.000001	8.1932	0.0381228	0.0005
S1	60	9	5	50%	0.0590	0.0051	0.0000	0.0011	0.0002	0.0000	1.01E-07	0.0002	0.0001	0.0000000	0.000001	8.1932	0.0381228	0.0005
S1	60	10	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137030	0.0002
S1	60	11	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137030	0.0002
S1	60	12	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137030	0.0002
S1	60	13	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137029	0.0002
S1	60	14	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137030	0.0002
S1	60	15	5	50%	0.0212	0.0018	0.0000	0.0004	0.0001	0.0000	3.62E-08	0.0001	0.0000	0.0000000	0.000000	2.9450	0.0137030	0.0002
S1	60	16	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	5.16E-08	0.0001	0.0001	0.0000000	0.000000	4.1939	0.0195141	0.0002
S1	60	17	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	5.16E-08	0.0001	0.0001	0.0000000	0.000000	4.1939	0.0195141	0.0002
S1	60	18	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	5.16E-08	0.0001	0.0001	0.0000000	0.000000	4.1939	0.0195141	0.0002
S1	60	19	5	50%	0.0302	0.0026	0.0000	0.0006	0.0001	0.0000	5.16E-08	0.0001	0.0001	0.0000000	0.000000	4.1939	0.0195141	0.0002
S1	60	20	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	6.94E-08	0.0001	0.0001	0.0000000	0.000000	5.6442	0.0262624	0.0003
S1	60	21	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	6.94E-08	0.0001	0.0001	0.0000000	0.000000	5.6442	0.0262624	0.0003
S1	60	22	5	50%	0.0407	0.0035	0.0000	0.0008	0.0002	0.0000	6.94E-08	0.0001	0.0001	0.0000000	0.000000	5.6442	0.0262624	0.0003
S1	60	23	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	3.69E-08	0.0001	0.0000	0.0000000	0.000000	2.9996	0.0139572	0.0002
S1	60	24	5	50%	0.0216	0.0019	0.0000	0.0004	0.0001	0.0000	3.69E-08	0.0001	0.0000	0.0000000	0.000000	2.9996	0.0139572	0.0002
S2	60	1	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	8.89E-09	0.0000	0.0000	0.0000000	0.000000	0.7229	0.0033639	0.0000
S2	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S2	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S2	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S2	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S2	60	6	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.43E-08	0.0000	0.0000	0.0000000	0.000000	1.9747	0.0091881	0.0001
S2	60	7	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.43E-08	0.0000	0.0000	0.0000000	0.000000	1.9747	0.0091881	0.0001
S2	60	8	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.43E-08	0.0000	0.0000	0.0000000	0.000000	1.9747	0.0091881	0.0001
S2	60	9	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.43E-08	0.0000	0.0000	0.0000000	0.000000	1.9747	0.0091881	0.0001
S2	60	10	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	11	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	12	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	13	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	14	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	15	5	50%	0.0051	0.0004	0.0000	0.0001	0.0000	0.0000	8.73E-09	0.0000	0.0000	0.0000000	0.000000	0.7098	0.0033026	0.0000
S2	60	16	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	1.24E-08	0.0000	0.0000	0.0000000	0.000000	1.0108	0.0047032	0.0001
S2	60	17	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	1.24E-08	0.0000	0.0000	0.0000000	0.000000	1.0108	0.0047032	0.0001
S2	60	18	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	1.24E-08	0.0000	0.0000	0.0000000	0.000000	1.0108	0.0047032	0.0001
S2	60	19	5	50%	0.0073	0.0006	0.0000	0.0001	0.0000	0.0000	1.24E-08	0.0000	0.0000	0.0000000	0.000000	1.0108	0.0047032	0.0001
S2	60	20	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	1.67E-08	0.0000	0.0000	0.0000000	0.000000	1.3603	0.0063296	0.0001
S2	60	21	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	1.67E-08	0.0000	0.0000	0.0000000	0.000000	1.3603	0.0063296	0.0001
S2	60	22	5	50%	0.0098	0.0009	0.0000	0.0002	0.0000	0.0000	1.67E-08	0.0000	0.0000	0.0000000	0.000000	1.3603	0.0063296	0.0001
S2	60	23	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	8.89E-09	0.0000	0.0000	0.0000000	0.000000	0.7229	0.0033639	0.0000
S2	60	24	5	50%	0.0052	0.0005	0.0000	0.0001	0.0000	0.0000	8.89E-09	0.0000	0.0000	0.0000000	0.000000	0.7229	0.0033639	0.0000
S3	60	1	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	8.25E-08	0.0001	0.0001	0.0000000	0.000000	6.7107	0.0312249	0.0004
S3	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S3	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S3	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S3	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S3	60	6	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.000001	18.3296	0.0852879	0.0011
S3	60	7	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.000001	18.3296	0.0852879	0.0011
S3	60	8	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.000001	18.3296	0.0852879	0.0011
S3	60	9	5	50%	0.1321	0.0115	0.0001	0.0025	0.0005	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.000001	18.3296	0.0852879	0.0011
S3	60	10	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306563	0.0004
S3	60	11	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306563	0.0004
S3	60	12	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306563	0.0004
S3	60	13	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306560	0.0004
S3	60	14	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306563	0.0004
S3	60	15	5	50%	0.0475	0.0041	0.0000	0.0009	0.0002	0.0000	8.10E-08	0.0001	0.0001	0.0000000	0.000000	6.5885	0.0306563	0.0004
S3	60	16	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	1.15E-07	0.0002	0.0002	0.0000000	0.000001	9.3825	0.0436568	0.0006
S3	60	17	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	1.15E-07	0.0002	0.0002	0.0000000	0.000001	9.3825	0.0436568	0.0006
S3	60	18	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	1.15E-07	0.0002	0.0002	0.0000000	0.000001	9.3825	0.0436568	0.0006
S3	60	19	5	50%	0.0676	0.0059	0.0000	0.0013	0.0003	0.0000	1.15E-07	0.0002	0.0002	0.0000000	0.000001	9.3825	0.0436568	0.0006
S3	60	20	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	1.55E-07	0.0003	0.0002	0.0000000	0.000001	12.6271	0.0587539	0.0007
S3	60	21	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	1.55E-07	0.0003	0.0002	0.0000000	0.000001	12.6271	0.0587539	0.0007
S3	60	22	5	50%	0.0910	0.0079	0.0000	0.0017	0.0004	0.0000	1.55E-07	0.0003	0.0002	0.0000000	0.000001	12.6271	0.0587539	0.0007
S3	60	23	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	8.25E-08	0.0001	0.0001	0.0000000	0.000000	6.7107	0.0312249	0.0004
S3	60	24	5	50%	0.0484	0.0042	0.0000	0.0009	0.0002	0.0000	8.25E-08	0.0001	0.0001	0.0000000	0.000000	6.7107	0.0312249	0.0004

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S4	60	1	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	7.54E-08	0.0001	0.0001	0.0000000	0.000000	6.1293	0.0285199	0.0004
S4	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S4	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S4	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S4	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S4	60	6	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	2.06E-07	0.0003	0.0003	0.0000000	0.000001	16.7418	0.0778995	0.0010
S4	60	7	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	2.06E-07	0.0003	0.0003	0.0000000	0.000001	16.7418	0.0778995	0.0010
S4	60	8	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	2.06E-07	0.0003	0.0003	0.0000000	0.000001	16.7418	0.0778995	0.0010
S4	60	9	5	50%	0.1206	0.0105	0.0000	0.0023	0.0005	0.0000	2.06E-07	0.0003	0.0003	0.0000000	0.000001	16.7418	0.0778995	0.0010
S4	60	10	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280005	0.0004
S4	60	11	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280005	0.0004
S4	60	12	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280005	0.0004
S4	60	13	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280003	0.0004
S4	60	14	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280005	0.0004
S4	60	15	5	50%	0.0434	0.0038	0.0000	0.0008	0.0002	0.0000	7.40E-08	0.0001	0.0001	0.0000000	0.000000	6.0177	0.0280005	0.0004
S4	60	16	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	1.05E-07	0.0002	0.0001	0.0000000	0.000001	8.5697	0.0398748	0.0005
S4	60	17	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	1.05E-07	0.0002	0.0001	0.0000000	0.000001	8.5697	0.0398748	0.0005
S4	60	18	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	1.05E-07	0.0002	0.0001	0.0000000	0.000001	8.5697	0.0398748	0.0005
S4	60	19	5	50%	0.0617	0.0054	0.0000	0.0012	0.0002	0.0000	1.05E-07	0.0002	0.0001	0.0000000	0.000001	8.5697	0.0398748	0.0005
S4	60	20	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5332	0.0536641	0.0007
S4	60	21	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5332	0.0536641	0.0007
S4	60	22	5	50%	0.0831	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5332	0.0536641	0.0007
S4	60	23	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	7.54E-08	0.0001	0.0001	0.0000000	0.000000	6.1293	0.0285199	0.0004
S4	60	24	5	50%	0.0442	0.0038	0.0000	0.0008	0.0002	0.0000	7.54E-08	0.0001	0.0001	0.0000000	0.000000	6.1293	0.0285199	0.0004
S5	60	1	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	5.53E-08	0.0001	0.0001	0.0000000	0.000000	4.4983	0.0209304	0.0003
S5	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S5	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S5	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S5	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S5	60	6	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	1.51E-07	0.0002	0.0002	0.0000000	0.000001	12.2866	0.0571695	0.0007
S5	60	7	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	1.51E-07	0.0002	0.0002	0.0000000	0.000001	12.2866	0.0571695	0.0007
S5	60	8	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	1.51E-07	0.0002	0.0002	0.0000000	0.000001	12.2866	0.0571695	0.0007
S5	60	9	5	50%	0.0885	0.0077	0.0000	0.0017	0.0003	0.0000	1.51E-07	0.0002	0.0002	0.0000000	0.000001	12.2866	0.0571695	0.0007
S5	60	10	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205493	0.0003
S5	60	11	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205493	0.0003
S5	60	12	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205493	0.0003
S5	60	13	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205491	0.0003
S5	60	14	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205493	0.0003
S5	60	15	5	50%	0.0318	0.0028	0.0000	0.0006	0.0001	0.0000	5.43E-08	0.0001	0.0001	0.0000000	0.000000	4.4163	0.0205493	0.0003
S5	60	16	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	7.73E-08	0.0001	0.0001	0.0000000	0.000000	6.2892	0.0292637	0.0004
S5	60	17	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	7.73E-08	0.0001	0.0001	0.0000000	0.000000	6.2892	0.0292637	0.0004
S5	60	18	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	7.73E-08	0.0001	0.0001	0.0000000	0.000000	6.2892	0.0292637	0.0004
S5	60	19	5	50%	0.0453	0.0039	0.0000	0.0009	0.0002	0.0000	7.73E-08	0.0001	0.0001	0.0000000	0.000000	6.2892	0.0292637	0.0004
S5	60	20	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	1.04E-07	0.0002	0.0001	0.0000000	0.000001	8.4641	0.0393835	0.0005
S5	60	21	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	1.04E-07	0.0002	0.0001	0.0000000	0.000001	8.4641	0.0393835	0.0005
S5	60	22	5	50%	0.0610	0.0053	0.0000	0.0012	0.0002	0.0000	1.04E-07	0.0002	0.0001	0.0000000	0.000001	8.4641	0.0393835	0.0005
S5	60	23	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	5.53E-08	0.0001	0.0001	0.0000000	0.000000	4.4983	0.0209304	0.0003
S5	60	24	5	50%	0.0324	0.0028	0.0000	0.0006	0.0001	0.0000	5.53E-08	0.0001	0.0001	0.0000000	0.000000	4.4983	0.0209304	0.0003
S6	60	1	5	50%	0.0259	0.0022	0.0000	0.0005	0.0001	0.0000	4.42E-08	0.0001	0.0001	0.0000000	0.000000	3.5915	0.0167113	0.0002
S6	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S6	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S6	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S6	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S6	60	6	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	1.21E-07	0.0002	0.0002	0.0000000	0.000001	9.8099	0.0456453	0.0006
S6	60	7	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	1.21E-07	0.0002	0.0002	0.0000000	0.000001	9.8099	0.0456453	0.0006
S6	60	8	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	1.21E-07	0.0002	0.0002	0.0000000	0.000001	9.8099	0.0456453	0.0006
S6	60	9	5	50%	0.0707	0.0061	0.0000	0.0014	0.0003	0.0000	1.21E-07	0.0002	0.0002	0.0000000	0.000001	9.8099	0.0456453	0.0006
S6	60	10	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164070	0.0002
S6	60	11	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164070	0.0002
S6	60	12	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164070	0.0002
S6	60	13	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164068	0.0002
S6	60	14	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164070	0.0002
S6	60	15	5	50%	0.0254	0.0022	0.0000	0.0005	0.0001	0.0000	4.34E-08	0.0001	0.0001	0.0000000	0.000000	3.5261	0.0164070	0.0002
S6	60	16	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	6.18E-08	0.0001	0.0001	0.0000000	0.000000	5.0214	0.0233647	0.0003
S6	60	17	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	6.18E-08	0.0001	0.0001	0.0000000	0.000000	5.0214	0.0233647	0.0003
S6	60	18	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	6.18E-08	0.0001	0.0001	0.0000000	0.000000	5.0214	0.0233647	0.0003
S6	60	19	5	50%	0.0362	0.0031	0.0000	0.0007	0.0001	0.0000	6.18E-08	0.0001	0.0001	0.0000000	0.000000	5.0214	0.0233647	0.0003
S6	60	20	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	8.31E-08	0.0001	0.0001	0.0000000	0.000000	6.7579	0.0314446	0.0004
S6	60	21	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	8.31E-08	0.0001	0.0001	0.0000000	0.000000	6.7579	0.0314446	0.0004
S6	60	22	5	50%	0.0487	0.0042	0.0000	0.0009	0.0002	0.0000	8.31E-08	0.0001	0.0001	0.0000000	0.000000	6.7579	0.0314446	0.0004
S6	60	23	5	50%	0.0259	0.0023	0.0000	0.0005	0.0001	0.0000	4.42E-08	0.0001	0.0001	0.0000000	0.000000	3.5915	0.0167113	0.0002
S6	60	24	5	50%	0.0259	0.0022	0.0000	0.0005	0.0001	0.0000	4.42E-08	0.0001	0.0001	0.0000000	0.000000	3.5915	0.0167113	0.0002
S7	60	1	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	5.19E-08	0.0001	0.0001	0.0000000	0.000000	4.2166	0.0196198	0.0002

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S7	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S7	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S7	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S7	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S7	60	6	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5172	0.0535897	0.0007
S7	60	7	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5172	0.0535897	0.0007
S7	60	8	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5172	0.0535897	0.0007
S7	60	9	5	50%	0.0830	0.0072	0.0000	0.0016	0.0003	0.0000	1.42E-07	0.0002	0.0002	0.0000000	0.000001	11.5172	0.0535897	0.0007
S7	60	10	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192625	0.0002
S7	60	11	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192625	0.0002
S7	60	12	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192625	0.0002
S7	60	13	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192624	0.0002
S7	60	14	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192625	0.0002
S7	60	15	5	50%	0.0298	0.0026	0.0000	0.0006	0.0001	0.0000	5.09E-08	0.0001	0.0001	0.0000000	0.000000	4.1398	0.0192625	0.0002
S7	60	16	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	7.25E-08	0.0001	0.0001	0.0000000	0.000000	5.8954	0.0274312	0.0003
S7	60	17	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	7.25E-08	0.0001	0.0001	0.0000000	0.000000	5.8954	0.0274312	0.0003
S7	60	18	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	7.25E-08	0.0001	0.0001	0.0000000	0.000000	5.8954	0.0274312	0.0003
S7	60	19	5	50%	0.0425	0.0037	0.0000	0.0008	0.0002	0.0000	7.25E-08	0.0001	0.0001	0.0000000	0.000000	5.8954	0.0274312	0.0003
S7	60	20	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	9.76E-08	0.0002	0.0001	0.0000000	0.000001	7.9341	0.0369174	0.0005
S7	60	21	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	9.76E-08	0.0002	0.0001	0.0000000	0.000001	7.9341	0.0369174	0.0005
S7	60	22	5	50%	0.0572	0.0050	0.0000	0.0011	0.0002	0.0000	9.76E-08	0.0002	0.0001	0.0000000	0.000001	7.9341	0.0369174	0.0005
S7	60	23	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	5.19E-08	0.0001	0.0001	0.0000000	0.000000	4.2166	0.0196198	0.0002
S7	60	24	5	50%	0.0304	0.0026	0.0000	0.0006	0.0001	0.0000	5.19E-08	0.0001	0.0001	0.0000000	0.000000	4.2166	0.0196198	0.0002
S8	60	1	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	3.50E-08	0.0001	0.0000	0.0000000	0.000000	2.8488	0.0132556	0.0002
S8	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S8	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S8	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S8	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S8	60	6	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	9.57E-08	0.0002	0.0001	0.0000000	0.000001	7.7813	0.0362064	0.0005
S8	60	7	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	9.57E-08	0.0002	0.0001	0.0000000	0.000001	7.7813	0.0362064	0.0005
S8	60	8	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	9.57E-08	0.0002	0.0001	0.0000000	0.000001	7.7813	0.0362064	0.0005
S8	60	9	5	50%	0.0561	0.0049	0.0000	0.0011	0.0002	0.0000	9.57E-08	0.0002	0.0001	0.0000000	0.000001	7.7813	0.0362064	0.0005
S8	60	10	5	50%	0.0202	0.0018	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130142	0.0002
S8	60	11	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130142	0.0002
S8	60	12	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130142	0.0002
S8	60	13	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130141	0.0002
S8	60	14	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130142	0.0002
S8	60	15	5	50%	0.0202	0.0017	0.0000	0.0004	0.0001	0.0000	3.44E-08	0.0001	0.0000	0.0000000	0.000000	2.7969	0.0130142	0.0002
S8	60	16	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	4.90E-08	0.0001	0.0001	0.0000000	0.000000	3.9830	0.0185332	0.0002
S8	60	17	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	4.90E-08	0.0001	0.0001	0.0000000	0.000000	3.9830	0.0185332	0.0002
S8	60	18	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	4.90E-08	0.0001	0.0001	0.0000000	0.000000	3.9830	0.0185332	0.0002
S8	60	19	5	50%	0.0287	0.0025	0.0000	0.0005	0.0001	0.0000	4.90E-08	0.0001	0.0001	0.0000000	0.000000	3.9830	0.0185332	0.0002
S8	60	20	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	6.59E-08	0.0001	0.0001	0.0000000	0.000000	5.3604	0.0249422	0.0003
S8	60	21	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	6.59E-08	0.0001	0.0001	0.0000000	0.000000	5.3604	0.0249422	0.0003
S8	60	22	5	50%	0.0386	0.0034	0.0000	0.0007	0.0002	0.0000	6.59E-08	0.0001	0.0001	0.0000000	0.000000	5.3604	0.0249422	0.0003
S8	60	23	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	3.50E-08	0.0001	0.0000	0.0000000	0.000000	2.8488	0.0132556	0.0002
S8	60	24	5	50%	0.0205	0.0018	0.0000	0.0004	0.0001	0.0000	3.50E-08	0.0001	0.0000	0.0000000	0.000000	2.8488	0.0132556	0.0002
S9	60	1	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	5.78E-08	0.0001	0.0001	0.0000000	0.000000	4.7013	0.0218753	0.0003
S9	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S9	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S9	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S9	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S9	60	6	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	1.58E-07	0.0003	0.0002	0.0000000	0.000001	12.8413	0.0597505	0.0008
S9	60	7	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	1.58E-07	0.0003	0.0002	0.0000000	0.000001	12.8413	0.0597505	0.0008
S9	60	8	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	1.58E-07	0.0003	0.0002	0.0000000	0.000001	12.8413	0.0597505	0.0008
S9	60	9	5	50%	0.0925	0.0080	0.0000	0.0018	0.0004	0.0000	1.58E-07	0.0003	0.0002	0.0000000	0.000001	12.8413	0.0597505	0.0008
S9	60	10	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214770	0.0003
S9	60	11	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214770	0.0003
S9	60	12	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214770	0.0003
S9	60	13	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214768	0.0003
S9	60	14	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214770	0.0003
S9	60	15	5	50%	0.0333	0.0029	0.0000	0.0006	0.0001	0.0000	5.68E-08	0.0001	0.0001	0.0000000	0.000000	4.6157	0.0214770	0.0003
S9	60	16	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	8.08E-08	0.0001	0.0001	0.0000000	0.000000	6.5731	0.0305848	0.0004
S9	60	17	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	8.08E-08	0.0001	0.0001	0.0000000	0.000000	6.5731	0.0305848	0.0004
S9	60	18	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	8.08E-08	0.0001	0.0001	0.0000000	0.000000	6.5731	0.0305848	0.0004
S9	60	19	5	50%	0.0474	0.0041	0.0000	0.0009	0.0002	0.0000	8.08E-08	0.0001	0.0001	0.0000000	0.000000	6.5731	0.0305848	0.0004
S9	60	20	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	1.09E-07	0.0002	0.0001	0.0000000	0.000001	8.8462	0.0411615	0.0005
S9	60	21	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	1.09E-07	0.0002	0.0001	0.0000000	0.000001	8.8462	0.0411615	0.0005
S9	60	22	5	50%	0.0637	0.0055	0.0000	0.0012	0.0002	0.0000	1.09E-07	0.0002	0.0001	0.0000000	0.000001	8.8462	0.0411615	0.0005
S9	60	23	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	5.78E-08	0.0001	0.0001	0.0000000	0.000000	4.7013	0.0218753	0.0003
S9	60	24	5	50%	0.0339	0.0029	0.0000	0.0006	0.0001	0.0000	5.78E-08	0.0001	0.0001	0.0000000	0.000000	4.7013	0.0218753	0.0003
S10	60	1	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	9.89E-08	0.0002	0.0001	0.0000000	0.000001	8.0389	0.0374052	0.0005
S10	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S10	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S10	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S10	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S10	60	6	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	2.70E-07	0.0004	0.0004	0.0000000	0.000002	21.9576	0.1021689	0.0013
S10	60	7	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	2.70E-07	0.0004	0.0004	0.0000000	0.000002	21.9576	0.1021689	0.0013
S10	60	8	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	2.70E-07	0.0004	0.0004	0.0000000	0.000002	21.9576	0.1021689	0.0013
S10	60	9	5	50%	0.1582	0.0137	0.0001	0.0030	0.0006	0.0000	2.70E-07	0.0004	0.0004	0.0000000	0.000002	21.9576	0.1021689	0.0013
S10	60	10	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367240	0.0005
S10	60	11	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367240	0.0005
S10	60	12	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367240	0.0005
S10	60	13	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367238	0.0005
S10	60	14	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367240	0.0005
S10	60	15	5	50%	0.0569	0.0049	0.0000	0.0011	0.0002	0.0000	9.71E-08	0.0002	0.0001	0.0000000	0.000001	7.8925	0.0367240	0.0005
S10	60	16	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	1.38E-07	0.0002	0.0002	0.0000000	0.000001	11.2396	0.0522977	0.0007
S10	60	17	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	1.38E-07	0.0002	0.0002	0.0000000	0.000001	11.2396	0.0522977	0.0007
S10	60	18	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	1.38E-07	0.0002	0.0002	0.0000000	0.000001	11.2396	0.0522977	0.0007
S10	60	19	5	50%	0.0810	0.0070	0.0000	0.0015	0.0003	0.0000	1.38E-07	0.0002	0.0002	0.0000000	0.000001	11.2396	0.0522977	0.0007
S10	60	20	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	1.86E-07	0.0003	0.0002	0.0000000	0.000001	15.1264	0.0703830	0.0009
S10	60	21	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	1.86E-07	0.0003	0.0002	0.0000000	0.000001	15.1264	0.0703830	0.0009
S10	60	22	5	50%	0.1090	0.0095	0.0000	0.0021	0.0004	0.0000	1.86E-07	0.0003	0.0002	0.0000000	0.000001	15.1264	0.0703830	0.0009
S10	60	23	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	9.89E-08	0.0002	0.0001	0.0000000	0.000001	8.0389	0.0374052	0.0005
S10	60	24	5	50%	0.0579	0.0050	0.0000	0.0011	0.0002	0.0000	9.89E-08	0.0002	0.0001	0.0000000	0.000001	8.0389	0.0374052	0.0005
S11	60	1	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	7.38E-08	0.0001	0.0001	0.0000000	0.000000	5.9994	0.0279153	0.0004
S11	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S11	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S11	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S11	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S11	60	6	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	2.02E-07	0.0003	0.0003	0.0000000	0.000001	16.3868	0.0762481	0.0010
S11	60	7	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	2.02E-07	0.0003	0.0003	0.0000000	0.000001	16.3868	0.0762481	0.0010
S11	60	8	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	2.02E-07	0.0003	0.0003	0.0000000	0.000001	16.3868	0.0762481	0.0010
S11	60	9	5	50%	0.1181	0.0103	0.0000	0.0023	0.0005	0.0000	2.02E-07	0.0003	0.0003	0.0000000	0.000001	16.3868	0.0762481	0.0010
S11	60	10	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274070	0.0003
S11	60	11	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274070	0.0003
S11	60	12	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274070	0.0003
S11	60	13	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274067	0.0003
S11	60	14	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274070	0.0003
S11	60	15	5	50%	0.0424	0.0037	0.0000	0.0008	0.0002	0.0000	7.24E-08	0.0001	0.0001	0.0000000	0.000000	5.8902	0.0274070	0.0003
S11	60	16	5	50%	0.0604	0.0052	0.0000	0.0012	0.0002	0.0000	1.03E-07	0.0002	0.0001	0.0000000	0.000001	8.3880	0.0390295	0.0005
S11	60	17	5	50%	0.0604	0.0052	0.0000	0.0012	0.0002	0.0000	1.03E-07	0.0002	0.0001	0.0000000	0.000001	8.3880	0.0390295	0.0005
S11	60	18	5	50%	0.0604	0.0053	0.0000	0.0012	0.0002	0.0000	1.03E-07	0.0002	0.0001	0.0000000	0.000001	8.3880	0.0390295	0.0005
S11	60	19	5	50%	0.0604	0.0053	0.0000	0.0012	0.0002	0.0000	1.03E-07	0.0002	0.0001	0.0000000	0.000001	8.3880	0.0390295	0.0005
S11	60	20	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.000001	11.2887	0.0525265	0.0007
S11	60	21	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.000001	11.2887	0.0525265	0.0007
S11	60	22	5	50%	0.0813	0.0071	0.0000	0.0016	0.0003	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.000001	11.2887	0.0525265	0.0007
S11	60	23	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	7.38E-08	0.0001	0.0001	0.0000000	0.000000	5.9994	0.0279153	0.0004
S11	60	24	5	50%	0.0432	0.0038	0.0000	0.0008	0.0002	0.0000	7.38E-08	0.0001	0.0001	0.0000000	0.000000	5.9994	0.0279153	0.0004
S12	60	1	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	1.28E-08	0.0000	0.0000	0.0000000	0.000000	1.0447	0.0048612	0.0001
S12	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S12	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S12	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S12	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S12	60	6	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8536	0.0132779	0.0002
S12	60	7	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8536	0.0132779	0.0002
S12	60	8	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8536	0.0132779	0.0002
S12	60	9	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8536	0.0132779	0.0002
S12	60	10	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047727	0.0001
S12	60	11	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047727	0.0001
S12	60	12	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047727	0.0001
S12	60	13	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047726	0.0001
S12	60	14	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047727	0.0001
S12	60	15	5	50%	0.0074	0.0006	0.0000	0.0001	0.0000	0.0000	1.26E-08	0.0000	0.0000	0.0000000	0.000000	1.0257	0.0047727	0.0001
S12	60	16	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	1.80E-08	0.0000	0.0000	0.0000000	0.000000	1.4607	0.0067966	0.0001
S12	60	17	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	1.80E-08	0.0000	0.0000	0.0000000	0.000000	1.4607	0.0067966	0.0001
S12	60	18	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	1.80E-08	0.0000	0.0000	0.0000000	0.000000	1.4607	0.0067966	0.0001
S12	60	19	5	50%	0.0105	0.0009	0.0000	0.0002	0.0000	0.0000	1.80E-08	0.0000	0.0000	0.0000000	0.000000	1.4607	0.0067966	0.0001
S12	60	20	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.42E-08	0.0000	0.0000	0.0000000	0.000000	1.9658	0.0091470	0.0001
S12	60	21	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.42E-08	0.0000	0.0000	0.0000000	0.000000	1.9658	0.0091470	0.0001
S12	60	22	5	50%	0.0142	0.0012	0.0000	0.0003	0.0001	0.0000	2.42E-08	0.0000	0.0000	0.0000000	0.000000	1.9658	0.0091470	0.0001
S12	60	23	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	1.28E-08	0.0000	0.0000	0.0000000	0.000000	1.0447	0.0048612	0.0001
S12	60	24	5	50%	0.0075	0.0007	0.0000	0.0001	0.0000	0.0000	1.28E-08	0.0000	0.0000	0.0000000	0.000000	1.0447	0.0048612	0.0001
S13	60	1	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	5.87E-08	0.0001	0.0001	0.0000000	0.000000	4.7720	0.0222039	0.0003
S13	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S13	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000

AECOM

C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S13	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S13	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S13	60	6	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.000001	13.0342	0.0606481	0.0008
S13	60	7	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.000001	13.0342	0.0606481	0.0008
S13	60	8	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.000001	13.0342	0.0606481	0.0008
S13	60	9	5	50%	0.0939	0.0082	0.0000	0.0018	0.0004	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.000001	13.0342	0.0606481	0.0008
S13	60	10	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217996	0.0003
S13	60	11	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217996	0.0003
S13	60	12	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217996	0.0003
S13	60	13	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217994	0.0003
S13	60	14	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217996	0.0003
S13	60	15	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6851	0.0217996	0.0003
S13	60	16	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	8.20E-08	0.0001	0.0001	0.0000000	0.000000	6.6719	0.0310442	0.0004
S13	60	17	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	8.20E-08	0.0001	0.0001	0.0000000	0.000000	6.6719	0.0310442	0.0004
S13	60	18	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	8.20E-08	0.0001	0.0001	0.0000000	0.000000	6.6719	0.0310442	0.0004
S13	60	19	5	50%	0.0481	0.0042	0.0000	0.0009	0.0002	0.0000	8.20E-08	0.0001	0.0001	0.0000000	0.000000	6.6719	0.0310442	0.0004
S13	60	20	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	1.10E-07	0.0002	0.0001	0.0000000	0.000001	8.9791	0.0417798	0.0005
S13	60	21	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	1.10E-07	0.0002	0.0001	0.0000000	0.000001	8.9791	0.0417798	0.0005
S13	60	22	5	50%	0.0647	0.0056	0.0000	0.0012	0.0003	0.0000	1.10E-07	0.0002	0.0001	0.0000000	0.000001	8.9791	0.0417798	0.0005
S13	60	23	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	5.87E-08	0.0001	0.0001	0.0000000	0.000000	4.7720	0.0222039	0.0003
S13	60	24	5	50%	0.0344	0.0030	0.0000	0.0007	0.0001	0.0000	5.87E-08	0.0001	0.0001	0.0000000	0.000000	4.7720	0.0222039	0.0003
S14	60	1	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	4.70E-08	0.0001	0.0001	0.0000000	0.000000	3.8221	0.0177842	0.0002
S14	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S14	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S14	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S14	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S14	60	6	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.000001	10.4397	0.0485760	0.0006
S14	60	7	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.000001	10.4397	0.0485760	0.0006
S14	60	8	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.000001	10.4397	0.0485760	0.0006
S14	60	9	5	50%	0.0752	0.0065	0.0000	0.0014	0.0003	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.000001	10.4397	0.0485760	0.0006
S14	60	10	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174604	0.0002
S14	60	11	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174604	0.0002
S14	60	12	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174604	0.0002
S14	60	13	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174602	0.0002
S14	60	14	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174604	0.0002
S14	60	15	5	50%	0.0270	0.0023	0.0000	0.0005	0.0001	0.0000	4.61E-08	0.0001	0.0001	0.0000000	0.000000	3.7525	0.0174604	0.0002
S14	60	16	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	6.57E-08	0.0001	0.0001	0.0000000	0.000000	5.3438	0.0248648	0.0003
S14	60	17	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	6.57E-08	0.0001	0.0001	0.0000000	0.000000	5.3438	0.0248648	0.0003
S14	60	18	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	6.57E-08	0.0001	0.0001	0.0000000	0.000000	5.3438	0.0248648	0.0003
S14	60	19	5	50%	0.0385	0.0033	0.0000	0.0007	0.0002	0.0000	6.57E-08	0.0001	0.0001	0.0000000	0.000000	5.3438	0.0248648	0.0003
S14	60	20	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	8.84E-08	0.0001	0.0001	0.0000000	0.000001	7.1918	0.0334635	0.0004
S14	60	21	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	8.84E-08	0.0001	0.0001	0.0000000	0.000001	7.1918	0.0334635	0.0004
S14	60	22	5	50%	0.0518	0.0045	0.0000	0.0010	0.0002	0.0000	8.84E-08	0.0001	0.0001	0.0000000	0.000001	7.1918	0.0334635	0.0004
S14	60	23	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	4.70E-08	0.0001	0.0001	0.0000000	0.000000	3.8221	0.0177842	0.0002
S14	60	24	5	50%	0.0275	0.0024	0.0000	0.0005	0.0001	0.0000	4.70E-08	0.0001	0.0001	0.0000000	0.000000	3.8221	0.0177842	0.0002
S15	60	1	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	1.09E-08	0.0000	0.0000	0.0000000	0.000000	0.8847	0.0041164	0.0001
S15	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S15	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S15	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S15	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S15	60	6	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	2.97E-08	0.0000	0.0000	0.0000000	0.000000	2.4164	0.0112435	0.0001
S15	60	7	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	2.97E-08	0.0000	0.0000	0.0000000	0.000000	2.4164	0.0112435	0.0001
S15	60	8	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	2.97E-08	0.0000	0.0000	0.0000000	0.000000	2.4164	0.0112435	0.0001
S15	60	9	5	50%	0.0174	0.0015	0.0000	0.0003	0.0001	0.0000	2.97E-08	0.0000	0.0000	0.0000000	0.000000	2.4164	0.0112435	0.0001
S15	60	10	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	11	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	12	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	13	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	14	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	15	5	50%	0.0063	0.0005	0.0000	0.0001	0.0000	0.0000	1.07E-08	0.0000	0.0000	0.0000000	0.000000	0.8686	0.0040414	0.0001
S15	60	16	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	1.52E-08	0.0000	0.0000	0.0000000	0.000000	1.2369	0.0057553	0.0001
S15	60	17	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	1.52E-08	0.0000	0.0000	0.0000000	0.000000	1.2369	0.0057553	0.0001
S15	60	18	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	1.52E-08	0.0000	0.0000	0.0000000	0.000000	1.2369	0.0057553	0.0001
S15	60	19	5	50%	0.0089	0.0008	0.0000	0.0002	0.0000	0.0000	1.52E-08	0.0000	0.0000	0.0000000	0.000000	1.2369	0.0057553	0.0001
S15	60	20	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	2.05E-08	0.0000	0.0000	0.0000000	0.000000	1.6646	0.0077455	0.0001
S15	60	21	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	2.05E-08	0.0000	0.0000	0.0000000	0.000000	1.6646	0.0077455	0.0001
S15	60	22	5	50%	0.0120	0.0010	0.0000	0.0002	0.0000	0.0000	2.05E-08	0.0000	0.0000	0.0000000	0.000000	1.6646	0.0077455	0.0001
S15	60	23	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	1.09E-08	0.0000	0.0000	0.0000000	0.000000	0.8847	0.0041164	0.0001
S15	60	24	5	50%	0.0064	0.0006	0.0000	0.0001	0.0000	0.0000	1.09E-08	0.0000	0.0000	0.0000000	0.000000	0.8847	0.0041164	0.0001
S16	60	1	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	2.11E-08	0.0000	0.0000	0.0000000	0.000000	1.7150	0.0079797	0.0001
S16	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S16	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S16	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S16	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S16	60	6	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6842	0.0217958	0.0003
S16	60	7	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6842	0.0217958	0.0003
S16	60	8	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6842	0.0217958	0.0003
S16	60	9	5	50%	0.0338	0.0029	0.0000	0.0006	0.0001	0.0000	5.76E-08	0.0001	0.0001	0.0000000	0.000000	4.6842	0.0217958	0.0003
S16	60	10	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078344	0.0001
S16	60	11	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078344	0.0001
S16	60	12	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078344	0.0001
S16	60	13	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078343	0.0001
S16	60	14	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078344	0.0001
S16	60	15	5	50%	0.0121	0.0011	0.0000	0.0002	0.0000	0.0000	2.07E-08	0.0000	0.0000	0.0000000	0.000000	1.6837	0.0078344	0.0001
S16	60	16	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	2.95E-08	0.0000	0.0000	0.0000000	0.000000	2.3977	0.0111567	0.0001
S16	60	17	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	2.95E-08	0.0000	0.0000	0.0000000	0.000000	2.3977	0.0111567	0.0001
S16	60	18	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	2.95E-08	0.0000	0.0000	0.0000000	0.000000	2.3977	0.0111567	0.0001
S16	60	19	5	50%	0.0173	0.0015	0.0000	0.0003	0.0001	0.0000	2.95E-08	0.0000	0.0000	0.0000000	0.000000	2.3977	0.0111567	0.0001
S16	60	20	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	3.97E-08	0.0001	0.0001	0.0000000	0.000000	3.2269	0.0150149	0.0002
S16	60	21	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	3.97E-08	0.0001	0.0001	0.0000000	0.000000	3.2269	0.0150149	0.0002
S16	60	22	5	50%	0.0233	0.0020	0.0000	0.0004	0.0001	0.0000	3.97E-08	0.0001	0.0001	0.0000000	0.000000	3.2269	0.0150149	0.0002
S16	60	23	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	2.11E-08	0.0000	0.0000	0.0000000	0.000000	1.7150	0.0079797	0.0001
S16	60	24	5	50%	0.0124	0.0011	0.0000	0.0002	0.0000	0.0000	2.11E-08	0.0000	0.0000	0.0000000	0.000000	1.7150	0.0079797	0.0001
S17	60	1	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	2.51E-08	0.0000	0.0000	0.0000000	0.000000	2.0418	0.0095004	0.0001
S17	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S17	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S17	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S17	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S17	60	6	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	6.86E-08	0.0001	0.0001	0.0000000	0.000000	5.5769	0.0259495	0.0003
S17	60	7	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	6.86E-08	0.0001	0.0001	0.0000000	0.000000	5.5769	0.0259495	0.0003
S17	60	8	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	6.86E-08	0.0001	0.0001	0.0000000	0.000000	5.5769	0.0259495	0.0003
S17	60	9	5	50%	0.0402	0.0035	0.0000	0.0008	0.0002	0.0000	6.86E-08	0.0001	0.0001	0.0000000	0.000000	5.5769	0.0259495	0.0003
S17	60	10	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093274	0.0001
S17	60	11	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093274	0.0001
S17	60	12	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093274	0.0001
S17	60	13	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093273	0.0001
S17	60	14	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093274	0.0001
S17	60	15	5	50%	0.0144	0.0013	0.0000	0.0003	0.0001	0.0000	2.47E-08	0.0000	0.0000	0.0000000	0.000000	2.0046	0.0093274	0.0001
S17	60	16	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8547	0.0132829	0.0002
S17	60	17	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8547	0.0132829	0.0002
S17	60	18	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8547	0.0132829	0.0002
S17	60	19	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.51E-08	0.0001	0.0000	0.0000000	0.000000	2.8547	0.0132829	0.0002
S17	60	20	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	4.72E-08	0.0001	0.0001	0.0000000	0.000000	3.8419	0.0178763	0.0002
S17	60	21	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	4.72E-08	0.0001	0.0001	0.0000000	0.000000	3.8419	0.0178763	0.0002
S17	60	22	5	50%	0.0277	0.0024	0.0000	0.0005	0.0001	0.0000	4.72E-08	0.0001	0.0001	0.0000000	0.000000	3.8419	0.0178763	0.0002
S17	60	23	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	2.51E-08	0.0000	0.0000	0.0000000	0.000000	2.0418	0.0095004	0.0001
S17	60	24	5	50%	0.0147	0.0013	0.0000	0.0003	0.0001	0.0000	2.51E-08	0.0000	0.0000	0.0000000	0.000000	2.0418	0.0095004	0.0001
S18	60	1	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	2.37E-08	0.0000	0.0000	0.0000000	0.000000	1.9243	0.0089539	0.0001
S18	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S18	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S18	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S18	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S18	60	6	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	6.46E-08	0.0001	0.0001	0.0000000	0.000000	5.2561	0.0244568	0.0003
S18	60	7	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	6.46E-08	0.0001	0.0001	0.0000000	0.000000	5.2561	0.0244568	0.0003
S18	60	8	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	6.46E-08	0.0001	0.0001	0.0000000	0.000000	5.2561	0.0244568	0.0003
S18	60	9	5	50%	0.0379	0.0033	0.0000	0.0007	0.0001	0.0000	6.46E-08	0.0001	0.0001	0.0000000	0.000000	5.2561	0.0244568	0.0003
S18	60	10	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087909	0.0001
S18	60	11	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087909	0.0001
S18	60	12	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087909	0.0001
S18	60	13	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087908	0.0001
S18	60	14	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087909	0.0001
S18	60	15	5	50%	0.0136	0.0012	0.0000	0.0003	0.0001	0.0000	2.32E-08	0.0000	0.0000	0.0000000	0.000000	1.8893	0.0087909	0.0001
S18	60	16	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	3.31E-08	0.0001	0.0000	0.0000000	0.000000	2.6905	0.0125188	0.0002
S18	60	17	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	3.31E-08	0.0001	0.0000	0.0000000	0.000000	2.6905	0.0125188	0.0002
S18	60	18	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	3.31E-08	0.0001	0.0000	0.0000000	0.000000	2.6905	0.0125188	0.0002
S18	60	19	5	50%	0.0194	0.0017	0.0000	0.0004	0.0001	0.0000	3.31E-08	0.0001	0.0000	0.0000000	0.000000	2.6905	0.0125188	0.0002
S18	60	20	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	4.45E-08	0.0001	0.0001	0.0000000	0.000000	3.6209	0.0168480	0.0002
S18	60	21	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	4.45E-08	0.0001	0.0001	0.0000000	0.000000	3.6209	0.0168480	0.0002
S18	60	22	5	50%	0.0261	0.0023	0.0000	0.0005	0.0001	0.0000	4.45E-08	0.0001	0.0001	0.0000000	0.000000	3.6209	0.0168480	0.0002
S18	60	23	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	2.37E-08	0.0000	0.0000	0.0000000	0.000000	1.9243	0.0089539	0.0001
S18	60	24	5	50%	0.0139	0.0012	0.0000	0.0003	0.0001	0.0000	2.37E-08	0.0000	0.0000	0.0000000	0.000000	1.9243	0.0089539	0.0001
S19	60	1	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	1.87E-08	0.0000	0.0000	0.0000000	0.000000	1.5200	0.0070727	0.0001
S19	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S19	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S19	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S19	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S19	60	6	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	5.11E-08	0.0001	0.0001	0.0000000	0.000000	4.1518	0.0193183	0.0002
S19	60	7	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	5.11E-08	0.0001	0.0001	0.0000000	0.000000	4.1518	0.0193183	0.0002
S19	60	8	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	5.11E-08	0.0001	0.0001	0.0000000	0.000000	4.1518	0.0193183	0.0002
S19	60	9	5	50%	0.0299	0.0026	0.0000	0.0006	0.0001	0.0000	5.11E-08	0.0001	0.0001	0.0000000	0.000000	4.1518	0.0193183	0.0002
S19	60	10	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069439	0.0001
S19	60	11	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069439	0.0001
S19	60	12	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069439	0.0001
S19	60	13	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069438	0.0001
S19	60	14	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069439	0.0001
S19	60	15	5	50%	0.0108	0.0009	0.0000	0.0002	0.0000	0.0000	1.84E-08	0.0000	0.0000	0.0000000	0.000000	1.4923	0.0069439	0.0001
S19	60	16	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	2.61E-08	0.0000	0.0000	0.0000000	0.000000	2.1252	0.0098886	0.0001
S19	60	17	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	2.61E-08	0.0000	0.0000	0.0000000	0.000000	2.1252	0.0098886	0.0001
S19	60	18	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	2.61E-08	0.0000	0.0000	0.0000000	0.000000	2.1252	0.0098886	0.0001
S19	60	19	5	50%	0.0153	0.0013	0.0000	0.0003	0.0001	0.0000	2.61E-08	0.0000	0.0000	0.0000000	0.000000	2.1252	0.0098886	0.0001
S19	60	20	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.52E-08	0.0001	0.0000	0.0000000	0.000000	2.8601	0.0133082	0.0002
S19	60	21	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.52E-08	0.0001	0.0000	0.0000000	0.000000	2.8601	0.0133082	0.0002
S19	60	22	5	50%	0.0206	0.0018	0.0000	0.0004	0.0001	0.0000	3.52E-08	0.0001	0.0000	0.0000000	0.000000	2.8601	0.0133082	0.0002
S19	60	23	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	1.87E-08	0.0000	0.0000	0.0000000	0.000000	1.5200	0.0070727	0.0001
S19	60	24	5	50%	0.0110	0.0010	0.0000	0.0002	0.0000	0.0000	1.87E-08	0.0000	0.0000	0.0000000	0.000000	1.5200	0.0070727	0.0001
S20	60	1	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.61E-09	0.0000	0.0000	0.0000000	0.000000	0.6998	0.0032564	0.0000
S20	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S20	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S20	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S20	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S20	60	6	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	2.35E-08	0.0000	0.0000	0.0000000	0.000000	1.9116	0.0088945	0.0001
S20	60	7	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	2.35E-08	0.0000	0.0000	0.0000000	0.000000	1.9116	0.0088945	0.0001
S20	60	8	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	2.35E-08	0.0000	0.0000	0.0000000	0.000000	1.9116	0.0088945	0.0001
S20	60	9	5	50%	0.0138	0.0012	0.0000	0.0003	0.0001	0.0000	2.35E-08	0.0000	0.0000	0.0000000	0.000000	1.9116	0.0088945	0.0001
S20	60	10	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	11	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	12	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	13	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	14	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	15	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.45E-09	0.0000	0.0000	0.0000000	0.000000	0.6871	0.0031971	0.0000
S20	60	16	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	1.20E-08	0.0000	0.0000	0.0000000	0.000000	0.9785	0.0045529	0.0001
S20	60	17	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	1.20E-08	0.0000	0.0000	0.0000000	0.000000	0.9785	0.0045529	0.0001
S20	60	18	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	1.20E-08	0.0000	0.0000	0.0000000	0.000000	0.9785	0.0045529	0.0001
S20	60	19	5	50%	0.0071	0.0006	0.0000	0.0001	0.0000	0.0000	1.20E-08	0.0000	0.0000	0.0000000	0.000000	0.9785	0.0045529	0.0001
S20	60	20	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	1.62E-08	0.0000	0.0000	0.0000000	0.000000	1.3169	0.0061273	0.0001
S20	60	21	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	1.62E-08	0.0000	0.0000	0.0000000	0.000000	1.3169	0.0061273	0.0001
S20	60	22	5	50%	0.0095	0.0008	0.0000	0.0002	0.0000	0.0000	1.62E-08	0.0000	0.0000	0.0000000	0.000000	1.3169	0.0061273	0.0001
S20	60	23	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.61E-09	0.0000	0.0000	0.0000000	0.000000	0.6998	0.0032564	0.0000
S20	60	24	5	50%	0.0050	0.0004	0.0000	0.0001	0.0000	0.0000	8.61E-09	0.0000	0.0000	0.0000000	0.000000	0.6998	0.0032564	0.0000
S21	60	1	5	50%	0.0854	0.0074	0.0000	0.0016	0.0003	0.0000	1.46E-07	0.0002	0.0002	0.0000000	0.000001	11.8549	0.0551608	0.0007
S21	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S21	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S21	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S21	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S21	60	6	5	50%	0.2333	0.0203	0.0001	0.0045	0.0009	0.0000	3.98E-07	0.0007	0.0005	0.0000000	0.000002	32.3805	0.1506669	0.0019
S21	60	7	5	50%	0.2333	0.0203	0.0001	0.0045	0.0009	0.0000	3.98E-07	0.0007	0.0005	0.0000000	0.000002	32.3805	0.1506669	0.0019
S21	60	8	5	50%	0.2333	0.0203	0.0001	0.0045	0.0009	0.0000	3.98E-07	0.0007	0.0005	0.0000000	0.000002	32.3805	0.1506669	0.0019
S21	60	9	5	50%	0.2333	0.0203	0.0001	0.0045	0.0009	0.0000	3.98E-07	0.0007	0.0005	0.0000000	0.000002	32.3805	0.1506669	0.0019
S21	60	10	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541564	0.0007
S21	60	11	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541564	0.0007
S21	60	12	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541564	0.0007
S21	60	13	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541559	0.0007
S21	60	14	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541564	0.0007
S21	60	15	5	50%	0.0839	0.0073	0.0000	0.0016	0.0003	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.000001	11.6390	0.0541564	0.0007
S21	60	16	5	50%	0.1194	0.0104	0.0000	0.0023	0.0005	0.0000	2.04E-07	0.0003	0.0003	0.0000000	0.000001	16.5748	0.0771226	0.0010
S21	60	17	5	50%	0.1194	0.0104	0.0000	0.0023	0.0005	0.0000	2.04E-07	0.0003	0.0003	0.0000000	0.000001	16.5748	0.0771226	0.0010
S21	60	18	5	50%	0.1194	0.0104	0.0000	0.0023	0.0005	0.0000	2.04E-07	0.0003	0.0003	0.0000000	0.000001	16.5748	0.0771226	0.0010
S21	60	19	5	50%	0.1194	0.0104	0.0000	0.0023	0.0005	0.0000	2.04E-07	0.0003	0.0003	0.0000000	0.000001	16.5748	0.0771226	0.0010
S21	60	20	5	50%	0.1607	0.0140	0.0001	0.0031	0.0006	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.000002	22.3066	0.1037927	0.0013
S21	60	21	5	50%	0.1607	0.0140	0.0001	0.0031	0.0006	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.000002	22.3066	0.1037927	0.0013
S21	60	22	5	50%	0.1607	0.0140	0.0001	0.0031	0.0006	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.000002	22.3066	0.1037927	0.0013
S21	60	23	5	50%	0.0854	0.0074	0.0000	0.0016	0.0003	0.0000	1.46E-07	0.0002	0.0002	0.0000000	0.000001	11.8549	0.0551608	0.0007
S21	60	24	5	50%	0.0854	0.0074	0.0000	0.0016	0.0003	0.0000	1.46E-07	0.0002	0.0002	0.0000000	0.000001	11.8549	0.0551608	0.0007

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C.1. TTC Scarborough Busway: Bus Emission Rate Summary Table

Source Information				Hybrid	2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/s)		
Modeling ID	Speed Limit	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S22	60	1	5	50%	0.0791	0.0069	0.0000	0.0015	0.0003	0.0000	1.35E-07	0.0002	0.0002	0.0000000	0.000001	10.9800	0.0510901	0.0006
S22	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S22	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S22	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S22	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S22	60	6	5	50%	0.2161	0.0188	0.0001	0.0041	0.0008	0.0000	3.69E-07	0.0006	0.0005	0.0000000	0.000002	29.9910	0.1395481	0.0018
S22	60	7	5	50%	0.2161	0.0188	0.0001	0.0041	0.0008	0.0000	3.69E-07	0.0006	0.0005	0.0000000	0.000002	29.9910	0.1395481	0.0018
S22	60	8	5	50%	0.2161	0.0188	0.0001	0.0041	0.0008	0.0000	3.69E-07	0.0006	0.0005	0.0000000	0.000002	29.9910	0.1395481	0.0018
S22	60	9	5	50%	0.2161	0.0188	0.0001	0.0041	0.0008	0.0000	3.69E-07	0.0006	0.0005	0.0000000	0.000002	29.9910	0.1395481	0.0018
S22	60	10	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501598	0.0006
S22	60	11	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501598	0.0006
S22	60	12	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501598	0.0006
S22	60	13	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501594	0.0006
S22	60	14	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501598	0.0006
S22	60	15	5	50%	0.0777	0.0067	0.0000	0.0015	0.0003	0.0000	1.33E-07	0.0002	0.0002	0.0000000	0.000001	10.7801	0.0501598	0.0006
S22	60	16	5	50%	0.1106	0.0096	0.0000	0.0021	0.0004	0.0000	1.89E-07	0.0003	0.0003	0.0000000	0.000001	15.3516	0.0714312	0.0009
S22	60	17	5	50%	0.1106	0.0096	0.0000	0.0021	0.0004	0.0000	1.89E-07	0.0003	0.0003	0.0000000	0.000001	15.3516	0.0714312	0.0009
S22	60	18	5	50%	0.1106	0.0096	0.0000	0.0021	0.0004	0.0000	1.89E-07	0.0003	0.0003	0.0000000	0.000001	15.3516	0.0714312	0.0009
S22	60	19	5	50%	0.1106	0.0096	0.0000	0.0021	0.0004	0.0000	1.89E-07	0.0003	0.0003	0.0000000	0.000001	15.3516	0.0714312	0.0009
S22	60	20	5	50%	0.1489	0.0129	0.0001	0.0028	0.0006	0.0000	2.54E-07	0.0004	0.0003	0.0000000	0.000002	20.6604	0.0961331	0.0012
S22	60	21	5	50%	0.1489	0.0129	0.0001	0.0028	0.0006	0.0000	2.54E-07	0.0004	0.0003	0.0000000	0.000002	20.6604	0.0961331	0.0012
S22	60	22	5	50%	0.1489	0.0129	0.0001	0.0028	0.0006	0.0000	2.54E-07	0.0004	0.0003	0.0000000	0.000002	20.6604	0.0961331	0.0012
S22	60	23	5	50%	0.0791	0.0069	0.0000	0.0015	0.0003	0.0000	1.35E-07	0.0002	0.0002	0.0000000	0.000001	10.9800	0.0510901	0.0006
S22	60	24	5	50%	0.0791	0.0069	0.0000	0.0015	0.0003	0.0000	1.35E-07	0.0002	0.0002	0.0000000	0.000001	10.9800	0.0510901	0.0006
S23	60	1	5	50%	0.1680	0.0146	0.0001	0.0032	0.0007	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.000002	23.3105	0.1084640	0.0014
S23	60	2	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S23	60	3	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S23	60	4	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S23	60	5	5	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.000000	0.0000	0.0000000	0.0000
S23	60	6	5	50%	0.4588	0.0399	0.0002	0.0088	0.0018	0.0001	7.83E-07	0.0013	0.0010	0.0000001	0.000005	63.6706	0.2962598	0.0037
S23	60	7	5	50%	0.4588	0.0399	0.0002	0.0088	0.0018	0.0001	7.83E-07	0.0013	0.0010	0.0000001	0.000005	63.6706	0.2962598	0.0037
S23	60	8	5	50%	0.4588	0.0399	0.0002	0.0088	0.0018	0.0001	7.83E-07	0.0013	0.0010	0.0000001	0.000005	63.6706	0.2962598	0.0037
S23	60	9	5	50%	0.4588	0.0399	0.0002	0.0088	0.0018	0.0001	7.83E-07	0.0013	0.0010	0.0000001	0.000005	63.6706	0.2962598	0.0037
S23	60	10	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064889	0.0013
S23	60	11	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064889	0.0013
S23	60	12	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064889	0.0013
S23	60	13	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064881	0.0013
S23	60	14	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064889	0.0013
S23	60	15	5	50%	0.1649	0.0143	0.0001	0.0032	0.0006	0.0000	2.81E-07	0.0005	0.0004	0.0000000	0.000002	22.8861	0.1064889	0.0013
S23	60	16	5	50%	0.2348	0.0204	0.0001	0.0045	0.0009	0.0000	4.01E-07	0.0007	0.0005	0.0000000	0.000002	32.5914	0.1516480	0.0019
S23	60	17	5	50%	0.2348	0.0204	0.0001	0.0045	0.0009	0.0000	4.01E-07	0.0007	0.0005	0.0000000	0.000002	32.5914	0.1516480	0.0019
S23	60	18	5	50%	0.2348	0.0204	0.0001	0.0045	0.0009	0.0000	4.01E-07	0.0007	0.0005	0.0000000	0.000002	32.5914	0.1516480	0.0019
S23	60	19	5	50%	0.2348	0.0204	0.0001	0.0045	0.0009	0.0000	4.01E-07	0.0007	0.0005	0.0000000	0.000002	32.5914	0.1516480	0.0019
S23	60	20	5	50%	0.3161	0.0275	0.0001	0.0060	0.0012	0.0001	5.39E-07	0.0009	0.0007	0.0000001	0.000003	43.8620	0.2040901	0.0026
S23	60	21	5	50%	0.3161	0.0275	0.0001	0.0060	0.0012	0.0001	5.39E-07	0.0009	0.0007	0.0000001	0.000003	43.8620	0.2040901	0.0026
S23	60	22	5	50%	0.3161	0.0275	0.0001	0.0060	0.0012	0.0001	5.39E-07	0.0009	0.0007	0.0000001	0.000003	43.8620	0.2040901	0.0026
S23	60	23	5	50%	0.1680	0.0146	0.0001	0.0032	0.0007	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.000002	23.3105	0.1084640	0.0014
S23	60	24	5	50%	0.1680	0.0146	0.0001	0.0032	0.0007	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.000002	23.3105	0.1084640	0.0014

Note: Electrification % was not applied to PM10 nor PM2.5.

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S24	3	1	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S24	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S24	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S24	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S24	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S24	9	6	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S24	9	7	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S24	9	8	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S24	9	9	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S24	3	10	1	50%	0.0493	0.0234	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	11	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	12	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	13	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	14	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	15	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S24	5	16	1	50%	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S24	5	17	1	50%	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S24	5	18	1	50%	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S24	5	19	1	50%	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S24	6	20	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S24	6	21	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S24	6	22	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S24	3	23	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S24	3	24	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S25	3	1	1	50%	0.0394	0.0186	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S25	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S25	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S25	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S25	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S25	7	6	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S25	7	7	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S25	7	8	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S25	7	9	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S25	3	10	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	3	11	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	3	12	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	3	13	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	3	14	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	3	15	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S25	4	16	1	50%	0.0550	0.0260	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S25	4	17	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S25	4	18	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S25	4	19	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S25	5	20	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S25	5	21	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S25	5	22	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S25	3	23	1	50%	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S25	3	24	1	50%	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S26	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S26	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S26	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S26	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S26	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S26	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S26	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S26	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S26	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S26	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S26	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S26	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S26	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S26	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S26	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S26	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S26	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S27	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S27	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S27	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S27	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S27	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S27	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S27	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S27	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S27	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S27	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S27	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S27	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S27	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S27	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S27	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S27	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S27	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S27	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S28	3	1	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S28	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S28	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S28	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S28	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S28	9	6	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S28	9	7	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S28	9	8	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S28	9	9	1	50%	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	1.10E-06	0.0019	0.0016	0.0000000	0.0000057
S28	3	10	1	50%	0.0493	0.0234	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	11	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	12	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	13	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	14	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	15	1	50%	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	3.95E-07	0.0007	0.0006	0.0000000	0.0000021
S28	5	16	1	50%	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S28	5	17	1	50%	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S28	5	18	1	50%	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S28	5	19	1	50%	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	5.63E-07	0.0010	0.0008	0.0000000	0.0000029
S28	6	20	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S28	6	21	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S28	6	22	1	50%	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	7.57E-07	0.0013	0.0011	0.0000000	0.0000039
S28	3	23	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S28	3	24	1	50%	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	4.03E-07	0.0007	0.0006	0.0000000	0.0000021
S29	3	1	1	50%	0.0394	0.0186	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S29	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S29	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S29	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S29	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S29	7	6	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S29	7	7	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S29	7	8	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S29	7	9	1	50%	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	8.62E-07	0.0015	0.0012	0.0000000	0.0000045
S29	3	10	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	3	11	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	3	12	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	3	13	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	3	14	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	3	15	1	50%	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	3.10E-07	0.0005	0.0004	0.0000000	0.0000016
S29	4	16	1	50%	0.0550	0.0260	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S29	4	17	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S29	4	18	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S29	4	19	1	50%	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	4.41E-07	0.0008	0.0006	0.0000000	0.0000023
S29	5	20	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S29	5	21	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S29	5	22	1	50%	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	5.94E-07	0.0010	0.0009	0.0000000	0.0000031
S29	3	23	1	50%	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S29	3	24	1	50%	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	3.15E-07	0.0005	0.0005	0.0000000	0.0000016
S30	2	1	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011
S30	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S30	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S30	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S30	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S30	5	6	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S30	5	7	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S30	5	8	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S30	5	9	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S30	2	10	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	11	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	12	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	13	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	14	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	15	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	16	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S30	2	17	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S30	2	18	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S30	2	19	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S30	3	20	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S30	3	21	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S30	3	22	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S30	2	23	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011
S30	2	24	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S31	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S31	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S31	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S31	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S31	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S31	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S31	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S31	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S31	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S31	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S31	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S31	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S31	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S31	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S31	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S31	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S31	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S31	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S31	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S32	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S32	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S32	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S32	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S32	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S32	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S32	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S32	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S32	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S32	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S32	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S32	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S32	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S32	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S32	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S32	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S32	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S32	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S33	1	1	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S33	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S33	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S33	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S33	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S33	3	6	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S33	3	7	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S33	3	8	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S33	3	9	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S33	1	10	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	11	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	12	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	13	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	14	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	15	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S33	2	16	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S33	2	17	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S33	2	18	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S33	2	19	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S33	2	20	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S33	2	21	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S33	2	22	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S33	1	23	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S33	1	24	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S34	2	1	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011
S34	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S34	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S34	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S34	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S34	5	6	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S34	5	7	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S34	5	8	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S34	5	9	1	50%	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	5.65E-07	0.0010	0.0008	0.0000000	0.0000029
S34	2	10	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	11	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	12	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	13	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	14	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	15	1	50%	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	2.03E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	16	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S34	2	17	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S34	2	18	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S34	2	19	1	50%	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	2.89E-07	0.0005	0.0004	0.0000000	0.0000015
S34	3	20	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S34	3	21	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S34	3	22	1	50%	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	3.89E-07	0.0007	0.0006	0.0000000	0.0000020
S34	2	23	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011
S34	2	24	1	50%	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	2.07E-07	0.0004	0.0003	0.0000000	0.0000011
S35	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S35	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S35	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S35	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S35	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S35	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S35	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S35	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S35	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S35	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S35	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S35	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S35	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S35	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S35	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S35	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S35	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S35	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S35	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S36	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S36	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S36	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S36	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S36	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S36	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S36	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S36	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S36	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S36	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S36	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S36	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S36	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S36	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S36	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S36	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S36	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S36	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S37	1	1	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S37	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S37	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S37	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S37	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S37	3	6	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S37	3	7	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S37	3	8	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S37	3	9	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S37	1	10	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	11	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	12	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	13	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	14	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	15	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S37	2	16	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S37	2	17	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S37	2	18	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S37	2	19	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S37	2	20	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S37	2	21	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S37	2	22	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S37	1	23	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S37	1	24	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S38	1	1	1	50%	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	1.41E-07	0.0002	0.0002	0.0000000	0.0000007
S38	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S38	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S38	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S38	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S38	3	6	1	50%	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	3.86E-07	0.0007	0.0006	0.0000000	0.0000020
S38	3	7	1	50%	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	3.86E-07	0.0007	0.0006	0.0000000	0.0000020
S38	3	8	1	50%	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	3.86E-07	0.0007	0.0006	0.0000000	0.0000020
S38	3	9	1	50%	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	3.86E-07	0.0007	0.0006	0.0000000	0.0000020
S38	1	10	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	11	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	12	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	13	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	14	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	15	1	50%	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	1.39E-07	0.0002	0.0002	0.0000000	0.0000007
S38	2	16	1	50%	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	1.98E-07	0.0003	0.0003	0.0000000	0.0000010
S38	2	17	1	50%	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	1.98E-07	0.0003	0.0003	0.0000000	0.0000010
S38	2	18	1	50%	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	1.98E-07	0.0003	0.0003	0.0000000	0.0000010
S38	2	19	1	50%	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	1.98E-07	0.0003	0.0003	0.0000000	0.0000010
S38	2	20	1	50%	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	2.66E-07	0.0005	0.0004	0.0000000	0.0000014
S38	2	21	1	50%	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	2.66E-07	0.0005	0.0004	0.0000000	0.0000014
S38	2	22	1	50%	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	2.66E-07	0.0005	0.0004	0.0000000	0.0000014
S38	1	23	1	50%	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	1.41E-07	0.0002	0.0002	0.0000000	0.0000007
S38	1	24	1	50%	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	1.41E-07	0.0002	0.0002	0.0000000	0.0000007
S39	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S39	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S39	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S39	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S39	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S39	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S39	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S39	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S39	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S39	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S39	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S39	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S39	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S39	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S39	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S39	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S39	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S39	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S39	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S40	1	1	1	50%	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	7.62E-08	0.0001	0.0001	0.0000000	0.0000004
S40	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S40	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S40	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S40	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S40	2	6	1	50%	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	2.08E-07	0.0004	0.0003	0.0000000	0.0000011
S40	2	7	1	50%	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	2.08E-07	0.0004	0.0003	0.0000000	0.0000011
S40	2	8	1	50%	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	2.08E-07	0.0004	0.0003	0.0000000	0.0000011

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S40	2	9	1	50%	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	2.08E-07	0.0004	0.0003	0.0000000	0.0000011
S40	1	10	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	11	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	12	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	13	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	14	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	15	1	50%	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	7.48E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	16	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.06E-07	0.0002	0.0002	0.0000000	0.0000006
S40	1	17	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.06E-07	0.0002	0.0002	0.0000000	0.0000006
S40	1	18	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.06E-07	0.0002	0.0002	0.0000000	0.0000006
S40	1	19	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.06E-07	0.0002	0.0002	0.0000000	0.0000006
S40	1	20	1	50%	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.0000007
S40	1	21	1	50%	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.0000007
S40	1	22	1	50%	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	1.43E-07	0.0002	0.0002	0.0000000	0.0000007
S40	1	23	1	50%	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	7.62E-08	0.0001	0.0001	0.0000000	0.0000004
S40	1	24	1	50%	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	7.62E-08	0.0001	0.0001	0.0000000	0.0000004
S41	1	1	1	50%	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	1.09E-07	0.0002	0.0002	0.0000000	0.0000006
S41	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S41	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S41	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S41	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S41	3	6	1	50%	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	2.97E-07	0.0005	0.0004	0.0000000	0.0000015
S41	3	7	1	50%	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	2.97E-07	0.0005	0.0004	0.0000000	0.0000015
S41	3	8	1	50%	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	2.97E-07	0.0005	0.0004	0.0000000	0.0000015
S41	3	9	1	50%	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	2.97E-07	0.0005	0.0004	0.0000000	0.0000015
S41	1	10	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	11	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	12	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	13	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	14	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	15	1	50%	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	1.07E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	16	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S41	1	17	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S41	1	18	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S41	1	19	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S41	2	20	1	50%	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	2.05E-07	0.0004	0.0003	0.0000000	0.0000011
S41	2	21	1	50%	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	2.05E-07	0.0004	0.0003	0.0000000	0.0000011
S41	2	22	1	50%	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	2.05E-07	0.0004	0.0003	0.0000000	0.0000011
S41	1	23	1	50%	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	1.09E-07	0.0002	0.0002	0.0000000	0.0000006
S41	1	24	1	50%	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	1.09E-07	0.0002	0.0002	0.0000000	0.0000006
S42	1	1	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S42	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S42	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S42	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S42	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S42	3	6	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S42	3	7	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S42	3	8	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S42	3	9	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S42	1	10	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	11	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	12	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	13	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	14	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	15	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S42	2	16	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S42	2	17	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S42	2	18	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S42	2	19	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S42	2	20	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S42	2	21	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S42	2	22	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S42	1	23	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S42	1	24	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S43	1	1	1	50%	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	9.79E-08	0.0002	0.0001	0.0000000	0.0000005
S43	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S43	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S43	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S43	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S43	2	6	1	50%	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	2.67E-07	0.0005	0.0004	0.0000000	0.0000014
S43	2	7	1	50%	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	2.67E-07	0.0005	0.0004	0.0000000	0.0000014
S43	2	8	1	50%	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	2.67E-07	0.0005	0.0004	0.0000000	0.0000014
S43	2	9	1	50%	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	2.67E-07	0.0005	0.0004	0.0000000	0.0000014
S43	1	10	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	11	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	12	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	13	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	14	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	15	1	50%	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	9.61E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	16	1	50%	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	1.37E-07	0.0002	0.0002	0.0000000	0.0000007
S43	1	17	1	50%	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	1.37E-07	0.0002	0.0002	0.0000000	0.0000007
S43	1	18	1	50%	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	1.37E-07	0.0002	0.0002	0.0000000	0.0000007
S43	1	19	1	50%	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	1.37E-07	0.0002	0.0002	0.0000000	0.0000007
S43	2	20	1	50%	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	1.84E-07	0.0003	0.0003	0.0000000	0.0000010
S43	2	21	1	50%	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	1.84E-07	0.0003	0.0003	0.0000000	0.0000010
S43	2	22	1	50%	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	1.84E-07	0.0003	0.0003	0.0000000	0.0000010
S43	1	23	1	50%	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	9.79E-08	0.0002	0.0001	0.0000000	0.0000005
S43	1	24	1	50%	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	9.79E-08	0.0002	0.0001	0.0000000	0.0000005
S44	2	1	1	50%	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	1.85E-07	0.0003	0.0003	0.0000000	0.0000010
S44	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S44	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S44	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S44	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S44	4	6	1	50%	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	5.05E-07	0.0009	0.0007	0.0000000	0.0000026
S44	4	7	1	50%	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	5.05E-07	0.0009	0.0007	0.0000000	0.0000026
S44	4	8	1	50%	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	5.05E-07	0.0009	0.0007	0.0000000	0.0000026
S44	4	9	1	50%	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	5.05E-07	0.0009	0.0007	0.0000000	0.0000026
S44	2	10	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	11	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	12	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	13	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	14	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	15	1	50%	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	1.82E-07	0.0003	0.0003	0.0000000	0.0000009
S44	2	16	1	50%	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	2.59E-07	0.0004	0.0004	0.0000000	0.0000013
S44	2	17	1	50%	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	2.59E-07	0.0004	0.0004	0.0000000	0.0000013
S44	2	18	1	50%	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	2.59E-07	0.0004	0.0004	0.0000000	0.0000013
S44	2	19	1	50%	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	2.59E-07	0.0004	0.0004	0.0000000	0.0000013
S44	3	20	1	50%	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	3.48E-07	0.0006	0.0005	0.0000000	0.0000018
S44	3	21	1	50%	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	3.48E-07	0.0006	0.0005	0.0000000	0.0000018
S44	3	22	1	50%	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	3.48E-07	0.0006	0.0005	0.0000000	0.0000018
S44	2	23	1	50%	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	1.85E-07	0.0003	0.0003	0.0000000	0.0000010
S44	2	24	1	50%	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	1.85E-07	0.0003	0.0003	0.0000000	0.0000010

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S45	2	1	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010
S45	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S45	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S45	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S45	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S45	5	6	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S45	5	7	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S45	5	8	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S45	5	9	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S45	2	10	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	11	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	12	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	13	1	50%	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	14	1	50%	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	15	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	16	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S45	2	17	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S45	2	18	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S45	2	19	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S45	3	20	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S45	3	21	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S45	3	22	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S45	2	23	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010
S45	2	24	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010
S46	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S46	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S46	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S46	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S46	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S46	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S46	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S46	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S46	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S46	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S46	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S46	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S46	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S46	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S46	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S46	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S46	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S46	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S46	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	1	1	50%	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S47	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S47	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S47	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S47	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S47	4	6	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S47	4	7	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S47	4	8	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S47	4	9	1	50%	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	4.46E-07	0.0008	0.0006	0.0000000	0.0000023
S47	1	10	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	11	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	12	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	13	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	14	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	15	1	50%	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	1.60E-07	0.0003	0.0002	0.0000000	0.0000008
S47	2	16	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S47	2	17	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S47	2	18	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S47	2	19	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S47	3	20	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S47	3	21	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S47	3	22	1	50%	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	3.07E-07	0.0005	0.0004	0.0000000	0.0000016
S47	1	23	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S47	1	24	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.63E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	1	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S48	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S48	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S48	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S48	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S48	4	6	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S48	4	7	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S48	4	8	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S48	4	9	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S48	1	10	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	11	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	12	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	13	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	14	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	15	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S48	2	16	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S48	2	17	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S48	2	18	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S48	2	19	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S48	2	20	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S48	2	21	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S48	2	22	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S48	1	23	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S48	1	24	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	1	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S49	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S49	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S49	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S49	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S49	4	6	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S49	4	7	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S49	4	8	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S49	4	9	1	50%	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	4.16E-07	0.0007	0.0006	0.0000000	0.0000022
S49	1	10	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	11	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	12	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	13	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	14	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	15	1	50%	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	1.50E-07	0.0003	0.0002	0.0000000	0.0000008
S49	2	16	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S49	2	17	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S49	2	18	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S49	2	19	1	50%	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	2.13E-07	0.0004	0.0003	0.0000000	0.0000011
S49	2	20	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S49	2	21	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S49	2	22	1	50%	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	2.87E-07	0.0005	0.0004	0.0000000	0.0000015
S49	1	23	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S49	1	24	1	50%	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	1.52E-07	0.0003	0.0002	0.0000000	0.0000008
S50	1	1	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S50	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S50	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S50	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S50	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S50	3	6	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S50	3	7	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S50	3	8	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S50	3	9	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S50	1	10	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	11	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	12	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	13	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	14	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	15	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S50	2	16	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S50	2	17	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S50	2	18	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S50	2	19	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S50	2	20	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S50	2	21	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S50	2	22	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S50	1	23	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S50	1	24	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	1	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S51	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S51	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S51	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S51	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S51	3	6	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S51	3	7	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S51	3	8	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S51	3	9	1	50%	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	3.57E-07	0.0006	0.0005	0.0000000	0.0000019
S51	1	10	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	11	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	12	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	13	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	14	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	15	1	50%	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	1.28E-07	0.0002	0.0002	0.0000000	0.0000007
S51	2	16	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S51	2	17	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S51	2	18	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S51	2	19	1	50%	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	1.83E-07	0.0003	0.0003	0.0000000	0.0000010
S51	2	20	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S51	2	21	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S51	2	22	1	50%	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	2.46E-07	0.0004	0.0004	0.0000000	0.0000013
S51	1	23	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007
S51	1	24	1	50%	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	1.31E-07	0.0002	0.0002	0.0000000	0.0000007

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S52	1	1	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S52	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S52	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S52	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S52	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S52	4	6	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S52	4	7	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S52	4	8	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S52	4	9	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S52	1	10	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	1	11	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	1	12	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	1	13	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	1	14	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	1	15	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S52	2	16	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S52	2	17	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S52	2	18	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S52	2	19	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S52	3	20	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S52	3	21	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S52	3	22	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S52	1	23	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S52	1	24	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S53	1	1	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S53	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S53	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S53	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S53	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S53	4	6	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S53	4	7	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S53	4	8	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S53	4	9	1	50%	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	4.75E-07	0.0008	0.0007	0.0000000	0.0000025
S53	1	10	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	1	11	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	1	12	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	1	13	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	1	14	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	1	15	1	50%	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	1.71E-07	0.0003	0.0002	0.0000000	0.0000009
S53	2	16	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S53	2	17	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S53	2	18	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S53	2	19	1	50%	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	2.43E-07	0.0004	0.0004	0.0000000	0.0000013
S53	3	20	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S53	3	21	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S53	3	22	1	50%	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	3.28E-07	0.0006	0.0005	0.0000000	0.0000017
S53	1	23	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S53	1	24	1	50%	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	1.74E-07	0.0003	0.0003	0.0000000	0.0000009
S54	1	1	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S54	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S54	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S54	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S54	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S54	2	6	1	50%	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S54	2	7	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S54	2	8	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S54	2	9	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S54	1	10	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	11	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	12	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	13	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	14	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	15	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S54	1	16	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S54	1	17	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S54	1	18	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S54	1	19	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S54	1	20	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S54	1	21	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S54	1	22	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S54	1	23	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S54	1	24	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S55	1	1	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S55	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S55	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S55	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S55	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S55	2	6	1	50%	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S55	2	7	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S55	2	8	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S55	2	9	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S55	1	10	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	11	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	12	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	13	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	14	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	15	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S55	1	16	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S55	1	17	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S55	1	18	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S55	1	19	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S55	1	20	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S55	1	21	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S55	1	22	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S55	1	23	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S55	1	24	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S56	1	1	1	50%	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	6.53E-08	0.0001	0.0001	0.0000000	0.0000003
S56	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S56	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S56	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S56	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S56	2	6	1	50%	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	1.78E-07	0.0003	0.0003	0.0000000	0.0000009
S56	2	7	1	50%	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	1.78E-07	0.0003	0.0003	0.0000000	0.0000009
S56	2	8	1	50%	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	1.78E-07	0.0003	0.0003	0.0000000	0.0000009
S56	2	9	1	50%	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	1.78E-07	0.0003	0.0003	0.0000000	0.0000009
S56	1	10	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	11	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	12	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	13	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	14	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	15	1	50%	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	6.41E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	16	1	50%	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	9.13E-08	0.0002	0.0001	0.0000000	0.0000005

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S56	1	17	1	50%	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	9.13E-08	0.0002	0.0001	0.0000000	0.0000005
S56	1	18	1	50%	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	9.13E-08	0.0002	0.0001	0.0000000	0.0000005
S56	1	19	1	50%	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	9.13E-08	0.0002	0.0001	0.0000000	0.0000005
S56	1	20	1	50%	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	1.23E-07	0.0002	0.0002	0.0000000	0.0000006
S56	1	21	1	50%	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	1.23E-07	0.0002	0.0002	0.0000000	0.0000006
S56	1	22	1	50%	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	1.23E-07	0.0002	0.0002	0.0000000	0.0000006
S56	1	23	1	50%	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	6.53E-08	0.0001	0.0001	0.0000000	0.0000003
S56	1	24	1	50%	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	6.53E-08	0.0001	0.0001	0.0000000	0.0000003
S57	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S57	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S57	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S57	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S57	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S57	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S57	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S57	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S57	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S57	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S57	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S57	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S57	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S57	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S57	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S57	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S57	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S57	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S58	1	1	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S58	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S58	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S58	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S58	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S58	3	6	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S58	3	7	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S58	3	8	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S58	3	9	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S58	1	10	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	11	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	12	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	13	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	14	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	15	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	16	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S58	1	17	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S58	1	18	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S58	1	19	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S58	2	20	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S58	2	21	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S58	2	22	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S58	1	23	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S58	1	24	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S59	1	1	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S59	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S59	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S59	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S59	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S59	2	6	1	50%	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S59	2	7	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S59	2	8	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S59	2	9	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S59	1	10	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	11	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	12	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	13	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	14	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	15	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S59	1	16	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S59	1	17	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S59	1	18	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S59	1	19	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S59	1	20	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S59	1	21	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S59	1	22	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S59	1	23	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S59	1	24	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S60	1	1	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S60	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S60	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S60	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S60	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S60	3	6	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S60	3	7	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S60	3	8	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S60	3	9	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S60	1	10	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	11	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	12	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	13	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	14	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	15	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	16	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S60	1	17	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S60	1	18	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S60	1	19	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S60	2	20	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S60	2	21	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S60	2	22	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S60	1	23	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S60	1	24	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S61	1	1	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S61	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S61	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S61	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S61	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S61	2	6	1	50%	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S61	2	7	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S61	2	8	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S61	2	9	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S61	1	10	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	11	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	12	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	13	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	14	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	15	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S61	1	16	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S61	1	17	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S61	1	18	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S61	1	19	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S61	1	20	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S61	1	21	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S61	1	22	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S61	1	23	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S61	1	24	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S62	1	1	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S62	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S62	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S62	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S62	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S62	3	6	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S62	3	7	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S62	3	8	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S62	3	9	1	50%	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	3.27E-07	0.0006	0.0005	0.0000000	0.0000017
S62	1	10	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	11	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	12	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	13	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	14	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	15	1	50%	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	1.17E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	16	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S62	1	17	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S62	1	18	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S62	1	19	1	50%	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	1.67E-07	0.0003	0.0002	0.0000000	0.0000009
S62	2	20	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S62	2	21	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S62	2	22	1	50%	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	2.25E-07	0.0004	0.0003	0.0000000	0.0000012
S62	1	23	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S62	1	24	1	50%	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	1.20E-07	0.0002	0.0002	0.0000000	0.0000006
S63	1	1	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S63	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S63	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S63	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S63	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S63	2	6	1	50%	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S63	2	7	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S63	2	8	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S63	2	9	1	50%	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	2.38E-07	0.0004	0.0003	0.0000000	0.0000012
S63	1	10	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	11	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	12	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	13	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	14	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	15	1	50%	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	8.54E-08	0.0001	0.0001	0.0000000	0.0000004
S63	1	16	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S63	1	17	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S63	1	18	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S63	1	19	1	50%	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	1.22E-07	0.0002	0.0002	0.0000000	0.0000006
S63	1	20	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S63	1	21	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S63	1	22	1	50%	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	1.64E-07	0.0003	0.0002	0.0000000	0.0000009
S63	1	23	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S63	1	24	1	50%	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	8.70E-08	0.0002	0.0001	0.0000000	0.0000005
S64	2	1	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S64	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S64	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S64	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S64	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S64	5	6	1	50%	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	6.24E-07	0.0011	0.0009	0.0000000	0.0000032
S64	5	7	1	50%	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	6.24E-07	0.0011	0.0009	0.0000000	0.0000032
S64	5	8	1	50%	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	6.24E-07	0.0011	0.0009	0.0000000	0.0000032
S64	5	9	1	50%	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	6.24E-07	0.0011	0.0009	0.0000000	0.0000032
S64	2	10	1	50%	0.0280	0.0133	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	11	1	50%	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	12	1	50%	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	13	1	50%	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	14	1	50%	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	15	1	50%	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	2.24E-07	0.0004	0.0003	0.0000000	0.0000012
S64	3	16	1	50%	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	3.19E-07	0.0006	0.0005	0.0000000	0.0000017
S64	3	17	1	50%	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	3.19E-07	0.0006	0.0005	0.0000000	0.0000017
S64	3	18	1	50%	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	3.19E-07	0.0006	0.0005	0.0000000	0.0000017
S64	3	19	1	50%	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	3.19E-07	0.0006	0.0005	0.0000000	0.0000017
S64	4	20	1	50%	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	4.30E-07	0.0007	0.0006	0.0000000	0.0000022
S64	4	21	1	50%	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	4.30E-07	0.0007	0.0006	0.0000000	0.0000022
S64	4	22	1	50%	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	4.30E-07	0.0007	0.0006	0.0000000	0.0000022
S64	2	23	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S64	2	24	1	50%	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	2.28E-07	0.0004	0.0003	0.0000000	0.0000012
S65	2	1	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010
S65	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S65	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S65	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S65	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S65	5	6	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S65	5	7	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S65	5	8	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S65	5	9	1	50%	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	5.35E-07	0.0009	0.0008	0.0000000	0.0000028
S65	2	10	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	11	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	12	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	13	1	50%	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	14	1	50%	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	15	1	50%	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	1.92E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	16	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S65	2	17	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S65	2	18	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S65	2	19	1	50%	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	2.74E-07	0.0005	0.0004	0.0000000	0.0000014
S65	3	20	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S65	3	21	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S65	3	22	1	50%	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	3.68E-07	0.0006	0.0005	0.0000000	0.0000019
S65	2	23	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010
S65	2	24	1	50%	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	1.96E-07	0.0003	0.0003	0.0000000	0.0000010

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S66	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S66	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S66	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S66	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S66	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S66	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S66	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S66	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S66	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S66	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S66	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S66	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S66	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S66	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S66	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S66	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S66	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S67	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S67	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S67	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S67	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S67	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S67	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S67	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S67	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S67	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S67	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S67	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S67	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S67	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S67	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S67	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S67	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S67	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S67	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S68	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S68	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S68	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S68	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S68	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S68	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S68	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S68	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S68	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S68	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S68	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S68	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S68	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S68	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S68	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S68	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S68	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S69	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S69	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S69	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S69	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S69	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S69	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S69	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S69	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S69	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S69	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S69	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S69	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S69	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S69	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S69	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S69	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S69	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S69	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S70	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S70	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S70	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S70	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S70	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S70	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S70	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S70	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S70	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S70	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S70	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S70	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S70	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S70	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S70	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S70	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S70	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S71	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S71	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S71	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S71	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S71	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S71	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S71	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S71	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S71	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S71	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S71	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S71	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S71	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S71	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S71	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S71	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S71	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S71	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S72	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S72	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S72	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S72	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S72	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S72	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S72	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S72	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S72	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S72	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S72	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S72	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S72	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S72	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S72	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S72	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S72	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S72	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S73	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S73	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S73	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S73	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S73	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S73	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S73	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S73	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S73	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S73	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S73	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S73	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S73	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S73	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S73	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S73	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S73	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S73	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S74	0	1	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S74	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S74	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S74	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S74	1	6	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S74	1	7	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S74	1	8	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				Hybrid	2028 Future No-Build Max Emission Rate (g/s)										
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	%Electrification	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein
S74	1	9	1	50%	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	8.91E-08	0.0002	0.0001	0.0000000	0.0000005
S74	0	10	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	11	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	12	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	13	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	14	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	15	1	50%	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	3.20E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	16	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S74	0	17	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S74	0	18	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S74	0	19	1	50%	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	4.56E-08	0.0001	0.0001	0.0000000	0.0000002
S74	1	20	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S74	1	21	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S74	1	22	1	50%	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	6.14E-08	0.0001	0.0001	0.0000000	0.0000003
S74	0	23	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S74	0	24	1	50%	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	3.26E-08	0.0001	0.0000	0.0000000	0.0000002
S75	0	1	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	2	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S75	0	3	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S75	0	4	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S75	0	5	1	50%	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.00E+00	0.0000	0.0000	0.0000000	0.0000000
S75	1	6	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S75	1	7	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S75	1	8	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S75	1	9	1	50%	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	1.19E-07	0.0002	0.0002	0.0000000	0.0000006
S75	0	10	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	11	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	12	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	13	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	14	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	15	1	50%	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	4.27E-08	0.0001	0.0001	0.0000000	0.0000002
S75	1	16	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S75	1	17	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S75	1	18	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S75	1	19	1	50%	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	6.08E-08	0.0001	0.0001	0.0000000	0.0000003
S75	1	20	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S75	1	21	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S75	1	22	1	50%	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	8.19E-08	0.0001	0.0001	0.0000000	0.0000004
S75	0	23	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002
S75	0	24	1	50%	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	4.35E-08	0.0001	0.0001	0.0000000	0.0000002

Note: Electrification % was not applied to PM10 nor PM2.5.

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S24	3	1	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S24	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S24	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S24	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S24	9	6	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S24	9	7	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S24	9	8	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S24	9	9	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S24	3	10	1	0.0493	0.0234	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	11	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	12	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	13	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	14	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	15	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	5	16	1	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S24	5	17	1	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S24	5	18	1	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S24	5	19	1	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S24	6	20	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S24	6	21	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S24	6	22	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S24	3	23	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S24	3	24	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	1	1	0.0394	0.0186	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S25	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S25	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S25	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S25	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S25	7	6	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S25	7	7	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S25	7	8	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S25	7	9	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S25	3	10	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	11	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	12	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	13	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	14	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	15	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S25	4	16	1	0.0550	0.0260	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S25	4	17	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S25	4	18	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S25	4	19	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S25	5	20	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S25	5	21	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S25	5	22	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S25	3	23	1	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S25	3	24	1	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S26	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S26	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S26	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S27	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S27	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S27	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S27	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S27	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S28	3	1	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S28	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S28	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S28	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S28	9	6	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S28	9	7	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S28	9	8	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S28	9	9	1	0.1371	0.0650	0.0001	0.0005	0.0004	0.0001	0.0000	0.0019	0.0016	0.0000000	0.000006	13625.83	175.24	1.4096
S28	3	10	1	0.0493	0.0234	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	11	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	12	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	13	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	14	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	15	1	0.0493	0.0233	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	5	16	1	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S28	5	17	1	0.0702	0.0332	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S28	5	18	1	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S28	5	19	1	0.0702	0.0333	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S28	6	20	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S28	6	21	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S28	6	22	1	0.0945	0.0448	0.0001	0.0003	0.0003	0.0000	0.0000	0.0013	0.0011	0.0000000	0.000004	13625.83	175.24	1.4096
S28	3	23	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S28	3	24	1	0.0502	0.0238	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	1	1	0.0394	0.0186	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S29	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S29	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S29	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S29	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S29	7	6	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S29	7	7	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S29	7	8	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S29	7	9	1	0.1075	0.0509	0.0001	0.0004	0.0003	0.0001	0.0000	0.0015	0.0012	0.0000000	0.000004	13625.83	175.24	1.4096
S29	3	10	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	11	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	12	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	13	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	14	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	15	1	0.0386	0.0183	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S29	4	16	1	0.0550	0.0260	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S29	4	17	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S29	4	18	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S29	4	19	1	0.0550	0.0261	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S29	5	20	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S29	5	21	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S29	5	22	1	0.0740	0.0351	0.0001	0.0003	0.0002	0.0000	0.0000	0.0010	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S29	3	23	1	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S29	3	24	1	0.0394	0.0187	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S30	2	1	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S30	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S30	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S30	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S30	5	6	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S30	5	7	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S30	5	8	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S30	5	9	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S30	2	10	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	11	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	12	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	13	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	14	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	15	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	16	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S30	2	17	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S30	2	18	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S30	2	19	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S30	3	20	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S30	3	21	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S30	3	22	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S30	2	23	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S30	2	24	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S31	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S31	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S31	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S31	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S31	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S31	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S31	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S31	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S31	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S31	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S31	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S31	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S31	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S31	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S31	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S31	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S31	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S32	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S32	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S32	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S32	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S32	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S32	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S32	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S32	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S32	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S32	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S32	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S32	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S32	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S32	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S32	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S32	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	1	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S33	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S33	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S33	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S33	3	6	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S33	3	7	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S33	3	8	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096

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C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S33	3	9	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S33	1	10	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	11	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	12	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	13	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	14	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	15	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	16	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	17	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	18	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	19	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	20	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	21	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S33	2	22	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	23	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S33	1	24	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	1	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S34	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S34	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S34	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S34	5	6	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S34	5	7	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S34	5	8	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S34	5	9	1	0.0704	0.0334	0.0001	0.0002	0.0002	0.0000	0.0000	0.0010	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S34	2	10	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	11	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	12	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	13	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	14	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	15	1	0.0253	0.0120	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	16	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S34	2	17	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S34	2	18	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S34	2	19	1	0.0360	0.0171	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S34	3	20	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S34	3	21	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S34	3	22	1	0.0485	0.0230	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S34	2	23	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S34	2	24	1	0.0258	0.0122	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S35	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S35	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S35	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S35	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S35	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S35	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S35	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S35	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S35	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S35	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S35	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S35	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S35	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S35	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S35	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S35	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S36	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S36	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S36	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S36	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S36	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S36	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S36	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S36	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S36	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S36	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S36	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S36	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S36	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S36	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S36	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S36	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	1	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S37	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S37	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S37	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S37	3	6	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S37	3	7	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S37	3	8	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S37	3	9	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S37	1	10	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	11	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	12	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	13	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	14	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	15	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	16	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	17	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	18	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	19	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	20	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	21	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S37	2	22	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	23	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S37	1	24	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S38	1	1	1	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S38	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S38	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S38	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S38	3	6	1	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S38	3	7	1	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S38	3	8	1	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S38	3	9	1	0.0482	0.0228	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S38	1	10	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	11	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	12	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	13	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	14	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	15	1	0.0173	0.0082	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	16	1	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	17	1	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	18	1	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	19	1	0.0247	0.0117	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	20	1	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	21	1	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S38	2	22	1	0.0332	0.0157	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	23	1	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S38	1	24	1	0.0176	0.0084	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S39	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S39	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S39	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S39	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S39	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S39	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S39	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S39	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S39	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S39	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S39	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S39	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S39	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S39	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S39	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S39	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	1	1	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S40	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S40	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S40	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S40	2	6	1	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S40	2	7	1	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S40	2	8	1	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S40	2	9	1	0.0259	0.0123	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	10	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	11	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	12	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	13	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	14	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	15	1	0.0093	0.0044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	16	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	17	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	18	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	19	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	20	1	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	21	1	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	22	1	0.0179	0.0085	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S40	1	23	1	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S40	1	24	1	0.0095	0.0045	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S41	1	1	1	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S41	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S41	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S41	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S41	3	6	1	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S41	3	7	1	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S41	3	8	1	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S41	3	9	1	0.0371	0.0176	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S41	1	10	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	11	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	12	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	13	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	14	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	15	1	0.0133	0.0063	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	16	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	17	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	18	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	19	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	2	20	1	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S41	2	21	1	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S41	2	22	1	0.0255	0.0121	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	23	1	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S41	1	24	1	0.0136	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	1	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S42	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S42	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S42	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S42	3	6	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S42	3	7	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S42	3	8	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S42	3	9	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S42	1	10	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	11	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	12	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	13	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	14	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	15	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	16	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S42	2	17	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	18	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	19	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	20	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	21	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S42	2	22	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	23	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S42	1	24	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	1	1	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S43	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S43	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S43	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S43	2	6	1	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	7	1	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	8	1	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	9	1	0.0334	0.0158	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	10	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	11	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	12	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	13	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	14	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	15	1	0.0120	0.0057	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	16	1	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	17	1	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	18	1	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	19	1	0.0171	0.0081	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	20	1	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	21	1	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S43	2	22	1	0.0230	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	23	1	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S43	1	24	1	0.0122	0.0058	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	1	1	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S44	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S44	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S44	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S44	4	6	1	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	0.0000	0.0009	0.0007	0.0000000	0.000003	13625.83	175.24	1.4096
S44	4	7	1	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	0.0000	0.0009	0.0007	0.0000000	0.000003	13625.83	175.24	1.4096
S44	4	8	1	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	0.0000	0.0009	0.0007	0.0000000	0.000003	13625.83	175.24	1.4096
S44	4	9	1	0.0630	0.0299	0.0000	0.0002	0.0002	0.0000	0.0000	0.0009	0.0007	0.0000000	0.000003	13625.83	175.24	1.4096
S44	2	10	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	11	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	12	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	13	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	14	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	15	1	0.0226	0.0107	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	16	1	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	17	1	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	18	1	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	19	1	0.0323	0.0153	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S44	3	20	1	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S44	3	21	1	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S44	3	22	1	0.0434	0.0206	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S44	2	23	1	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S44	2	24	1	0.0231	0.0109	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S45	2	1	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S45	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S45	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S45	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S45	5	6	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S45	5	7	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S45	5	8	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S45	5	9	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S45	2	10	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	11	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	12	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	13	1	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	14	1	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	15	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	16	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	17	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	18	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	19	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S45	3	20	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S45	3	21	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S45	3	22	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S45	2	23	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S45	2	24	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S46	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S46	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S46	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S46	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S46	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S46	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S46	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S46	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S46	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S46	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S46	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S46	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S46	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S46	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S46	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S46	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	1	1	0.0204	0.0096	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S47	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S47	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S47	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S47	4	6	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S47	4	7	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S47	4	8	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S47	4	9	1	0.0556	0.0263	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S47	1	10	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	11	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	12	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	13	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	14	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	15	1	0.0200	0.0095	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	2	16	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S47	2	17	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S47	2	18	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S47	2	19	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S47	3	20	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S47	3	21	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S47	3	22	1	0.0383	0.0182	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000002	13625.83	175.24	1.4096
S47	1	23	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S47	1	24	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	1	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S48	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S48	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S48	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S48	4	6	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S48	4	7	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S48	4	8	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S48	4	9	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S48	1	10	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	11	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	12	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	13	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	14	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	15	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	16	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	17	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	18	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	19	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	20	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	21	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S48	2	22	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	23	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S48	1	24	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	1	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S49	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S49	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S49	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S49	4	6	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S49	4	7	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S49	4	8	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S49	4	9	1	0.0519	0.0246	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S49	1	10	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	11	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	12	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	13	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	14	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	15	1	0.0187	0.0088	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	16	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S49	2	17	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	18	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	19	1	0.0266	0.0126	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	20	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	21	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S49	2	22	1	0.0357	0.0169	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	23	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S49	1	24	1	0.0190	0.0090	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	1	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S50	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S50	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S50	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S50	3	6	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S50	3	7	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S50	3	8	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S50	3	9	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S50	1	10	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	11	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	12	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	13	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	14	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	15	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	16	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	17	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	18	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	19	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	20	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	21	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S50	2	22	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	23	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S50	1	24	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	1	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S51	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S51	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S51	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S51	3	6	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S51	3	7	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S51	3	8	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S51	3	9	1	0.0445	0.0211	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S51	1	10	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	11	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	12	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	13	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	14	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	15	1	0.0160	0.0076	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	16	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	17	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	18	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	19	1	0.0228	0.0108	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	20	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	21	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S51	2	22	1	0.0306	0.0145	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	23	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S51	1	24	1	0.0163	0.0077	0.0000	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S52	1	1	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S52	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S52	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S52	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S52	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S52	4	6	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S52	4	7	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S52	4	8	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S52	4	9	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S52	1	10	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	11	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	12	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	13	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	14	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	15	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S52	2	16	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S52	2	17	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S52	2	18	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S52	2	19	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S52	3	20	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S52	3	21	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S52	3	22	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S52	1	23	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S52	1	24	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	1	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S53	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S53	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S53	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S53	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S53	4	6	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S53	4	7	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S53	4	8	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S53	4	9	1	0.0593	0.0281	0.0000	0.0002	0.0002	0.0000	0.0000	0.0008	0.0007	0.0000000	0.000002	13625.83	175.24	1.4096
S53	1	10	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	11	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	12	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	13	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	14	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	15	1	0.0213	0.0101	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S53	2	16	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S53	2	17	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S53	2	18	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S53	2	19	1	0.0304	0.0144	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S53	3	20	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S53	3	21	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S53	3	22	1	0.0409	0.0194	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S53	1	23	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S53	1	24	1	0.0217	0.0103	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	1	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S54	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S54	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S54	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S54	2	6	1	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S54	2	7	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S54	2	8	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S54	2	9	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	10	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	11	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	12	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	13	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	14	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	15	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	16	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	17	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	18	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	19	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	20	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	21	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	22	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S54	1	23	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S54	1	24	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	1	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S55	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S55	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S55	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S55	2	6	1	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S55	2	7	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S55	2	8	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S55	2	9	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	10	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	11	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	12	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	13	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	14	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	15	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	16	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	17	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	18	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	19	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	20	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	21	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	22	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S55	1	23	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S55	1	24	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	1	1	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S56	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S56	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S56	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S56	2	6	1	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S56	2	7	1	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S56	2	8	1	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S56	2	9	1	0.0222	0.0105	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S56	1	10	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	11	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	12	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	13	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	14	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	15	1	0.0080	0.0038	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	16	1	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S56	1	17	1	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	18	1	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	19	1	0.0114	0.0054	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	20	1	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S56	1	21	1	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S56	1	22	1	0.0153	0.0073	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S56	1	23	1	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S56	1	24	1	0.0081	0.0039	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S57	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S57	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S57	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S57	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S57	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S58	1	1	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S58	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S58	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S58	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S58	3	6	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S58	3	7	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S58	3	8	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S58	3	9	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S58	1	10	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	11	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	12	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	13	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	14	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	15	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	16	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	17	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	18	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	19	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	2	20	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S58	2	21	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S58	2	22	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	23	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S58	1	24	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S59	1	1	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S59	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S59	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S59	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S59	2	6	1	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S59	2	7	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S59	2	8	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S59	2	9	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	10	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	11	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	12	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	13	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	14	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	15	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	16	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	17	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	18	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	19	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	20	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	21	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	22	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S59	1	23	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S59	1	24	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S60	1	1	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S60	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S60	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S60	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S60	3	6	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S60	3	7	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S60	3	8	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S60	3	9	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S60	1	10	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	11	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	12	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	13	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	14	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	15	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	16	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	17	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	18	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	19	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	2	20	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S60	2	21	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S60	2	22	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	23	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S60	1	24	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	1	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S61	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S61	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S61	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S61	2	6	1	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S61	2	7	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S61	2	8	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S61	2	9	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	10	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	11	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	12	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	13	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	14	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	15	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	16	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	17	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	18	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	19	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	20	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	21	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	22	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S61	1	23	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S61	1	24	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S62	1	1	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S62	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S62	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S62	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S62	3	6	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S62	3	7	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S62	3	8	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S62	3	9	1	0.0408	0.0193	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S62	1	10	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	11	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	12	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	13	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	14	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	15	1	0.0147	0.0069	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	16	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	17	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	18	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	19	1	0.0209	0.0099	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	2	20	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S62	2	21	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S62	2	22	1	0.0281	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	23	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S62	1	24	1	0.0149	0.0071	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	1	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S63	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S63	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S63	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S63	2	6	1	0.0297	0.0140	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S63	2	7	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S63	2	8	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S63	2	9	1	0.0297	0.0141	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	10	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	11	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	12	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	13	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	14	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	15	1	0.0107	0.0050	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	16	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S63	1	17	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	18	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	19	1	0.0152	0.0072	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	20	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	21	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	22	1	0.0204	0.0097	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S63	1	23	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S63	1	24	1	0.0109	0.0051	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S64	2	1	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S64	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S64	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S64	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S64	5	6	1	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	0.0000	0.0011	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S64	5	7	1	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	0.0000	0.0011	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S64	5	8	1	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	0.0000	0.0011	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S64	5	9	1	0.0778	0.0369	0.0001	0.0003	0.0003	0.0000	0.0000	0.0011	0.0009	0.0000000	0.000003	13625.83	175.24	1.4096
S64	2	10	1	0.0280	0.0133	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	11	1	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	12	1	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	13	1	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	14	1	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	15	1	0.0280	0.0132	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	3	16	1	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S64	3	17	1	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S64	3	18	1	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S64	3	19	1	0.0398	0.0189	0.0000	0.0001	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S64	4	20	1	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S64	4	21	1	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S64	4	22	1	0.0536	0.0254	0.0000	0.0002	0.0002	0.0000	0.0000	0.0007	0.0006	0.0000000	0.000002	13625.83	175.24	1.4096
S64	2	23	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S64	2	24	1	0.0285	0.0135	0.0000	0.0001	0.0001	0.0000	0.0000	0.0004	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	1	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S65	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S65	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S65	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S65	5	6	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S65	5	7	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S65	5	8	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S65	5	9	1	0.0667	0.0316	0.0001	0.0002	0.0002	0.0000	0.0000	0.0009	0.0008	0.0000000	0.000003	13625.83	175.24	1.4096
S65	2	10	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	11	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	12	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	13	1	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	14	1	0.0240	0.0113	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	15	1	0.0240	0.0114	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	16	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	17	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	18	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	19	1	0.0341	0.0162	0.0000	0.0001	0.0001	0.0000	0.0000	0.0005	0.0004	0.0000000	0.000001	13625.83	175.24	1.4096
S65	3	20	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S65	3	21	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S65	3	22	1	0.0460	0.0218	0.0000	0.0002	0.0001	0.0000	0.0000	0.0006	0.0005	0.0000000	0.000002	13625.83	175.24	1.4096
S65	2	23	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096
S65	2	24	1	0.0244	0.0116	0.0000	0.0001	0.0001	0.0000	0.0000	0.0003	0.0003	0.0000000	0.000001	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S66	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S66	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S67	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S67	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S67	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S67	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S67	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S68	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S68	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S69	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S69	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S69	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S69	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S69	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S70	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S70	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S71	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S71	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S71	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S71	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S71	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S72	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S72	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S73	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S73	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S73	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S73	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S73	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	1	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	6	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	7	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	8	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

AECOM

C.2. TTC Scarborough Busway: Signalized Sources

Source Information				2028 Future Build Max Emission Rate (g/s)											2028 Max Emission Rate (g/VMT)		
Modeling ID	Idling Ratio x Approach Volume (VEH-HR)	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
S74	1	9	1	0.0111	0.0053	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	10	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	11	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	12	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	13	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	14	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	15	1	0.0040	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	16	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	17	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	18	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	19	1	0.0057	0.0027	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	20	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	21	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	1	22	1	0.0077	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	23	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S74	0	24	1	0.0041	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	1	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	2	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	3	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	4	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	5	1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	6	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S75	1	7	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S75	1	8	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S75	1	9	1	0.0148	0.0070	0.0000	0.0001	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000000	0.000001	13625.83	175.24	1.4096
S75	0	10	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	11	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	12	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	13	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	14	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	15	1	0.0053	0.0025	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	16	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	17	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	18	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	19	1	0.0076	0.0036	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	20	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	21	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	1	22	1	0.0102	0.0048	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	23	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096
S75	0	24	1	0.0054	0.0026	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000000	0.000000	13625.83	175.24	1.4096

Note: Electrification % was not applied to PM10 nor PM2.5.

C.3. TTC Scarborough Busway: Emission Rate Summary Table

Source Information				2028 Future Build Max Emission Rate (g/s)											Max Emission Rate (G/VMT)		
Modeling ID	Speed Limit	Hour	Road Type	CO	NOx	SO2	PM10	PM2.5	Benzene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Benzo(a)pyrene	Acrolein	CO2	CH4	N2O
P1	0	1	1	0.0284	0.0202	0.0001	0.0012	0.0011	0.0000	7.70E-06	0.0002	0.0001	0.000000	0.000019	6808.4631	0.2107	0.3476
P1	0	2	1	0.0189	0.0120	0.0000	0.0008	0.0007	0.0000	5.12E-06	0.0002	0.0001	0.000000	0.000013	6736.5967	0.2102	0.3476
P1	0	3	1	0.0126	0.0073	0.0000	0.0005	0.0005	0.0000	3.40E-06	0.0001	0.0001	0.000000	0.000008	6656.3694	0.2097	0.3476
P1	0	4	1	0.0095	0.0055	0.0000	0.0004	0.0004	0.0000	2.55E-06	0.0001	0.0000	0.000000	0.000006	6613.0108	0.2094	0.3476
P1	0	5	1	0.0095	0.0055	0.0000	0.0004	0.0004	0.0000	2.55E-06	0.0001	0.0000	0.000000	0.000006	6597.1860	0.2093	0.3476
P1	0	6	1	0.0236	0.0137	0.0000	0.0010	0.0009	0.0000	6.37E-06	0.0002	0.0001	0.000000	0.000016	6597.1860	0.2093	0.3476
P1	0	7	1	0.0536	0.0310	0.0001	0.0022	0.0020	0.0001	1.45E-05	0.0004	0.0002	0.000000	0.000036	6636.3341	0.2095	0.3476
P1	0	8	1	0.0711	0.0492	0.0001	0.0029	0.0027	0.0001	1.92E-05	0.0006	0.0003	0.000000	0.000048	6797.4550	0.2107	0.3476
P1	0	9	1	0.0878	0.0802	0.0002	0.0036	0.0033	0.0001	2.37E-05	0.0007	0.0004	0.000000	0.000059	7024.6113	0.2122	0.3476
P1	0	10	1	0.0997	0.1049	0.0002	0.0040	0.0037	0.0001	2.68E-05	0.0008	0.0004	0.000001	0.000067	7172.8313	0.2132	0.3476
P1	0	11	1	0.0923	0.1075	0.0002	0.0037	0.0034	0.0001	2.48E-05	0.0007	0.0004	0.000001	0.000062	7294.1424	0.2141	0.3476
P1	0	12	1	0.0950	0.1301	0.0002	0.0038	0.0034	0.0001	2.54E-05	0.0007	0.0004	0.000001	0.000063	7515.3202	0.2156	0.3476
P1	0	13	1	0.0986	0.1401	0.0002	0.0039	0.0036	0.0001	2.63E-05	0.0008	0.0004	0.000001	0.000066	7573.7433	0.2160	0.3476
P1	0	14	1	0.0988	0.1437	0.0002	0.0039	0.0036	0.0001	2.63E-05	0.0008	0.0004	0.000001	0.000066	7607.5118	0.2162	0.3476
P1	0	15	1	0.0973	0.1451	0.0002	0.0038	0.0035	0.0001	2.59E-05	0.0008	0.0004	0.000001	0.000065	7643.5606	0.2165	0.3476
P1	0	16	1	0.0972	0.1438	0.0002	0.0038	0.0035	0.0001	2.59E-05	0.0008	0.0004	0.000001	0.000065	7628.6248	0.2164	0.3476
P1	0	17	1	0.0972	0.1434	0.0002	0.0038	0.0035	0.0001	2.59E-05	0.0008	0.0004	0.000001	0.000065	7622.1664	0.2163	0.3476
P1	0	18	1	0.0970	0.1394	0.0002	0.0038	0.0035	0.0001	2.58E-05	0.0008	0.0004	0.000001	0.000065	7576.8042	0.2160	0.3476
P1	0	19	1	0.0934	0.1303	0.0002	0.0037	0.0034	0.0001	2.49E-05	0.0007	0.0004	0.000001	0.000062	7524.9192	0.2157	0.3476
P1	0	20	1	0.0925	0.1134	0.0002	0.0037	0.0034	0.0001	2.48E-05	0.0007	0.0004	0.000001	0.000062	7339.6504	0.2144	0.3476
P1	0	21	1	0.0806	0.0889	0.0002	0.0032	0.0030	0.0001	2.17E-05	0.0006	0.0003	0.000000	0.000054	7212.2336	0.2135	0.3476
P1	0	22	1	0.0689	0.0685	0.0001	0.0028	0.0026	0.0001	1.86E-05	0.0005	0.0003	0.000000	0.000046	7096.1098	0.2127	0.3476
P1	0	23	1	0.0542	0.0484	0.0001	0.0022	0.0020	0.0001	1.46E-05	0.0004	0.0002	0.000000	0.000036	6993.4874	0.2120	0.3476
P1	0	24	1	0.0428	0.0343	0.0001	0.0017	0.0016	0.0000	1.16E-05	0.0003	0.0002	0.000000	0.000029	6902.1525	0.2114	0.3476
P2	0	1	1	0.0376	0.0267	0.0001	0.0015	0.0014	0.0000	1.02E-05	0.0003	0.0002	0.000000	0.000025	6808.4631	0.2107	0.3476
P2	0	2	1	0.0251	0.0159	0.0001	0.0010	0.0009	0.0000	6.78E-06	0.0002	0.0001	0.000000	0.000017	6736.5967	0.2102	0.3476
P2	0	3	1	0.0167	0.0097	0.0000	0.0007	0.0006	0.0000	4.51E-06	0.0001	0.0001	0.000000	0.000011	6656.3694	0.2097	0.3476
P2	0	4	1	0.0125	0.0072	0.0000	0.0005	0.0005	0.0000	3.37E-06	0.0001	0.0001	0.000000	0.000008	6613.0108	0.2094	0.3476
P2	0	5	1	0.0125	0.0072	0.0000	0.0005	0.0005	0.0000	3.37E-06	0.0001	0.0001	0.000000	0.000008	6597.1860	0.2093	0.3476
P2	0	6	1	0.0313	0.0181	0.0001	0.0013	0.0012	0.0000	8.43E-06	0.0002	0.0001	0.000000	0.000021	6597.1860	0.2093	0.3476
P2	0	7	1	0.0710	0.0411	0.0001	0.0029	0.0027	0.0001	1.91E-05	0.0006	0.0003	0.000000	0.000048	6636.3341	0.2095	0.3476
P2	0	8	1	0.0940	0.0651	0.0002	0.0039	0.0035	0.0001	2.55E-05	0.0007	0.0004	0.000001	0.000064	6797.4550	0.2107	0.3476
P2	0	9	1	0.1162	0.1061	0.0002	0.0047	0.0043	0.0001	3.13E-05	0.0009	0.0005	0.000001	0.000078	7024.6113	0.2122	0.3476
P2	0	10	1	0.1320	0.1389	0.0003	0.0053	0.0049	0.0001	3.55E-05	0.0010	0.0005	0.000001	0.000089	7172.8313	0.2132	0.3476
P2	0	11	1	0.1221	0.1422	0.0003	0.0049	0.0045	0.0001	3.28E-05	0.0010	0.0005	0.000001	0.000082	7294.1424	0.2141	0.3476
P2	0	12	1	0.1257	0.1722	0.0003	0.0050	0.0046	0.0001	3.36E-05	0.0010	0.0005	0.000001	0.000084	7515.3202	0.2156	0.3476
P2	0	13	1	0.1305	0.1854	0.0003	0.0051	0.0047	0.0001	3.48E-05	0.0010	0.0005	0.000001	0.000087	7573.7433	0.2160	0.3476
P2	0	14	1	0.1307	0.1902	0.0003	0.0051	0.0047	0.0001	3.48E-05	0.0010	0.0005	0.000001	0.000087	7607.5118	0.2162	0.3476
P2	0	15	1	0.1288	0.1920	0.0003	0.0051	0.0046	0.0001	3.43E-05	0.0010	0.0005	0.000001	0.000086	7643.5606	0.2165	0.3476
P2	0	16	1	0.1287	0.1903	0.0003	0.0051	0.0046	0.0001	3.43E-05	0.0010	0.0005	0.000001	0.000086	7628.6248	0.2164	0.3476
P2	0	17	1	0.1286	0.1898	0.0003	0.0051	0.0046	0.0001	3.43E-05	0.0010	0.0005	0.000001	0.000085	7622.1664	0.2163	0.3476
P2	0	18	1	0.1283	0.1845	0.0003	0.0051	0.0046	0.0001	3.42E-05	0.0010	0.0005	0.000001	0.000085	7576.8042	0.2160	0.3476
P2	0	19	1	0.1236	0.1724	0.0003	0.0049	0.0045	0.0001	3.30E-05	0.0010	0.0005	0.000001	0.000082	7524.9192	0.2157	0.3476
P2	0	20	1	0.1224	0.1500	0.0003	0.0049	0.0045	0.0001	3.28E-05	0.0010	0.0005	0.000001	0.000082	7339.6504	0.2144	0.3476
P2	0	21	1	0.1067	0.1177	0.0002	0.0043	0.0039	0.0001	2.87E-05	0.0008	0.0004	0.000001	0.000072	7212.2336	0.2135	0.3476
P2	0	22	1	0.0912	0.0906	0.0002	0.0037	0.0034	0.0001	2.46E-05	0.0007	0.0004	0.000001	0.000061	7096.1098	0.2127	0.3476
P2	0	23	1	0.0717	0.0641	0.0001	0.0029	0.0027	0.0001	1.94E-05	0.0006	0.0003	0.000000	0.000048	6993.4874	0.2120	0.3476
P2	0	24	1	0.0567	0.0454	0.0001	0.0023	0.0021	0.0001	1.53E-05	0.0005	0.0002	0.000000	0.000038	6902.1525	0.2114	0.3476

*P1: Ellesmere Lot, P2: Lawrence East Lot

AECOM

Appendix D

MOVES.4.0 Output Summary

AECOM

BUS Travel Emission Rate Calculation: GHG (2028)

PollutantID	90	Atmospheric CO2			PollutantID	6	Nitrous Oxide (N2O)		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK	RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	16933.4	27251.67	1	0	1	1.75176	2.819184
1	0	2	16933.4	27251.67	1	0	2	1.75176	2.819184
1	0	3	16933.4	27251.67	1	0	3	1.75176	2.819184
1	0	4	16933.4	27251.67	1	0	4	1.75176	2.819184
1	0	5	16933.4	27251.67	1	0	5	1.75176	2.819184
1	0	6	16933.4	27251.67	1	0	6	1.75176	2.819184
1	0	7	16933.4	27251.67	1	0	7	1.75176	2.819184
1	0	8	16933.4	27251.67	1	0	8	1.75176	2.819184
1	0	9	16933.4	27251.67	1	0	9	1.75176	2.819184
1	0	10	16933.4	27251.67	1	0	10	1.75176	2.819184
1	0	11	16933.4	27251.67	1	0	11	1.75176	2.819184
1	0	12	16933.4	27251.67	1	0	12	1.75176	2.819184
1	0	13	16933.4	27251.67	1	0	13	1.75176	2.819184
1	0	14	16933.4	27251.67	1	0	14	1.75176	2.819184
1	0	15	16933.4	27251.67	1	0	15	1.75176	2.819184
1	0	16	16933.4	27251.67	1	0	16	1.75176	2.819184
1	0	17	16933.4	27251.67	1	0	17	1.75176	2.819184
1	0	18	16933.4	27251.67	1	0	18	1.75176	2.819184
1	0	19	16933.4	27251.67	1	0	19	1.75176	2.819184
1	0	20	16933.4	27251.67	1	0	20	1.75176	2.819184
1	0	21	16933.4	27251.67	1	0	21	1.75176	2.819184
1	0	22	16933.4	27251.67	1	0	22	1.75176	2.819184
1	0	23	16933.4	27251.67	1	0	23	1.75176	2.819184
1	0	24	16933.4	27251.67	1	0	24	1.75176	2.819184
5	8	1	2674.83	4304.722	5	8	1	0.15724	0.253053
5	8	2	2674.83	4304.722	5	8	2	0.15724	0.253053
5	8	3	2674.83	4304.722	5	8	3	0.15724	0.253053
5	8	4	2674.83	4304.722	5	8	4	0.15724	0.253053
5	8	5	2674.83	4304.722	5	8	5	0.15724	0.253053
5	8	6	2674.83	4304.722	5	8	6	0.15724	0.253053
5	8	7	2674.83	4304.722	5	8	7	0.15724	0.253053
5	8	8	2674.83	4304.722	5	8	8	0.15724	0.253053
5	8	9	2674.83	4304.722	5	8	9	0.15724	0.253053
5	8	10	2674.83	4304.722	5	8	10	0.15724	0.253053
5	8	11	2674.83	4304.722	5	8	11	0.15724	0.253053
5	8	12	2674.83	4304.722	5	8	12	0.15724	0.253053
5	8	13	2674.83	4304.722	5	8	13	0.15724	0.253053
5	8	14	2674.83	4304.722	5	8	14	0.15724	0.253053
5	8	15	2674.83	4304.722	5	8	15	0.15724	0.253053
5	8	16	2674.83	4304.722	5	8	16	0.15724	0.253053
5	8	17	2674.83	4304.722	5	8	17	0.15724	0.253053
5	8	18	2674.83	4304.722	5	8	18	0.15724	0.253053
5	8	19	2674.83	4304.722	5	8	19	0.15724	0.253053
5	8	20	2674.83	4304.722	5	8	20	0.15724	0.253053
5	8	21	2674.83	4304.722	5	8	21	0.15724	0.253053
5	8	22	2674.83	4304.722	5	8	22	0.15724	0.253053
5	8	23	2674.83	4304.722	5	8	23	0.15724	0.253053
5	8	24	2674.83	4304.722	5	8	24	0.15724	0.253053

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BUS Travel Emission Rate Calculation: GHG (2028)

PollutantID	5	Methane (CH4)		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	217.775	350.4749
1	0	2	217.775	350.4749
1	0	3	217.775	350.4749
1	0	4	217.775	350.4749
1	0	5	217.775	350.4749
1	0	6	217.775	350.4749
1	0	7	217.775	350.4749
1	0	8	217.775	350.4749
1	0	9	217.775	350.4749
1	0	10	217.775	350.4749
1	0	11	217.775	350.4749
1	0	12	217.775	350.4749
1	0	13	217.775	350.4749
1	0	14	217.775	350.4749
1	0	15	217.775	350.4749
1	0	16	217.775	350.4749
1	0	17	217.775	350.4749
1	0	18	217.775	350.4749
1	0	19	217.775	350.4749
1	0	20	217.775	350.4749
1	0	21	217.775	350.4749
1	0	22	217.775	350.4749
1	0	23	217.775	350.4749
1	0	24	217.775	350.4749
5	8	1	12.446	20.0299
5	8	2	12.446	20.0299
5	8	3	12.446	20.0299
5	8	4	12.446	20.0299
5	8	5	12.446	20.0299
5	8	6	12.446	20.0299
5	8	7	12.446	20.0299
5	8	8	12.446	20.0299
5	8	9	12.446	20.0299
5	8	10	12.446	20.0299
5	8	11	12.446	20.0299
5	8	12	12.446	20.0299
5	8	13	12.4459	20.02973
5	8	14	12.446	20.0299
5	8	15	12.446	20.0299
5	8	16	12.446	20.0299
5	8	17	12.446	20.0299
5	8	18	12.446	20.0299
5	8	19	12.446	20.0299
5	8	20	12.446	20.0299
5	8	21	12.446	20.0299
5	8	22	12.446	20.0299
5	8	23	12.446	20.0299
5	8	24	12.446	20.0299

BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	2	Carbon monoxide (CO)		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	106.186	170.8898
1	0	2	106.186	170.8898
1	0	3	106.186	170.8898
1	0	4	106.186	170.8898
1	0	5	106.186	170.8898
1	0	6	106.186	170.8898
1	0	7	106.186	170.8898
1	0	8	106.186	170.8898
1	0	9	106.186	170.8898
1	0	10	106.186	170.8898
1	0	11	106.186	170.8898
1	0	12	106.186	170.8898
1	0	13	106.186	170.8898
1	0	14	106.186	170.8898
1	0	15	106.186	170.8898
1	0	16	106.186	170.8898
1	0	17	106.186	170.8898
1	0	18	106.186	170.8898
1	0	19	106.186	170.8898
1	0	20	106.186	170.8898
1	0	21	106.186	170.8898
1	0	22	106.186	170.8898
1	0	23	106.186	170.8898
1	0	24	106.186	170.8898
5	8	1	31.0182	49.918954
5	8	2	31.0182	49.918954
5	8	3	31.0183	49.919115
5	8	4	31.0182	49.918954
5	8	5	31.0182	49.918954
5	8	6	31.0182	49.918954
5	8	7	31.0183	49.919115
5	8	8	31.0182	49.918954
5	8	9	31.0182	49.918954
5	8	10	31.0182	49.918954
5	8	11	31.0182	49.918954
5	8	12	31.0182	49.918954
5	8	13	31.0182	49.918954
5	8	14	31.0182	49.918954
5	8	15	31.0182	49.918954
5	8	16	31.0182	49.918954
5	8	17	31.0182	49.918954
5	8	18	31.0182	49.918954
5	8	19	31.0182	49.918954
5	8	20	31.0182	49.918954
5	8	21	31.0183	49.919115
5	8	22	31.0183	49.919115
5	8	23	31.0183	49.919115
5	8	24	31.0182	49.918954

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BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	3	Oxides of Nitrogen (NOx)			PollutantID	20	Benzene		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK	RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	50.282	80.92104	1	0	1	0.053308	0.085791
1	0	2	50.2708	80.90301	1	0	2	0.053308	0.085791
1	0	3	50.2864	80.92812	1	0	3	0.053308	0.085791
1	0	4	50.2988	80.94807	1	0	4	0.053308	0.085791
1	0	5	50.303	80.95483	1	0	5	0.053308	0.085791
1	0	6	50.3127	80.97044	1	0	6	0.053308	0.085791
1	0	7	50.3175	80.97817	1	0	7	0.053308	0.085791
1	0	8	50.3177	80.97849	1	0	8	0.053308	0.085791
1	0	9	50.3263	80.99233	1	0	9	0.053308	0.085791
1	0	10	50.3077	80.9624	1	0	10	0.053308	0.085791
1	0	11	50.2815	80.92023	1	0	11	0.053308	0.085791
1	0	12	50.2692	80.90044	1	0	12	0.053308	0.085791
1	0	13	50.2528	80.87404	1	0	13	0.053308	0.085791
1	0	14	50.2588	80.8837	1	0	14	0.053308	0.085791
1	0	15	50.2614	80.88788	1	0	15	0.053308	0.085791
1	0	16	50.2698	80.9014	1	0	16	0.053308	0.085791
1	0	17	50.2805	80.91862	1	0	17	0.053308	0.085791
1	0	18	50.308	80.96288	1	0	18	0.053308	0.085791
1	0	19	50.3231	80.98718	1	0	19	0.053308	0.085791
1	0	20	50.3231	80.98718	1	0	20	0.053308	0.085791
1	0	21	50.3271	80.99362	1	0	21	0.053308	0.085791
1	0	22	50.3327	81.00263	1	0	22	0.053308	0.085791
1	0	23	50.3552	81.03884	1	0	23	0.053308	0.085791
1	0	24	50.3488	81.02854	1	0	24	0.053308	0.085791
5	8	1	2.69271	4.333497	5	8	1	0.00647	0.010413
5	8	2	2.69199	4.332338	5	8	2	0.006471	0.010414
5	8	3	2.69289	4.333786	5	8	3	0.006471	0.010414
5	8	4	2.69361	4.334945	5	8	4	0.006471	0.010414
5	8	5	2.69384	4.335315	5	8	5	0.00647	0.010412
5	8	6	2.6944	4.336216	5	8	6	0.00647	0.010412
5	8	7	2.69469	4.336683	5	8	7	0.006471	0.010413
5	8	8	2.69471	4.336715	5	8	8	0.006473	0.010417
5	8	9	2.69526	4.337601	5	8	9	0.006472	0.010416
5	8	10	2.69419	4.335879	5	8	10	0.006475	0.01042
5	8	11	2.69271	4.333497	5	8	11	0.00648	0.010429
5	8	12	2.69213	4.332563	5	8	12	0.006483	0.010433
5	8	13	2.69128	4.331195	5	8	13	0.006484	0.010435
5	8	14	2.69184	4.332097	5	8	14	0.006488	0.010441
5	8	15	2.69212	4.332547	5	8	15	0.006487	0.01044
5	8	16	2.69265	4.3334	5	8	16	0.006483	0.010434
5	8	17	2.69328	4.334414	5	8	17	0.006488	0.010441
5	8	18	2.69485	4.336941	5	8	18	0.006493	0.010449
5	8	19	2.69564	4.338212	5	8	19	0.006495	0.010453
5	8	20	2.69555	4.338067	5	8	20	0.006493	0.010449
5	8	21	2.69573	4.338357	5	8	21	0.006492	0.010448
5	8	22	2.69599	4.338775	5	8	22	0.006494	0.01045
5	8	23	2.69726	4.340819	5	8	23	0.006493	0.010449
5	8	24	2.69681	4.340095	5	8	24	0.006471	0.010414

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BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	24	1,3-Butadiene		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	0.000851	0.00137
1	0	2	0.000851	0.00137
1	0	3	0.000851	0.00137
1	0	4	0.000851	0.00137
1	0	5	0.000851	0.00137
1	0	6	0.000851	0.00137
1	0	7	0.000851	0.00137
1	0	8	0.000851	0.00137
1	0	9	0.000851	0.00137
1	0	10	0.000851	0.00137
1	0	11	0.000851	0.00137
1	0	12	0.000851	0.00137
1	0	13	0.000851	0.00137
1	0	14	0.000851	0.00137
1	0	15	0.000851	0.00137
1	0	16	0.000851	0.00137
1	0	17	0.000851	0.00137
1	0	18	0.000851	0.00137
1	0	19	0.000851	0.00137
1	0	20	0.000851	0.00137
1	0	21	0.000851	0.00137
1	0	22	0.000851	0.00137
1	0	23	0.000851	0.00137
1	0	24	0.000851	0.00137
5	8	1	5.29E-05	8.52E-05
5	8	2	5.29E-05	8.52E-05
5	8	3	5.29E-05	8.52E-05
5	8	4	5.29E-05	8.52E-05
5	8	5	5.29E-05	8.52E-05
5	8	6	5.29E-05	8.52E-05
5	8	7	5.29E-05	8.52E-05
5	8	8	5.29E-05	8.52E-05
5	8	9	5.29E-05	8.52E-05
5	8	10	5.29E-05	8.52E-05
5	8	11	5.29E-05	8.52E-05
5	8	12	5.29E-05	8.52E-05
5	8	13	5.29E-05	8.52E-05
5	8	14	5.29E-05	8.52E-05
5	8	15	5.29E-05	8.52E-05
5	8	16	5.29E-05	8.52E-05
5	8	17	5.29E-05	8.52E-05
5	8	18	5.29E-05	8.52E-05
5	8	19	5.29E-05	8.52E-05
5	8	20	5.29E-05	8.52E-05
5	8	21	5.29E-05	8.52E-05
5	8	22	5.29E-05	8.52E-05
5	8	23	5.29E-05	8.52E-05
5	8	24	5.29E-05	8.52E-05

PollutantID	25	Formaldehyde		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	1.47239	2.369582
1	0	2	1.47239	2.369582
1	0	3	1.47239	2.369582
1	0	4	1.47239	2.369582
1	0	5	1.47239	2.369582
1	0	6	1.47239	2.369582
1	0	7	1.47239	2.369582
1	0	8	1.47239	2.369582
1	0	9	1.47239	2.369582
1	0	10	1.47239	2.369582
1	0	11	1.47239	2.369582
1	0	12	1.47239	2.369582
1	0	13	1.47239	2.369582
1	0	14	1.47239	2.369582
1	0	15	1.47239	2.369582
1	0	16	1.47239	2.369582
1	0	17	1.47239	2.369582
1	0	18	1.47239	2.369582
1	0	19	1.47239	2.369582
1	0	20	1.47239	2.369582
1	0	21	1.47239	2.369582
1	0	22	1.47239	2.369582
1	0	23	1.47239	2.369582
1	0	24	1.47239	2.369582
5	8	1	0.08695	0.139937
5	8	2	0.08695	0.139938
5	8	3	0.08695	0.139938
5	8	4	0.08695	0.139938
5	8	5	0.08695	0.139938
5	8	6	0.08695	0.139937
5	8	7	0.08695	0.139937
5	8	8	0.08695	0.139938
5	8	9	0.08695	0.139938
5	8	10	0.08695	0.139938
5	8	11	0.08695	0.139937
5	8	12	0.08695	0.139937
5	8	13	0.08695	0.139937
5	8	14	0.08695	0.139937
5	8	15	0.08695	0.139938
5	8	16	0.08695	0.139937
5	8	17	0.08695	0.139938
5	8	18	0.08695	0.139938
5	8	19	0.08695	0.139938
5	8	20	0.08695	0.139937
5	8	21	0.08695	0.139938
5	8	22	0.08695	0.139938
5	8	23	0.08695	0.139938
5	8	24	0.08695	0.139937

BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	26	Acetaldehyde			PollutantID	27	Acrolein		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK	RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	1.22556	1.972348	1	0	1	0.004433	0.007134
1	0	2	1.22556	1.972348	1	0	2	0.004433	0.007134
1	0	3	1.22556	1.972348	1	0	3	0.004433	0.007134
1	0	4	1.22556	1.972348	1	0	4	0.004433	0.007134
1	0	5	1.22556	1.972348	1	0	5	0.004433	0.007134
1	0	6	1.22556	1.972348	1	0	6	0.004433	0.007134
1	0	7	1.22556	1.972348	1	0	7	0.004433	0.007134
1	0	8	1.22556	1.972348	1	0	8	0.004433	0.007134
1	0	9	1.22556	1.972348	1	0	9	0.004433	0.007134
1	0	10	1.22556	1.972348	1	0	10	0.004433	0.007134
1	0	11	1.22556	1.972348	1	0	11	0.004433	0.007134
1	0	12	1.22556	1.972348	1	0	12	0.004433	0.007134
1	0	13	1.22556	1.972348	1	0	13	0.004433	0.007134
1	0	14	1.22556	1.972348	1	0	14	0.004433	0.007134
1	0	15	1.22556	1.972348	1	0	15	0.004433	0.007134
1	0	16	1.22556	1.972348	1	0	16	0.004433	0.007134
1	0	17	1.22556	1.972348	1	0	17	0.004433	0.007134
1	0	18	1.22556	1.972348	1	0	18	0.004433	0.007134
1	0	19	1.22556	1.972348	1	0	19	0.004433	0.007134
1	0	20	1.22556	1.972348	1	0	20	0.004433	0.007134
1	0	21	1.22556	1.972348	1	0	21	0.004433	0.007134
1	0	22	1.22556	1.972348	1	0	22	0.004433	0.007134
1	0	23	1.22556	1.972348	1	0	23	0.004433	0.007134
1	0	24	1.22556	1.972348	1	0	24	0.004433	0.007134
5	8	1	0.070436	0.113356	5	8	1	0.000316	0.000508
5	8	2	0.070436	0.113356	5	8	2	0.000316	0.000508
5	8	3	0.070436	0.113356	5	8	3	0.000316	0.000508
5	8	4	0.070436	0.113356	5	8	4	0.000316	0.000508
5	8	5	0.070436	0.113356	5	8	5	0.000316	0.000508
5	8	6	0.070436	0.113356	5	8	6	0.000316	0.000508
5	8	7	0.070436	0.113356	5	8	7	0.000316	0.000508
5	8	8	0.070436	0.113356	5	8	8	0.000316	0.000508
5	8	9	0.070436	0.113356	5	8	9	0.000316	0.000508
5	8	10	0.070436	0.113356	5	8	10	0.000316	0.000508
5	8	11	0.070436	0.113356	5	8	11	0.000316	0.000508
5	8	12	0.070436	0.113356	5	8	12	0.000316	0.000508
5	8	13	0.070436	0.113356	5	8	13	0.000316	0.000508
5	8	14	0.070436	0.113356	5	8	14	0.000316	0.000508
5	8	15	0.070436	0.113356	5	8	15	0.000316	0.000508
5	8	16	0.070436	0.113356	5	8	16	0.000316	0.000508
5	8	17	0.070436	0.113356	5	8	17	0.000316	0.000508
5	8	18	0.070436	0.113356	5	8	18	0.000316	0.000508
5	8	19	0.070436	0.113356	5	8	19	0.000316	0.000508
5	8	20	0.070436	0.113356	5	8	20	0.000316	0.000508
5	8	21	0.070436	0.113356	5	8	21	0.000316	0.000508
5	8	22	0.070436	0.113356	5	8	22	0.000316	0.000508
5	8	23	0.070436	0.113356	5	8	23	0.000316	0.000508
5	8	24	0.070436	0.113356	5	8	24	0.000316	0.000508

BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	31	Sulfur Dioxide (SO2)			PollutantID	974	Benzo(a)pyrene		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK	RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	0.0810348	0.130413	1	0	1	3.2E-05	5.21E-05
1	0	2	0.0810348	0.130413	1	0	2	3.2E-05	5.21E-05
1	0	3	0.0810348	0.130413	1	0	3	3.2E-05	5.21E-05
1	0	4	0.0810348	0.130413	1	0	4	3.2E-05	5.21E-05
1	0	5	0.0810348	0.130413	1	0	5	3.2E-05	5.21E-05
1	0	6	0.0810348	0.130413	1	0	6	3.2E-05	5.21E-05
1	0	7	0.0810348	0.130413	1	0	7	3.2E-05	5.21E-05
1	0	8	0.0810348	0.130413	1	0	8	3.2E-05	5.21E-05
1	0	9	0.0810348	0.130413	1	0	9	3.2E-05	5.21E-05
1	0	10	0.0810348	0.130413	1	0	10	3.2E-05	5.21E-05
1	0	11	0.0810348	0.130413	1	0	11	3.2E-05	5.21E-05
1	0	12	0.0810348	0.130413	1	0	12	3.2E-05	5.21E-05
1	0	13	0.0810348	0.130413	1	0	13	3.2E-05	5.21E-05
1	0	14	0.0810348	0.130413	1	0	14	3.2E-05	5.21E-05
1	0	15	0.0810348	0.130413	1	0	15	3.2E-05	5.21E-05
1	0	16	0.0810348	0.130413	1	0	16	3.2E-05	5.21E-05
1	0	17	0.0810348	0.130413	1	0	17	3.2E-05	5.21E-05
1	0	18	0.0810348	0.130413	1	0	18	3.2E-05	5.21E-05
1	0	19	0.0810348	0.130413	1	0	19	3.2E-05	5.21E-05
1	0	20	0.0810348	0.130413	1	0	20	3.2E-05	5.21E-05
1	0	21	0.0810348	0.130413	1	0	21	3.2E-05	5.21E-05
1	0	22	0.0810348	0.130413	1	0	22	3.2E-05	5.21E-05
1	0	23	0.0810348	0.130413	1	0	23	3.2E-05	5.21E-05
1	0	24	0.0810348	0.130413	1	0	24	3.2E-05	5.21E-05
5	8	1	0.0124085	0.01997	5	8	1	6.5E-06	1.05E-05
5	8	2	0.0124085	0.01997	5	8	2	6.5E-06	1.05E-05
5	8	3	0.0124085	0.01997	5	8	3	6.5E-06	1.05E-05
5	8	4	0.0124085	0.01997	5	8	4	6.5E-06	1.05E-05
5	8	5	0.0124085	0.01997	5	8	5	6.5E-06	1.05E-05
5	8	6	0.0124085	0.01997	5	8	6	6.5E-06	1.05E-05
5	8	7	0.0124085	0.01997	5	8	7	6.5E-06	1.05E-05
5	8	8	0.0124085	0.01997	5	8	8	6.5E-06	1.05E-05
5	8	9	0.0124085	0.01997	5	8	9	6.5E-06	1.05E-05
5	8	10	0.0124085	0.01997	5	8	10	6.5E-06	1.05E-05
5	8	11	0.0124085	0.01997	5	8	11	6.5E-06	1.05E-05
5	8	12	0.0124085	0.01997	5	8	12	6.5E-06	1.05E-05
5	8	13	0.0124085	0.01997	5	8	13	6.5E-06	1.05E-05
5	8	14	0.0124085	0.01997	5	8	14	6.5E-06	1.05E-05
5	8	15	0.0124085	0.01997	5	8	15	6.5E-06	1.05E-05
5	8	16	0.0124085	0.01997	5	8	16	6.5E-06	1.05E-05
5	8	17	0.0124085	0.01997	5	8	17	6.5E-06	1.05E-05
5	8	18	0.0124085	0.01997	5	8	18	6.5E-06	1.05E-05
5	8	19	0.0124085	0.01997	5	8	19	6.5E-06	1.05E-05
5	8	20	0.0124085	0.01997	5	8	20	6.5E-06	1.05E-05
5	8	21	0.0124085	0.01997	5	8	21	6.5E-06	1.05E-05
5	8	22	0.0124085	0.01997	5	8	22	6.5E-06	1.05E-05
5	8	23	0.0124085	0.01997	5	8	23	6.5E-06	1.05E-05
5	8	24	0.0124085	0.01997	5	8	24	6.5E-06	1.05E-05

BUS Travel Emission Rate Calculation: CAC (2028)

PollutantID	9100	PM10			PollutantID	9110	PM2.5		
RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK	RoadTypeID	AverageSpeedID	HourID	G/VKT TRK	G/VMT TRK
1	0	1	0.188256	0.302969	1	0	1	0.170818	0.274905
1	0	2	0.188256	0.302969	1	0	2	0.170818	0.274905
1	0	3	0.188256	0.302969	1	0	3	0.170818	0.274905
1	0	4	0.188256	0.302969	1	0	4	0.170818	0.274905
1	0	5	0.188256	0.302969	1	0	5	0.170818	0.274905
1	0	6	0.188256	0.302969	1	0	6	0.170819	0.274907
1	0	7	0.188256	0.302969	1	0	7	0.170818	0.274905
1	0	8	0.188256	0.302969	1	0	8	0.170818	0.274905
1	0	9	0.188256	0.302969	1	0	9	0.170818	0.274905
1	0	10	0.188256	0.302969	1	0	10	0.170818	0.274905
1	0	11	0.188256	0.302969	1	0	11	0.170818	0.274905
1	0	12	0.188256	0.302969	1	0	12	0.170818	0.274905
1	0	13	0.188256	0.302969	1	0	13	0.170818	0.274905
1	0	14	0.188256	0.302969	1	0	14	0.170818	0.274905
1	0	15	0.188256	0.302969	1	0	15	0.170818	0.274905
1	0	16	0.188256	0.302969	1	0	16	0.170818	0.274905
1	0	17	0.188256	0.302969	1	0	17	0.170818	0.274905
1	0	18	0.188256	0.302969	1	0	18	0.170818	0.274905
1	0	19	0.188256	0.302969	1	0	19	0.170818	0.274905
1	0	20	0.188256	0.302969	1	0	20	0.170818	0.274905
1	0	21	0.188256	0.302969	1	0	21	0.170818	0.274905
1	0	22	0.188256	0.302969	1	0	22	0.170818	0.274905
1	0	23	0.188256	0.302969	1	0	23	0.170818	0.274905
1	0	24	0.188256	0.302969	1	0	24	0.170818	0.274905
5	8	1	0.296607	0.477343	5	8	1	0.060806	0.097857
5	8	2	0.296607	0.477343	5	8	2	0.060806	0.097857
5	8	3	0.296607	0.477343	5	8	3	0.060806	0.097857
5	8	4	0.296607	0.477343	5	8	4	0.060806	0.097857
5	8	5	0.296607	0.477343	5	8	5	0.060806	0.097857
5	8	6	0.296607	0.477343	5	8	6	0.060806	0.097857
5	8	7	0.296607	0.477343	5	8	7	0.060806	0.097857
5	8	8	0.296607	0.477343	5	8	8	0.060806	0.097857
5	8	9	0.296607	0.477343	5	8	9	0.060806	0.097857
5	8	10	0.296607	0.477343	5	8	10	0.060806	0.097857
5	8	11	0.296607	0.477343	5	8	11	0.060806	0.097857
5	8	12	0.296607	0.477343	5	8	12	0.060806	0.097857
5	8	13	0.296607	0.477343	5	8	13	0.060806	0.097857
5	8	14	0.296607	0.477343	5	8	14	0.060806	0.097857
5	8	15	0.296607	0.477343	5	8	15	0.060806	0.097857
5	8	16	0.296607	0.477343	5	8	16	0.060806	0.097857
5	8	17	0.296607	0.477343	5	8	17	0.060806	0.097857
5	8	18	0.296607	0.477343	5	8	18	0.060806	0.097857
5	8	19	0.296607	0.477343	5	8	19	0.060806	0.097857
5	8	20	0.296607	0.477343	5	8	20	0.060806	0.097857
5	8	21	0.296607	0.477343	5	8	21	0.060806	0.097857
5	8	22	0.296607	0.477343	5	8	22	0.060806	0.097857
5	8	23	0.296607	0.477343	5	8	23	0.060806	0.097857
5	8	24	0.296607	0.477343	5	8	24	0.060806	0.097857

CAR Travel Emission Rate Calculation: GHG (2028)

PollutantID	90	Atmospheric CO2			PollutantID	6	Nitrous Oxide (N2O)		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	4.23E+03	6.81E+03	1	0	1	2.16E-01	0.34762
1	0	2	4.19E+03	6.74E+03	1	0	2	2.16E-01	0.34762
1	0	3	4.14E+03	6.66E+03	1	0	3	2.16E-01	0.34762
1	0	4	4.11E+03	6.61E+03	1	0	4	2.16E-01	0.34762
1	0	5	4.10E+03	6.60E+03	1	0	5	2.16E-01	0.34762
1	0	6	4.10E+03	6.60E+03	1	0	6	2.16E-01	0.34762
1	0	7	4.12E+03	6.64E+03	1	0	7	2.16E-01	0.34762
1	0	8	4.22E+03	6.80E+03	1	0	8	2.16E-01	0.34762
1	0	9	4.36E+03	7.02E+03	1	0	9	2.16E-01	0.34762
1	0	10	4.46E+03	7.17E+03	1	0	10	2.16E-01	0.34762
1	0	11	4.53E+03	7.29E+03	1	0	11	2.16E-01	0.34762
1	0	12	4.67E+03	7.52E+03	1	0	12	2.16E-01	0.34762
1	0	13	4.71E+03	7.57E+03	1	0	13	2.16E-01	0.34762
1	0	14	4.73E+03	7.61E+03	1	0	14	2.16E-01	0.34762
1	0	15	4.75E+03	7.64E+03	1	0	15	2.16E-01	0.34762
1	0	16	4.74E+03	7.63E+03	1	0	16	2.16E-01	0.34762
1	0	17	4.74E+03	7.62E+03	1	0	17	2.16E-01	0.34762
1	0	18	4.71E+03	7.58E+03	1	0	18	2.16E-01	0.34762
1	0	19	4.68E+03	7.52E+03	1	0	19	2.16E-01	0.34762
1	0	20	4.56E+03	7.34E+03	1	0	20	2.16E-01	0.34762
1	0	21	4.48E+03	7.21E+03	1	0	21	2.16E-01	0.34762
1	0	22	4.41E+03	7.10E+03	1	0	22	2.16E-01	0.34762
1	0	23	4.35E+03	6.99E+03	1	0	23	2.16E-01	0.34762
1	0	24	4.29E+03	6.90E+03	1	0	24	2.16E-01	0.34762

AECOM

CAR Travel Emission Rate Calculation: GHG (2028)

PollutantID	5	Methane (CH4)		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	1.31E-01	0.21074
1	0	2	1.31E-01	0.21024
1	0	3	1.30E-01	0.20969
1	0	4	1.30E-01	0.20939
1	0	5	1.30E-01	0.20928
1	0	6	1.30E-01	0.20928
1	0	7	1.30E-01	0.20955
1	0	8	1.31E-01	0.21066
1	0	9	1.32E-01	0.21223
1	0	10	1.33E-01	0.21325
1	0	11	1.33E-01	0.21408
1	0	12	1.34E-01	0.21561
1	0	13	1.34E-01	0.21601
1	0	14	1.34E-01	0.21624
1	0	15	1.35E-01	0.21649
1	0	16	1.34E-01	0.21639
1	0	17	1.34E-01	0.21635
1	0	18	1.34E-01	0.21603
1	0	19	1.34E-01	0.21568
1	0	20	1.33E-01	0.2144
1	0	21	1.33E-01	0.21352
1	0	22	1.32E-01	0.21272
1	0	23	1.32E-01	0.21201
1	0	24	1.31E-01	0.21138

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	2	Carbon monoxide (CO)		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	8.36E+00	13.45516
1	0	2	8.35E+00	13.44499
1	0	3	8.35E+00	13.43764
1	0	4	8.35E+00	13.4339
1	0	5	8.35E+00	13.43254
1	0	6	8.35E+00	13.43254
1	0	7	8.35E+00	13.43592
1	0	8	8.36E+00	13.4536
1	0	9	8.45E+00	13.59896
1	0	10	8.52E+00	13.70677
1	0	11	8.57E+00	13.79516
1	0	12	8.67E+00	13.95606
1	0	13	8.70E+00	13.99861
1	0	14	8.71E+00	14.02324
1	0	15	8.73E+00	14.04949
1	0	16	8.72E+00	14.03858
1	0	17	8.72E+00	14.03391
1	0	18	8.70E+00	14.00082
1	0	19	8.68E+00	13.96305
1	0	20	8.59E+00	13.82817
1	0	21	8.53E+00	13.73546
1	0	22	8.48E+00	13.65096
1	0	23	8.44E+00	13.57618
1	0	24	8.39E+00	13.50971

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	3	Oxides of Nitrogen (NOx)			PollutantID	20	Benzene		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	5.93E+00	9.54644	1	0	1	9.15E-03	0.01472
1	0	2	5.31E+00	8.54896	1	0	2	9.13E-03	0.01469
1	0	3	4.83E+00	7.77323	1	0	3	9.10E-03	0.01465
1	0	4	4.83E+00	7.77591	1	0	4	9.09E-03	0.01463
1	0	5	4.83E+00	7.77671	1	0	5	9.09E-03	0.01462
1	0	6	4.83E+00	7.77878	1	0	6	9.09E-03	0.01462
1	0	7	4.83E+00	7.77992	1	0	7	9.10E-03	0.01464
1	0	8	5.79E+00	9.31676	1	0	8	9.15E-03	0.01472
1	0	9	7.72E+00	12.4177	1	0	9	9.21E-03	0.01483
1	0	10	8.96E+00	14.4192	1	0	10	9.26E-03	0.0149
1	0	11	9.98E+00	16.0635	1	0	11	9.29E-03	0.01495
1	0	12	1.19E+01	19.1177	1	0	12	9.36E-03	0.01506
1	0	13	1.24E+01	19.8896	1	0	13	9.37E-03	0.01509
1	0	14	1.27E+01	20.4067	1	0	14	9.38E-03	0.0151
1	0	15	1.30E+01	20.952	1	0	15	9.39E-03	0.01512
1	0	16	1.29E+01	20.7591	1	0	16	9.39E-03	0.01511
1	0	17	1.29E+01	20.7048	1	0	17	9.39E-03	0.01511
1	0	18	1.25E+01	20.1283	1	0	18	9.37E-03	0.01509
1	0	19	1.21E+01	19.4704	1	0	19	9.36E-03	0.01506
1	0	20	1.05E+01	16.944	1	0	20	9.31E-03	0.01498
1	0	21	9.42E+00	15.1545	1	0	21	9.27E-03	0.01492
1	0	22	8.43E+00	13.5644	1	0	22	9.23E-03	0.01486
1	0	23	7.54E+00	12.1383	1	0	23	9.20E-03	0.01481
1	0	24	6.73E+00	10.8349	1	0	24	9.18E-03	0.01477

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	24	1,3-Butadiene			PollutantID	25	Formaldehyde		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	2.26E-03	0.00364	1	0	1	6.66E-02	0.10716
1	0	2	2.26E-03	0.00364	1	0	2	6.64E-02	0.10692
1	0	3	2.25E-03	0.00363	1	0	3	6.63E-02	0.10664
1	0	4	2.25E-03	0.00362	1	0	4	6.62E-02	0.1065
1	0	5	2.25E-03	0.00362	1	0	5	6.61E-02	0.10644
1	0	6	2.25E-03	0.00362	1	0	6	6.61E-02	0.10644
1	0	7	2.25E-03	0.00362	1	0	7	6.62E-02	0.10658
1	0	8	2.26E-03	0.00364	1	0	8	6.66E-02	0.10713
1	0	9	2.28E-03	0.00367	1	0	9	6.70E-02	0.1079
1	0	10	2.29E-03	0.00369	1	0	10	6.74E-02	0.10841
1	0	11	2.30E-03	0.0037	1	0	11	6.76E-02	0.10882
1	0	12	2.31E-03	0.00373	1	0	12	6.81E-02	0.10957
1	0	13	2.32E-03	0.00373	1	0	13	6.82E-02	0.10977
1	0	14	2.32E-03	0.00374	1	0	14	6.83E-02	0.10989
1	0	15	2.32E-03	0.00374	1	0	15	6.84E-02	0.11001
1	0	16	2.32E-03	0.00374	1	0	16	6.83E-02	0.10996
1	0	17	2.32E-03	0.00374	1	0	17	6.83E-02	0.10994
1	0	18	2.32E-03	0.00373	1	0	18	6.82E-02	0.10978
1	0	19	2.32E-03	0.00373	1	0	19	6.81E-02	0.10961
1	0	20	2.30E-03	0.0037	1	0	20	6.77E-02	0.10897
1	0	21	2.29E-03	0.00369	1	0	21	6.74E-02	0.10854
1	0	22	2.28E-03	0.00368	1	0	22	6.72E-02	0.10814
1	0	23	2.28E-03	0.00366	1	0	23	6.70E-02	0.10779
1	0	24	2.27E-03	0.00365	1	0	24	6.68E-02	0.10748

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	26	Acetaldehyde			PollutantID	27	Acrolein		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	3.39E-02	0.0546	1	0	1	5.65E-03	0.0090929
1	0	2	3.38E-02	0.05447	1	0	2	5.64E-03	0.0090721
1	0	3	3.38E-02	0.05433	1	0	3	5.62E-03	0.0090488
1	0	4	3.37E-02	0.05426	1	0	4	5.61E-03	0.0090363
1	0	5	3.37E-02	0.05424	1	0	5	5.61E-03	0.0090317
1	0	6	3.37E-02	0.05424	1	0	6	5.61E-03	0.0090317
1	0	7	3.37E-02	0.0543	1	0	7	5.62E-03	0.0090431
1	0	8	3.39E-02	0.05458	1	0	8	5.65E-03	0.0090897
1	0	9	3.42E-02	0.05497	1	0	9	5.69E-03	0.0091555
1	0	10	3.43E-02	0.05523	1	0	10	5.72E-03	0.0091984
1	0	11	3.45E-02	0.05544	1	0	11	5.74E-03	0.0092336
1	0	12	3.47E-02	0.05583	1	0	12	5.78E-03	0.0092977
1	0	13	3.48E-02	0.05593	1	0	13	5.79E-03	0.0093146
1	0	14	3.48E-02	0.05599	1	0	14	5.79E-03	0.0093244
1	0	15	3.48E-02	0.05605	1	0	15	5.80E-03	0.0093348
1	0	16	3.48E-02	0.05603	1	0	16	5.80E-03	0.0093305
1	0	17	3.48E-02	0.05602	1	0	17	5.80E-03	0.0093286
1	0	18	3.48E-02	0.05594	1	0	18	5.79E-03	0.0093155
1	0	19	3.47E-02	0.05585	1	0	19	5.78E-03	0.0093005
1	0	20	3.45E-02	0.05552	1	0	20	5.75E-03	0.0092468
1	0	21	3.44E-02	0.0553	1	0	21	5.72E-03	0.0092099
1	0	22	3.42E-02	0.0551	1	0	22	5.70E-03	0.0091762
1	0	23	3.41E-02	0.05492	1	0	23	5.68E-03	0.0091465
1	0	24	3.40E-02	0.05476	1	0	24	5.67E-03	0.00912

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	31	Sulfur Dioxide (SO2)			PollutantID	974	Benzo(a)pyrene		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	1.75E-02	0.02817	1	0	1	4.79E-05	7.714E-05
1	0	2	1.75E-02	0.02817	1	0	2	4.79E-05	7.714E-05
1	0	3	1.75E-02	0.02817	1	0	3	4.79E-05	7.714E-05
1	0	4	1.75E-02	0.02817	1	0	4	4.79E-05	7.714E-05
1	0	5	1.75E-02	0.02817	1	0	5	4.79E-05	7.714E-05
1	0	6	1.75E-02	0.02817	1	0	6	4.79E-05	7.714E-05
1	0	7	1.75E-02	0.02817	1	0	7	4.79E-05	7.714E-05
1	0	8	1.75E-02	0.02817	1	0	8	4.79E-05	7.714E-05
1	0	9	1.75E-02	0.02817	1	0	9	4.79E-05	7.714E-05
1	0	10	1.77E-02	0.02855	1	0	10	4.79E-05	7.714E-05
1	0	11	1.80E-02	0.02903	1	0	11	4.79E-05	7.714E-05
1	0	12	1.86E-02	0.02991	1	0	12	4.79E-05	7.714E-05
1	0	13	1.87E-02	0.03014	1	0	13	4.79E-05	7.714E-05
1	0	14	1.88E-02	0.03028	1	0	14	4.79E-05	7.714E-05
1	0	15	1.89E-02	0.03042	1	0	15	4.79E-05	7.714E-05
1	0	16	1.89E-02	0.03036	1	0	16	4.79E-05	7.714E-05
1	0	17	1.88E-02	0.03033	1	0	17	4.79E-05	7.714E-05
1	0	18	1.87E-02	0.03015	1	0	18	4.79E-05	7.714E-05
1	0	19	1.86E-02	0.02995	1	0	19	4.79E-05	7.714E-05
1	0	20	1.81E-02	0.02921	1	0	20	4.79E-05	7.714E-05
1	0	21	1.78E-02	0.0287	1	0	21	4.79E-05	7.714E-05
1	0	22	1.75E-02	0.02824	1	0	22	4.79E-05	7.714E-05
1	0	23	1.75E-02	0.02817	1	0	23	4.79E-05	7.714E-05
1	0	24	1.75E-02	0.02817	1	0	24	4.79E-05	7.714E-05

CAR Travel Emission Rate Calculation: CAC (2028)

PollutantID	9100	PM10			PollutantID	9110	PM2.5		
RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR	RoadTypeID	AverageSpeedID	HourID	G/VKT CAR	G/VMT CAR
1	0	1	3.43E-01	0.55133	1	0	1	3.15E-01	0.506655
1	0	2	3.43E-01	0.55133	1	0	2	3.15E-01	0.506654
1	0	3	3.43E-01	0.551331	1	0	3	3.15E-01	0.506655
1	0	4	3.43E-01	0.551331	1	0	4	3.15E-01	0.506655
1	0	5	3.43E-01	0.551331	1	0	5	3.15E-01	0.506655
1	0	6	3.43E-01	0.551331	1	0	6	3.15E-01	0.506655
1	0	7	3.43E-01	0.55133	1	0	7	3.15E-01	0.506655
1	0	8	3.43E-01	0.551331	1	0	8	3.15E-01	0.506655
1	0	9	3.43E-01	0.551331	1	0	9	3.15E-01	0.506655
1	0	10	3.43E-01	0.551331	1	0	10	3.15E-01	0.506655
1	0	11	3.43E-01	0.55133	1	0	11	3.15E-01	0.506655
1	0	12	3.43E-01	0.55133	1	0	12	3.15E-01	0.506655
1	0	13	3.43E-01	0.55133	1	0	13	3.15E-01	0.506655
1	0	14	3.43E-01	0.551331	1	0	14	3.15E-01	0.506656
1	0	15	3.43E-01	0.55133	1	0	15	3.15E-01	0.506655
1	0	16	3.43E-01	0.55133	1	0	16	3.15E-01	0.506655
1	0	17	3.43E-01	0.55133	1	0	17	3.15E-01	0.506655
1	0	18	3.43E-01	0.55133	1	0	18	3.15E-01	0.506654
1	0	19	3.43E-01	0.55133	1	0	19	3.15E-01	0.506655
1	0	20	3.43E-01	0.551331	1	0	20	3.15E-01	0.506655
1	0	21	3.43E-01	0.55133	1	0	21	3.15E-01	0.506655
1	0	22	3.43E-01	0.551331	1	0	22	3.15E-01	0.506655
1	0	23	3.43E-01	0.551331	1	0	23	3.15E-01	0.506655
1	0	24	3.43E-01	0.551331	1	0	24	3.15E-01	0.506655

Appendix E

Ambient Air Data

AECOM

Background Ambient Air Quality Calculations

Criteria Air Contaminant	Station ID	Averaging Period (hr)	Units	90th Percentile Concentrations				
				2018	2019	2020	2021	2022
NO2	60410	1	ppb	22.0	22.0	18.0	19.0	20.0
		24	ppb	18.4	18.0	14.7	16.4	16.1
		Annual	ppb	10.6	10.2	8.4	9.5	9.9
CO	60440	1	ppm	0.30	0.29	0.27	0.29	0.28
		8	ppm	0.29	0.29	0.26	0.29	0.28
SO2	60440	1	ppb	0.50	0.30	0.40	0.40	0.40
		0.16667	ppb	0.83	0.50	0.66	0.66	0.66
		Annual	ppb	0.26	0.15	0.15	0.17	0.17
PM10	60410	24	µg/m3	23.6	23.0	21.8	23.8	21.1
PM2.5	60410	24	µg/m3	12.8	12.4	11.8	12.9	11.4
		Annual	µg/m3	7.2	7.0	6.7	7.4	6.6
Benzo(a)pyrene	60438	24	ng/m3	0.22	0.13	0.11	0.49	0.07
		Annual	ng/m3	0.10	0.08	0.07	0.23	0.05
Benzene	60438	24	µg/m3	0.98	0.80	0.64	0.58	0.70
		Annual	µg/m3	0.58	0.55	0.48	0.48	0.51
1,3-Butadiene	60438	24	µg/m3	0.11	0.08	0.07	0.05	0.08
		Annual	µg/m3	0.06	0.05	0.05	0.04	0.05
Ozone	60410	1	ppb	41.0	39.0	40.0	41.0	39.0
		24	ppb	36.2	33.9	36.4	36.6	34.9
		Annual	ppb	25.2	24.6	26.1	26.2	25.1
				2015	**2016**	**2017**	**2018**	**2019**
Acetaldehyde	60438/ 60439	0.5	µg/m3	5.88	4.88	11.4	7.72	8.93
		24	µg/m3	1.99	1.65	3.85	2.61	3.02
Formaldehyde	60438/ 60439	24	µg/m3	3.80	2.60	4.20	2.43	2.87
Acrolein	60438/ 60439	1	µg/m3	0.169	0.159	0.234	0.149	ND
		24	µg/m3	0.070	0.065	0.096	0.061	ND

Parameters	
R (L.kPa/K.mol)	8.3
TEMP (K)	283.2
Pressure (Pa)	101325
Molecular Weights (g/mol)	
NO2	46
CO	28
SO2	64
O3	48
Conversion Factor	
ppb - ug/m3	24.5
ppm - ug/m3	0.02

Criteria Air Contaminant	Station ID	Averaging Period (hr)	Units	98th Percentile Concentrations					99th Percentile Concentrations				
				2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
NO2	60450	1	ppb	47.0	52.7	42.0	47.0	47.0	-	-	-	-	-
		24	ppb	-	-	-	-	-	-	-	-	-	-
		Annual	ppb	10.6	10.2	8.4	9.5	9.9	-	-	-	-	-
CO	60430	1	ppm	-	-	-	-	-	-	-	-	-	-
		8	ppm	-	-	-	-	-	-	-	-	-	-
SO2	60430	1	ppb	-	-	-	-	-	5.4	5.4	4.2	6.1	6.2
		0.16667	ppb	-	-	-	-	-					
		Annual	ppb	-	-	-	-	-	-	-	-	-	-
PM10	60450	24	µg/m3	-	-	-	-	-	-	-	-	-	-
PM2.5	60450	24	µg/m3	19.5	18.7	18.8	22.5	16.3	-	-	-	-	-
		Annual	µg/m3	7.2	7.0	6.7	7.4	6.6	-	-	-	-	-
Benzo(a)pyrene	60438	24	ng/m3	-	-	-	-	-	-	-	-	-	-
		Annual	ng/m3	-	-	-	-	-	-	-	-	-	-
Benzene	60438	24	µg/m3	-	-	-	-	-	-	-	-	-	-
		Annual	µg/m3	-	-	-	-	-	-	-	-	-	-
1,3-Butadiene	60438	24	µg/m3	-	-	-	-	-	-	-	-	-	-
		Annual	µg/m3	-	-	-	-	-	-	-	-	-	-
Ozone	60450	1	ppb										
		24	ppb	-	-	-	-	-	-	-	-	-	-
		Annual	ppb	-	-	-	-	-	-	-	-	-	-
Acetaldehyde	60438/ 60439	0.5	µg/m3	-	-	-	-	-					
		24	µg/m3	-	-	-	-	-	-	-	-	-	-
Formaldehyde	60438/ 60439	24	µg/m3	-	-	-	-	-	-	-	-	-	-
Acrolein	60438/ 60439	1	µg/m3	-	-	-	-	-	-	-	-	-	-
		24	µg/m3	-	-	-	-	-	-	-	-	-	-

Parameters	
R (L.kPa/K.mol)	8.3
TEMP (K)	283.2
Pressure (Pa)	101325
Molecular Weights (g/mol)	
NO2	46
CO	28
SO2	64
O3	48
Conversion Factor	
ppb - ug/m3	24.5
ppm - ug/m3	0.02

Appendix F

Input Traffic Data

TTC Scarborough Busway - Annual Averaged Daily Traffic (AADT) - Busses			Existing Conditions				Future No Build Conditions	Future Build Conditions
Source Location	Description	Modeling ID	AM Pk	PM Pk	2019 AADT	Factor	2028 AADT	2028 AADT
Eglinton Avenue	Between Midland Ave and Transway Crescent	S1	25	24	250	10	250	250
Eglinton Avenue	Between Transway Crescent and Kennedy Rd	S2	25	24	250	10	250	250
Kennedy Road	Between Eglinton Ave and Bertrand Ave	S3	63	58	610	10	610	610
Kennedy Road	Between Bertrand Ave and Ranstone Gardens	S4	63	58	610	10	610	610
Kennedy Road	Between Ranstone Gardens and Radnor Ave	S5	58	51	550	10	550	550
Kennedy Road	Between Radnor Ave and Lawrence Ave E	S6	50	47	490	10	490	490
Kennedy Road	Between Lawrence Ave E and Wickware Gate	S7	55	55	550	10	550	550
Kennedy Road	Between Wickware Gate and Forbes Rd	S8	67	60	640	10	640	640
Kennedy Road	Between Forbes Rd and Munham Gate	S9	66	47	570	10	570	570
Kennedy Road	Between Munham Gate and Ellesmere Rd	S10	56	62	590	10	590	590
Ellesmere Road	Between Kennedy Rd and Midland Ave	S11	29	49	390	10	390	390
Midland Avenue	Between Ellesmere Rd and Midwest Rd	S12	27	28	280	10	280	280
Midland Avenue	Between Midwest Rd and Dorcot Ave	S13	27	28	280	10	280	280
Midland Avenue	Between Dorcot Ave and Lawrence Ave E	S14	27	28	280	10	280	280
Midland Avenue	Between Lawrence Ave E and Prudential Dr	S15	25	24	250	10	250	250
Midland Avenue	Between Prudential Dr and Romulus Dr	S16	25	24	250	10	250	250
Midland Avenue	Between Romulus Dr and Stansbury Crescent	S17	25	24	250	10	250	250
Midland Avenue	Between Stansbury Crescent and Broadbent Ave	S18	25	24	250	10	250	250
Midland Avenue	Between Broadbent Ave and Gilder Dr	S19	25	24	250	10	250	250
Midland Avenue	Between Gilder Dr and Eglinton Ave E	S20	25	24	250	10	250	250
Future Build - SRT								
SRT Busway	Between Eglinton Ave and Tara Ave	S21	-	-	-	-	-	640
SRT Busway	Between Tara Ave and Lawrence Ave E	S22	-	-	-	-	-	640
SRT Busway	Between Lawrence Ave E and Ellesmere Rd	S23	-	-	-	-	-	640
Signalized Intersections - Future No Build								
Eglinton Avenue	At intersection of Eglinton Ave E and Midland Ave - Eastbound	S24	35	39	370	10	370	370
Eglinton Avenue	At intersection of Eglinton Ave E and Midland Ave - Westbound	S25	27	31	290	10	290	290
Midland Avenue	At intersection of Eglinton Ave E and Midland Ave - Northbound	S26	2	3	30	10	30	30
Midland Avenue	At intersection of Eglinton Ave E and Midland Ave - Southbound	S27	3	5	40	10	40	40
Eglinton Avenue	At intersection of Eglinton Ave E and Transway Crescent - Eastbound	S28	35	39	370	10	370	370
Eglinton Avenue	At intersection of Eglinton Ave E and Transway Crescent - Westbound	S29	27	31	290	10	290	290
Eglinton Avenue	At intersection of Eglinton Ave E and Kennedy Rd - Eastbound	S30	19	19	190	10	190	190
Eglinton Avenue	At intersection of Eglinton Ave E and Kennedy Rd - Westbound	S31	15	15	150	10	150	150
Kennedy Road	At intersection of Eglinton Ave E and Kennedy Rd - Northbound	S32	17	13	150	10	150	150
Kennedy Road	At intersection of Eglinton Ave E and Kennedy Rd - Southbound	S33	12	11	120	10	120	120
Kennedy Road	At intersection of Bertrand Ave and Kennedy Rd - Northbound	S34	19	19	190	10	190	190
Kennedy Road	At intersection of Bertrand Ave and Kennedy Rd - Southbound	S35	15	15	150	10	150	150
Kennedy Road	At intersection of Ranstone Garden and Kennedy Rd - Northbound	S36	17	13	150	10	150	150
Kennedy Road	At intersection of Ranstone Garden and Kennedy Rd - Southbound	S37	12	11	120	10	120	120

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TTC Scarborough Busway - Annual Averaged Daily Traffic (AADT) - Busses			Existing Conditions				Future No Build Conditions	Future Build Conditions
Source Location	Description	Modeling ID	AM Pk	PM Pk	2019 AADT	Factor	2028 AADT	2028 AADT
Kennedy Road	At intersection of Radnor Ave and Kennedy Rd - Northbound	S38	13	13	130	10	130	130
Kennedy Road	At intersection of Radnor Ave and Kennedy Rd - Southbound	S39	16	14	150	10	150	150
Lawrence Ave E	At intersection of Lawrence Ave E and Kennedy Rd - Eastbound	S40	5	9	70	10	70	70
Lawrence Ave E	At intersection of Lawrence Ave E and Kennedy Rd - Westbound	S41	7	12	100	10	100	100
Kennedy Road	At intersection of Lawrence Ave E and Kennedy Rd - Northbound	S42	11	12	120	10	120	120
Kennedy Road	At intersection of Lawrence Ave E and Kennedy Rd - Southbound	S43	10	8	90	10	90	90
Kennedy Road	At intersection of Wickware Gate and Kennedy Rd - Northbound	S44	18	16	170	10	170	170
Kennedy Road	At intersection of Wickware Gate and Kennedy Rd - Southbound	S45	16	19	180	10	180	180
Kennedy Road	At intersection of Forbes Rd and Kennedy Rd - Northbound	S46	16	13	150	10	150	150
Kennedy Road	At intersection of Forbes Rd and Kennedy Rd - Southbound	S47	17	12	150	10	150	150
Kennedy Road	At intersection of Munham Gate and Kennedy Rd - Northbound	S48	17	11	140	10	140	140
Kennedy Road	At intersection of Munham Gate and Kennedy Rd - Southbound	S49	16	11	140	10	140	140
Ellesmere Road	At intersection of Ellesmere Rd and Kennedy Rd - Eastbound	S50	7	16	120	10	120	120
Ellesmere Road	At intersection of Ellesmere Rd and Kennedy Rd - Westbound	S51	7	16	120	10	120	120
Kennedy Road	At intersection of Ellesmere Rd and Kennedy Rd - Northbound	S52	11	20	160	10	160	160
Kennedy Road	At intersection of Ellesmere Rd and Kennedy Rd - Southbound	S53	12	20	160	10	160	160
Ellesmere Road	At intersection of Ellesmere Rd and Midland Ave - Eastbound	S54	8	8	80	10	80	80
Ellesmere Road	At intersection of Ellesmere Rd and Midland Ave - Westbound	S55	7	9	80	10	80	80
Midland Avenue	At intersection of Ellesmere Rd and Midland Ave - Northbound	S56	4	7	60	10	60	60
Midland Avenue	At intersection of Ellesmere Rd and Midland Ave - Southbound	S57	3	5	40	10	40	40
Midland Avenue	At intersection of Midwest Rd and Midland Ave - Northbound	S58	12	9	110	10	110	110
Midland Avenue	At intersection of Midwest Rd and Midland Ave - Southbound	S59	8	7	80	10	80	80
Midland Avenue	At intersection of Dorcot Ave and Midland Ave - Northbound	S60	12	9	110	10	110	110
Midland Avenue	At intersection of Dorcot Ave and Midland Ave - Southbound	S61	8	7	80	10	80	80
Midland Avenue	At intersection of Lawrence Ave E and Midland Ave - Northbound	S62	12	9	110	10	110	110
Midland Avenue	At intersection of Lawrence Ave E and Midland Ave - Southbound	S63	8	7	80	10	80	80
Lawrence Ave E	At intersection of Lawrence Ave E and Midland Ave - Eastbound	S64	23	18	210	10	210	210
Lawrence Ave E	At intersection of Lawrence Ave E and Midland Ave - Westbound	S65	24	12	180	10	180	180
Midland Avenue	At intersection of Prudential Dr and Midland Ave - Northbound	S66	2	3	30	10	30	30
Midland Avenue	At intersection of Prudential Dr and Midland Ave - Southbound	S67	3	5	40	10	40	40
Midland Avenue	At intersection of Romulus Dr and Midland Ave - Northbound	S68	2	3	30	10	30	30
Midland Avenue	At intersection of Romulus Dr and Midland Ave - Southbound	S69	3	5	40	10	40	40
Midland Avenue	At intersection of Stansbury Crescent and Midland Ave - Northbound	S70	2	3	30	10	30	30
Midland Avenue	At intersection of Stansbury Crescent and Midland Ave - Southbound	S71	3	5	40	10	40	40
Midland Avenue	At intersection of Broadbent Ave and Midland Ave - Northbound	S72	2	3	30	10	30	30
Midland Avenue	At intersection of Broadbent Ave and Midland Ave - Southbound	S73	3	5	40	10	40	40
Midland Avenue	At intersection of Gilder Dr and Midland Ave - Northbound	S74	2	3	30	10	30	30
Midland Avenue	At intersection of Gilder Dr and Midland Ave - Southbound	S75	3	5	40	10	40	40

TTC Scarborough Busway - AADT - Busses		Future Build Conditions			
Source Location	Modeling ID	AM Pk	PM Pk	2028 AADT	Factor
Ellesmere Lot	P1	68	68	680	10
Lawrence East Lot	P2	90	90	900	10

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Appendix G

Annual Averaged Daily Traffic 24-hour Distribution Tables

AECOM

AADT 24-HR Distribution Tables

2019	
Kennedy Rd	
Hour	Community %
1	0.0180
2	0.0120
3	0.0080
4	0.0060
5	0.0060
6	0.0150
7	0.0340
8	0.0450
9	0.0550
10	0.0620
11	0.0570
12	0.0580
13	0.0600
14	0.0600
15	0.0590
16	0.0590
17	0.0590
18	0.0590
19	0.0570
20	0.0570
21	0.0500
22	0.0430
23	0.0340
24	0.0270
	100%

	2019		
	TTC Busses - Kennedy Bus Routes		
136	1	4	0.032
	2	0	0.000
	3	0	0.000
	4	0	0.000
	5	0	0.000
	6	12	0.088
	7	12	0.088
	8	12	0.088
	9	12	0.088
	10	4	0.032
	11	4	0.032
	12	4	0.032
	13	4	0.032
	14	4	0.032
	15	4	0.032
	16	6	0.045
	17	6	0.045
	18	6	0.045
	19	6	0.045
	20	8	0.061
	21	8	0.061
	22	8	0.061
	23	4	0.032
	24	4	0.032
			100%

Appendix H

Source Identification Tables

Future No-Build Conditions - Source Identification

Source ID	Source Type	Heavy Vehicle %	Source Description
S1	Free Flow	100.0%	Between Midland Ave and Transway Crescent
S2	Free Flow	100.0%	Between Transway Crescent and Kennedy Rd
S3	Free Flow	100.0%	Between Eglinton Ave and Bertrand Ave
S4	Free Flow	100.0%	Between Bertrand Ave and Ranstone Gardens
S5	Free Flow	100.0%	Between Ranstone Gardens and Radnor Ave
S6	Free Flow	100.0%	Between Radnor Ave and Lawrence Ave E
S7	Free Flow	100.0%	Between Lawrence Ave E and Wickware Gate
S8	Free Flow	100.0%	Between Wickware Gate and Forbes Rd
S9	Free Flow	100.0%	Between Forbes Rd and Munham Gate
S10	Free Flow	100.0%	Between Munham Gate and Ellesmere Rd
S11	Free Flow	100.0%	Between Kennedy Rd and Midland Ave
S12	Free Flow	100.0%	Between Ellesmere Rd and Midwest Rd
S13	Free Flow	100.0%	Between Midwest Rd and Dorcot Ave
S14	Free Flow	100.0%	Between Dorcot Ave and Lawrence Ave E
S15	Free Flow	100.0%	Between Lawrence Ave E and Prudential Dr
S16	Free Flow	100.0%	Between Prudential Dr and Romulus Dr
S17	Free Flow	100.0%	Between Romulus Dr and Stansbury Crescent
S18	Free Flow	100.0%	Between Stansbury Crescent and Broadbent Ave
S19	Free Flow	100.0%	Between Broadbent Ave and Gilder Dr
S20	Free Flow	100.0%	Between Gilder Dr and Eglinton Ave E
S24	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Eastbound
S25	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Westbound
S26	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Northbound
S27	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Southbound
S28	Queue	100.0%	At intersection of Eglinton Ave E and Transway Crescent - Eastbound
S29	Queue	100.0%	At intersection of Eglinton Ave E and Transway Crescent - Westbound
S30	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Eastbound
S31	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Westbound
S32	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Northbound
S33	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Southbound
S34	Queue	100.0%	At intersection of Bertrand Ave and Kennedy Rd - Northbound
S35	Queue	100.0%	At intersection of Bertrand Ave and Kennedy Rd - Southbound
S36	Queue	100.0%	At intersection of Ranstone Garden and Kennedy Rd - Northbound
S37	Queue	100.0%	At intersection of Ranstone Garden and Kennedy Rd - Southbound
S38	Queue	100.0%	At intersection of Radnor Ave and Kennedy Rd - Northbound
S39	Queue	100.0%	At intersection of Radnor Ave and Kennedy Rd - Southbound
S40	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Eastbound

Future No-Build Conditions - Source Identification

Source ID	Source Type	Heavy Vehicle %	Source Description
S41	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Westbound
S42	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Northbound
S43	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Southbound
S44	Queue	100.0%	At intersection of Wickware Gate and Kennedy Rd - Northbound
S45	Queue	100.0%	At intersection of Wickware Gate and Kennedy Rd - Southbound
S46	Queue	100.0%	At intersection of Forbes Rd and Kennedy Rd - Northbound
S47	Queue	100.0%	At intersection of Forbes Rd and Kennedy Rd - Southbound
S48	Queue	100.0%	At intersection of Munham Gate and Kennedy Rd - Northbound
S49	Queue	100.0%	At intersection of Munham Gate and Kennedy Rd - Southbound
S50	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Eastbound
S51	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Westbound
S52	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Northbound
S53	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Southbound
S54	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Eastbound
S55	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Westbound
S56	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Northbound
S57	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Southbound
S58	Queue	100.0%	At intersection of Midwest Rd and Midland Ave - Northbound
S59	Queue	100.0%	At intersection of Midwest Rd and Midland Ave - Southbound
S60	Queue	100.0%	At intersection of Dorcot Ave and Midland Ave - Northbound
S61	Queue	100.0%	At intersection of Dorcot Ave and Midland Ave - Southbound
S62	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Northbound
S63	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Southbound
S64	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Eastbound
S65	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Westbound
S66	Queue	100.0%	At intersection of Prudential Dr and Midland Ave - Northbound
S67	Queue	100.0%	At intersection of Prudential Dr and Midland Ave - Southbound
S68	Queue	100.0%	At intersection of Romulus Dr and Midland Ave - Northbound
S69	Queue	100.0%	At intersection of Romulus Dr and Midland Ave - Southbound
S70	Queue	100.0%	At intersection of Stansbury Crescent and Midland Ave - Northbound
S71	Queue	100.0%	At intersection of Stansbury Crescent and Midland Ave - Southbound
S72	Queue	100.0%	At intersection of Broadbent Ave and Midland Ave - Northbound
S73	Queue	100.0%	At intersection of Broadbent Ave and Midland Ave - Southbound
S74	Queue	100.0%	At intersection of Gilder Dr and Midland Ave - Northbound
S75	Queue	100.0%	At intersection of Gilder Dr and Midland Ave - Southbound

Future Build Conditions - Source Identification

Source ID	Source Type	Heavy Vehicle %	Source Description
S1	Free Flow	100.0%	Between Midland Ave and Transway Crescent
S2	Free Flow	100.0%	Between Transway Crescent and Kennedy Rd
S3	Free Flow	100.0%	Between Eglinton Ave and Bertrand Ave
S4	Free Flow	100.0%	Between Bertrand Ave and Ranstone Gardens
S5	Free Flow	100.0%	Between Ranstone Gardens and Radnor Ave
S6	Free Flow	100.0%	Between Radnor Ave and Lawrence Ave E
S7	Free Flow	100.0%	Between Lawrence Ave E and Wickware Gate
S8	Free Flow	100.0%	Between Wickware Gate and Forbes Rd
S9	Free Flow	100.0%	Between Forbes Rd and Munham Gate
S10	Free Flow	100.0%	Between Munham Gate and Ellesmere Rd
S11	Free Flow	100.0%	Between Kennedy Rd and Midland Ave
S12	Free Flow	100.0%	Between Ellesmere Rd and Midwest Rd
S13	Free Flow	100.0%	Between Midwest Rd and Dorcot Ave
S14	Free Flow	100.0%	Between Dorcot Ave and Lawrence Ave E
S15	Free Flow	100.0%	Between Lawrence Ave E and Prudential Dr
S16	Free Flow	100.0%	Between Prudential Dr and Romulus Dr
S17	Free Flow	100.0%	Between Romulus Dr and Stansbury Crescent
S18	Free Flow	100.0%	Between Stansbury Crescent and Broadbent Ave
S19	Free Flow	100.0%	Between Broadbent Ave and Gilder Dr
S20	Free Flow	100.0%	Between Gilder Dr and Eglinton Ave E
S21	Free Flow	100.0%	Between Eglinton Ave and Tara Ave
S22	Free Flow	100.0%	Between Tara Ave and Lawrence Ave E
S23	Free Flow	100.0%	Between Lawrence Ave E and Ellesmere Rd
S24	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Eastbound
S25	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Westbound
S26	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Northbound
S27	Queue	100.0%	At intersection of Eglinton Ave E and Midland Ave - Southbound
S28	Queue	100.0%	At intersection of Eglinton Ave E and Transway Crescent - Eastbound
S29	Queue	100.0%	At intersection of Eglinton Ave E and Transway Crescent - Westbound
S30	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Eastbound
S31	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Westbound
S32	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Northbound
S33	Queue	100.0%	At intersection of Eglinton Ave E and Kennedy Rd - Southbound
S34	Queue	100.0%	At intersection of Bertrand Ave and Kennedy Rd - Northbound
S35	Queue	100.0%	At intersection of Bertrand Ave and Kennedy Rd - Southbound
S36	Queue	100.0%	At intersection of Ranstone Garden and Kennedy Rd - Northbound
S37	Queue	100.0%	At intersection of Ranstone Garden and Kennedy Rd - Southbound

Future Build Conditions - Source Identification

Source ID	Source Type	Heavy Vehicle %	Source Description
S38	Queue	100.0%	At intersection of Radnor Ave and Kennedy Rd - Northbound
S39	Queue	100.0%	At intersection of Radnor Ave and Kennedy Rd - Southbound
S40	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Eastbound
S41	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Westbound
S42	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Northbound
S43	Queue	100.0%	At intersection of Lawrence Ave E and Kennedy Rd - Southbound
S44	Queue	100.0%	At intersection of Wickware Gate and Kennedy Rd - Northbound
S45	Queue	100.0%	At intersection of Wickware Gate and Kennedy Rd - Southbound
S46	Queue	100.0%	At intersection of Forbes Rd and Kennedy Rd - Northbound
S47	Queue	100.0%	At intersection of Forbes Rd and Kennedy Rd - Southbound
S48	Queue	100.0%	At intersection of Munham Gate and Kennedy Rd - Northbound
S49	Queue	100.0%	At intersection of Munham Gate and Kennedy Rd - Southbound
S50	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Eastbound
S51	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Westbound
S52	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Northbound
S53	Queue	100.0%	At intersection of Ellesmere Rd and Kennedy Rd - Southbound
S54	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Eastbound
S55	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Westbound
S56	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Northbound
S57	Queue	100.0%	At intersection of Ellesmere Rd and Midland Ave - Southbound
S58	Queue	100.0%	At intersection of Midwest Rd and Midland Ave - Northbound
S59	Queue	100.0%	At intersection of Midwest Rd and Midland Ave - Southbound
S60	Queue	100.0%	At intersection of Dorcot Ave and Midland Ave - Northbound
S61	Queue	100.0%	At intersection of Dorcot Ave and Midland Ave - Southbound
S62	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Northbound
S63	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Southbound
S64	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Eastbound
S65	Queue	100.0%	At intersection of Lawrence Ave E and Midland Ave - Westbound
S66	Queue	100.0%	At intersection of Prudential Dr and Midland Ave - Northbound
S67	Queue	100.0%	At intersection of Prudential Dr and Midland Ave - Southbound
S68	Queue	100.0%	At intersection of Romulus Dr and Midland Ave - Northbound
S69	Queue	100.0%	At intersection of Romulus Dr and Midland Ave - Southbound
S70	Queue	100.0%	At intersection of Stansbury Crescent and Midland Ave - Northbound
S71	Queue	100.0%	At intersection of Stansbury Crescent and Midland Ave - Southbound
S72	Queue	100.0%	At intersection of Broadbent Ave and Midland Ave - Northbound
S73	Queue	100.0%	At intersection of Broadbent Ave and Midland Ave - Southbound
S74	Queue	100.0%	At intersection of Gilder Dr and Midland Ave - Northbound
S75	Queue	100.0%	At intersection of Gilder Dr and Midland Ave - Southbound
P1	Free Flow	0.0%	Parking Lot - Ellesmere
P2	Free Flow	0.0%	Parking Lot - Lawrence East

AECOM

Appendix I

Ozone Limiting Method Calculations at Sensitive and Critical Receptors

AECOM

OLM Method for NOx conversion to NO2

MW	46.0055

Table F-1: Conversion of atmospheric NOx to NO_2 using the OLM Method: Maximum Concentration

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration ($\mu g/m^3$)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration ($\mu g/m^3$)	Receptor ID
Future No-Build	1	178	90.1	40.0	49.0	97.0	SR48
	24	59.5	30.0	35.4	30.0	59.5	CR11
	Annual	15.5	7.81	25.4	7.81	15.5	CR11
Future Build	1	22	11.0	40.0	11.0	21.8	SR7
	24	6.4	3.21	35.4	3.21	6.35	SR7
	Annual	0.67	0.340	25.4	0.340	0.674	SR7

Table F-2: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 48

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration ($\mu g/m^3$)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration ($\mu g/m^3$)	Receptor ID
Future No-Build	1	178	90.1	40.0	49.0	97.0	SR48
	24	56.4	28.5	35.4	28.5	56.4	SR48
	Annual	13.7	6.93	25.4	6.9	13.7	SR48
Future Build	1	2.3	1.15	40.0	1.15	2.3	SR48
	24	0.3	0.129	35.4	0.129	0.255	SR48
	Annual	0.0	0.02	25.4	0.0190	0.04	SR48

Table F-3: Conversion of atmospheric NOx to NO_2 using the OLM Method: Critical Receptor No. 11

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration ($\mu g/m^3$)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration ($\mu g/m^3$)	Receptor ID
Future No-Build	1	171	86.1	40.0	48.6	96.3	CR11
	24	59.5	30.0	35.4	30.0	59.5	CR11
	Annual	15.5	7.81	25.4	7.81	15.5	CR11
Future Build	1	0.84	0.424	40.0	0.424	0.840	CR11
	24	0.162	0.0816	35.4	0.0816	0.162	CR11
	Annual	0.024	0.0119	25.4	0.0119	0.0237	CR11

Table F-4: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 7

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration ($\mu g/m^3$)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration ($\mu g/m^3$)	Receptor ID
Future No-Build	1	10.7	5.40	40.0	5.40	10.7	SR7
	24	3.11	1.57	35.4	1.57	3.11	SR7
	Annual	0.59	0.298	25.4	0.298	0.589	SR7
Future Build	1	22	11.0	40.0	11.0	21.8	SR7
	24	6.4	3.21	35.4	3.21	6.35	SR7
	Annual	0.67	0.340	25.4	0.340	0.674	SR7

Table F-5: Conversion of atmospheric NOx to NO_2 using the OLM Method: Sensitive Receptor No. 12

Modelling Scenario	Averaging Period (hr)	Modelled NOx Concentration ($\mu g/m^3$)	Modelled NOx Concentration (ppb)	Background O_3 Concentration (ppb)	OLM NO_2 Concentration (ppb)	OLM NO_2 Concentration ($\mu g/m^3$)	Receptor ID
Future No-Build	1	6.42	3.24	40.0	3.24	6.42	SR12
	24	2.08	1.05	35.4	1.05	2.08	SR12
	Annual	0.452	0.228	25.4	0.228	0.452	SR12
Future Build	1	5.10	2.57	40.0	2.57	5.10	SR12
	24	1.28	0.644	35.4	0.644	1.28	SR12
	Annual	0.348	0.176	25.4	0.176	0.348	SR12

Appendix J

Maximum Concentrations at Sensitive and Critical Receptors

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (1-hour)

Multiplier	1			1			100			1			1			100		
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID
	150.13999	150.13999	SR1	12.17446	12.17446	SR1	2.50373	0.0250373	SR1	151.93188	151.93188	SR1	354.84691	354.84691	SR1	1.53396	0.0153396	SR1
	159.89904	159.89904	SR2	10.80305	10.80305	SR2	2.26481	0.0226481	SR2	138.47324	138.47324	SR2	296.47973	296.47973	SR2	1.38071	0.0138071	SR2
	117.85406	117.85406	SR3	11.15833	11.15833	SR3	2.14117	0.0214117	SR3	129.64863	129.64863	SR3	326.83955	326.83955	SR3	1.3369	0.013369	SR3
	127.95079	127.95079	SR4	10.88506	10.88506	SR4	2.18893	0.0218893	SR4	121.90146	121.90146	SR4	274.35598	274.35598	SR4	1.34931	0.0134931	SR4
	97.69798	97.69798	SR5	9.99557	9.99557	SR5	1.9609	0.019609	SR5	119.23415	119.23415	SR5	213.62242	213.62242	SR5	1.21687	0.0121687	SR5
	94.36748	94.36748	SR6	9.25973	9.25973	SR6	1.64594	0.0164594	SR6	103.35317	103.35317	SR6	193.03958	193.03958	SR6	1.05056	0.0105056	SR6
	92.27149	92.27149	SR7	10.68368	10.68368	SR7	1.87002	0.0187002	SR7	116.00642	116.00642	SR7	209.82776	209.82776	SR7	1.19908	0.0119908	SR7
	92.32139	92.32139	SR8	9.02162	9.02162	SR8	1.60665	0.0160665	SR8	103.75943	103.75943	SR8	197.5905	197.5905	SR8	1.02492	0.0102492	SR8
	90.30714	90.30714	SR9	8.60348	8.60348	SR9	1.53897	0.0153897	SR9	102.50204	102.50204	SR9	201.95345	201.95345	SR9	0.98047	0.0098047	SR9
	88.46865	88.46865	SR10	8.10065	8.10065	SR10	1.45852	0.0145852	SR10	100.99858	100.99858	SR10	205.015	205.015	SR10	0.92743	0.0092743	SR10
	78.09057	78.09057	SR11	6.96844	6.96844	SR11	1.29422	0.0129422	SR11	104.67418	104.67418	SR11	264.96008	264.96008	SR11	0.81559	0.0081559	SR11
	76.64372	76.64372	SR12	6.42299	6.42299	SR12	1.23594	0.0123594	SR12	101.88389	101.88389	SR12	246.39903	246.39903	SR12	0.77109	0.0077109	SR12
	79.46699	79.46699	SR13	6.49002	6.49002	SR13	1.22952	0.0122952	SR13	111.37276	111.37276	SR13	238.71901	238.71901	SR13	0.77045	0.0077045	SR13
	85.88683	85.88683	SR14	10.5998	10.5998	SR14	1.90695	0.0190695	SR14	119.78827	119.78827	SR14	236.30837	236.30837	SR14	1.21288	0.0121288	SR14
	88.59243	88.59243	SR15	10.91977	10.91977	SR15	1.97281	0.0197281	SR15	124.23067	124.23067	SR15	242.45198	242.45198	SR15	1.25322	0.0125322	SR15
	106.66589	106.66589	SR16	11.24648	11.24648	SR16	2.03103	0.0203103	SR16	115.83848	115.83848	SR16	233.67364	233.67364	SR16	1.29035	0.0129035	SR16
	105.24983	105.24983	SR17	10.67084	10.67084	SR17	1.94274	0.0194274	SR17	117.04602	117.04602	SR17	228.55871	228.55871	SR17	1.23109	0.0123109	SR17
	103.78347	103.78347	SR18	10.572	10.572	SR18	1.92913	0.0192913	SR18	117.20328	117.20328	SR18	225.35498	225.35498	SR18	1.22192	0.0122192	SR18
	100.492	100.492	SR19	10.72458	10.72458	SR19	1.9617	0.019617	SR19	126.79573	126.79573	SR19	246.38263	246.38263	SR19	1.24168	0.0124168	SR19
	108.90846	108.90846	SR20	12.17763	12.17763	SR20	2.14216	0.0214216	SR20	116.84717	116.84717	SR20	217.14574	217.14574	SR20	1.37156	0.0137156	SR20
	105.70774	105.70774	SR21	11.27588	11.27588	SR21	1.96764	0.0196764	SR21	130.46471	130.46471	SR21	239.7705	239.7705	SR21	1.26286	0.0126286	SR21
	109.92399	109.92399	SR22	11.2074	11.2074	SR22	1.99346	0.0199346	SR22	118.6291	118.6291	SR22	220.73607	220.73607	SR22	1.27216	0.0127216	SR22
	110.01826	110.01826	SR23	14.17643	14.17643	SR23	2.43821	0.0243821	SR23	134.78351	134.78351	SR23	239.76943	239.76943	SR23	1.57171	0.0157171	SR23
	107.57744	107.57744	SR24	10.3139	10.3139	SR24	1.86119	0.0186119	SR24	121.40852	121.40852	SR24	220.53177	220.53177	SR24	1.17458	0.0117458	SR24
	112.03898	112.03898	SR25	13.89611	13.89611	SR25	2.39665	0.0239665	SR25	140.21971	140.21971	SR25	245.29859	245.29859	SR25	1.54362	0.0154362	SR25
	114.26429	114.26429	SR26	12.807	12.807	SR26	2.23506	0.0223506	SR26	126.00209	126.00209	SR26	225.61279	225.61279	SR26	1.43444	0.0143444	SR26
	132.10517	132.10517	SR27	16.76184	16.76184	SR27	2.86542	0.0286542	SR27	144.51093	144.51093	SR27	247.33448	247.33448	SR27	1.85051	0.0185051	SR27
	154.52843	154.52843	SR28	16.42213	16.42213	SR28	2.82661	0.0282661	SR28	134.61167	134.61167	SR28	236.14513	236.14513	SR28	1.82166	0.0182166	SR28
	156.31714	156.31714	SR29	25.56377	25.56377	SR29	4.31185	0.0431185	SR29	150.38951	150.38951	SR29	334.66687	334.66687	SR29	2.79607	0.0279607	SR29
	224.81474	224.81474	SR30	25.13717	25.13717	SR30	4.26386	0.0426386	SR30	143.31217	143.31217	SR30	294.15929	294.15929	SR30	2.76018	0.0276018	SR30
	190.62893	190.62893	SR31	27.87205	27.87205	SR31	4.73305	0.0473305	SR31	174.23919	174.23919	SR31	340.46069	340.46069	SR31	3.06286	0.0306286	SR31
	154.26621	154.26621	SR32	15.27372	15.27372	SR32	2.63687	0.0263687	SR32	150.01027	150.01027	SR32	235.29482	235.29482	SR32	1.69784	0.0169784	SR32
	154.68595	154.68595	SR33	15.59482	15.59482	SR33	2.69371	0.0269371	SR33	125.43958	125.43958	SR33	202.92256	202.92256	SR33	1.73416	0.0173416	SR33
	116.57112	116.57112	SR34	13.09227	13.09227	SR34	2.26805	0.0226805	SR34	130.18218	130.18218	SR34	211.56105	211.56105	SR34	1.45885	0.0145885	SR34
	132.85803	132.85803	SR35	12.6298	12.6298	SR35	2.19317	0.0219317	SR35	106.56174	106.56174	SR35	178.08255	178.08255	SR35	1.40967	0.0140967	SR35
	111.95889	111.95889	SR36	10.31987	10.31987	SR36	1.80112	0.0180112	SR36	96.8153	96.8153	SR36	150.50212	150.50212	SR36	1.15592	0.0115592	SR36
	325.80644	325.80644	SR37	36.99317	36.99317	SR37	6.72497	0.0672497	SR37	247.25585	247.25585	SR37	551.38057	551.38057	SR37	4.26202	0.0426202	SR37
	329.10994	329.10994	SR38	46.41626	46.41626	SR38	8.33363	0.0833363	SR38	298.95955	298.95955	SR38	941.47423	941.47423	SR38	5.30283	0.0530283	SR38
	288.22153	288.22153	SR39	34.20641	34.20641	SR39	6.52619	0.0652619	SR39	333.13366	333.13366	SR39	660.07084	660.07084	SR39	4.08075	0.0408075	SR39
	253.13694	253.13694	SR40	29.19598	29.19598	SR40	5.66043	0.0566043	SR40	314.04623	314.04623	SR40	552.95885	552.95885	SR40	3.52354	0.0352354	SR40
	280.63239	280.63239	SR41	27.43763	27.43763	SR41	5.33421	0.0533421	SR41	299.57841	299.57841	SR41	506.70829	506.70829	SR41	3.31797	0.0331797	SR41
	285.83553	285.83553	SR42	38.4456	38.4456	SR42	6.88128	0.0688128	SR42	300.79114	300.79114	SR42	607.79623	607.79623	SR42	4.38329	0.0438329	SR42
	725.64451	725.64451	SR43	107.5801	107.5801	SR43	17.83081	0.1783081	SR43	298.56803	298.56803	SR43	1591.59264	1591.59264	SR43	11.62522	0.1162522	SR43
	849.50947	849.50947	SR44	106.59457	106.59457	SR44	17.84935	0.1784935	SR44	360.77105	360.77105	SR44	1654.74287	1654.74287	SR44	11.60047	0.1160047	SR44
	350.1941	350.1941	SR45	47.23397	47.23397	SR45	8.77804	0.0877804	SR45	358.99693	358.99693	SR45	787.87215	787.87215	SR45	5.53048	0.0553048	SR45
	275.43388	275.43388	SR46	32.59179	32.59179	SR46	6.26978	0.0626978	SR46	310.42318	310.42318	SR46	558.56977	558.56977	SR46	3.91167	0.0391167	SR46
	256.27834	256.27834	SR47	26.50011	26.50011	SR47	5.2801	0.052801	SR47	303.52077	303.52077	SR47	465.41233	465.41233	SR47	3.2624	0.032624	SR47
	1694.68728	1694.68728	SR48	178.46216	178.46216	SR48	29.207	0.29207	SR48	290.6465	290.6465	SR48	2961.10059	2961.10059	SR48	19.11758	0.1911758	SR48
	438.4492	438.4492	SR49	57.58083	57.58083	SR49	10.03091	0.1003091	SR49	270.18391	270.18391	SR49	910.09279	910.09279	SR49	6.44121	0.0644121	SR49
	268.11606	268.11606	SR50	34.45529	34.45529	SR50	6.51592	0.0651592	SR50	253.29184	253.29184	SR50	564.97643	564.97643	SR50	4.085	0.04085	SR50
	259.97512	259.97512	SR51	24.34252	24.34252	SR51	4.86312	0.0486312	SR51	240.4751	240.4751	SR51	408.43756	408.43756	SR51	3.00271	0.0300271	SR51
	244.75598	244.75598	SR52	20.76962	20.76962	SR52	4.29052	0.0429052	SR52	237.03266	237.03266	SR52	352.50613	352.50613	SR52	2.6254	0.026254	SR52
	261.83411	261.83411	SR53	20.67271	20.67271	SR53	4.35985	0.0435985	SR53	279.20673	279.20673	SR53	329.85689	329.85689	SR53	2.65345	0.0265345	SR53
	242.29681	242.29681	SR54	24.28696	24.28696	SR54	4.75392	0.0475392	SR54	242.63689	242.63689	SR54	347.12022	347.12022	SR54	2.95188	0.0295188	SR54
	274.38237	274.38237	SR55	34.25871	34.25871	SR55	6.2876	0.062876	SR55	236.26956	236.26956	SR55	467.8665	467.8665	SR55	3.97592	0.0397592	SR55
	726.01124	726.01124	SR56	108.48264	108.48264	SR56	17.95805	0.1795805	SR56	223.24782	223.24782	SR56	1403.06172	1403.06172	SR56	11.71271	0.1171271	SR56

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (1-hour)

Multiplier	1			1			100			1			1			100		
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID
	492.07849	492.07849	SR57	76.30042	76.30042	SR57	12.88682	0.1288682	SR57	213.71782	213.71782	SR57	961.62974	961.62974	SR57	8.35317	0.0835317	SR57
	292.20766	292.20766	SR58	35.04791	35.04791	SR58	6.56022	0.0656022	SR58	212.72658	212.72658	SR58	482.60994	482.60994	SR58	4.12487	0.0412487	SR58
	284.81531	284.81531	SR59	28.50024	28.50024	SR59	5.37778	0.0537778	SR59	211.90106	211.90106	SR59	405.60304	405.60304	SR59	3.37371	0.0337371	SR59
	267.32249	267.32249	SR60	30.40213	30.40213	SR60	5.71986	0.0571986	SR60	216.3134	216.3134	SR60	436.0832	436.0832	SR60	3.5913	0.035913	SR60
	277.61458	277.61458	SR61	36.6454	36.6454	SR61	6.81787	0.0681787	SR61	259.03747	259.03747	SR61	527.71709	527.71709	SR61	4.29424	0.0429424	SR61
	313.27042	313.27042	SR62	36.41106	36.41106	SR62	6.5188	0.065188	SR62	211.0582	211.0582	SR62	492.50383	492.50383	SR62	4.15209	0.0415209	SR62
	307.61276	307.61276	SR63	24.36748	24.36748	SR63	4.18229	0.0418229	SR63	240.35978	240.35978	SR63	376.2241	376.2241	SR63	2.69768	0.0269768	SR63
	608.76622	608.76622	SR64	58.52999	58.52999	SR64	9.73692	0.0973692	SR64	541.03732	541.03732	SR64	2920.42983	2920.42983	SR64	6.34095	0.0634095	SR64
	234.36144	234.36144	SR65	30.43793	30.43793	SR65	5.27243	0.0527243	SR65	421.13007	421.13007	SR65	989.31631	989.31631	SR65	3.39141	0.0339141	SR65
	186.01358	186.01358	SR66	19.65058	19.65058	SR66	3.49771	0.0349771	SR66	416.01549	416.01549	SR66	633.12815	633.12815	SR66	2.23166	0.0223166	SR66
	182.49426	182.49426	SR67	16.84507	16.84507	SR67	3.42477	0.0342477	SR67	501.1963	501.1963	SR67	722.7723	722.7723	SR67	2.1047	0.021047	SR67
	159.15064	159.15064	SR68	19.17977	19.17977	SR68	3.68122	0.0368122	SR68	392.20775	392.20775	SR68	860.43116	860.43116	SR68	2.29833	0.0229833	SR68
	400.01042	400.01042	SR69	40.44761	40.44761	SR69	6.89119	0.0689119	SR69	424.23302	424.23302	SR69	2372.47502	2372.47502	SR69	4.41264	0.0441264	SR69
	173.36122	173.36122	SR70	18.16903	18.16903	SR70	3.38714	0.0338714	SR70	405.06001	405.06001	SR70	872.9264	872.9264	SR70	2.13223	0.0213223	SR70
	122.21353	122.21353	SR71	12.07999	12.07999	SR71	2.52656	0.0252656	SR71	365.07172	365.07172	SR71	492.14782	492.14782	SR71	1.54105	0.0154105	SR71
	138.56317	138.56317	SR72	11.71037	11.71037	SR72	2.47537	0.0247537	SR72	361.22469	361.22469	SR72	546.19452	546.19452	SR72	1.50563	0.0150563	SR72
	143.92681	143.92681	SR73	17.51325	17.51325	SR73	3.35882	0.0335882	SR73	324.13358	324.13358	SR73	889.47483	889.47483	SR73	2.09749	0.0209749	SR73
	545.60582	545.60582	SR74	52.56512	52.56512	SR74	8.72147	0.0872147	SR74	357.18852	357.18852	SR74	2911.82362	2911.82362	SR74	5.68433	0.0568433	SR74
	131.38181	131.38181	SR75	11.09766	11.09766	SR75	2.3524	0.023524	SR75	334.93859	334.93859	SR75	486.84915	486.84915	SR75	1.42979	0.0142979	SR75
	130.81762	130.81762	SR76	8.73538	8.73538	SR76	1.83666	0.0183666	SR76	259.36456	259.36456	SR76	363.23698	363.23698	SR76	1.1187	0.011187	SR76
	127.98762	127.98762	SR77	9.57313	9.57313	SR77	2.01681	0.0201681	SR77	279.85587	279.85587	SR77	375.87616	375.87616	SR77	1.22779	0.0122779	SR77
	129.74874	129.74874	SR78	11.41193	11.41193	SR78	2.27158	0.0227158	SR78	264.10744	264.10744	SR78	473.75125	473.75125	SR78	1.40402	0.0140402	SR78
	163.44706	163.44706	SR79	20.03632	20.03632	SR79	3.66005	0.0366005	SR79	293.40416	293.40416	SR79	1018.08566	1018.08566	SR79	2.31756	0.0231756	SR79
	139.244	139.244	SR80	12.12193	12.12193	SR80	2.39583	0.0239583	SR80	290.8129	290.8129	SR80	449.78777	449.78777	SR80	1.48369	0.0148369	SR80
	295.66554	295.66554	SR81	24.04192	24.04192	SR81	4.36662	0.0436662	SR81	258.8104	258.8104	SR81	513.74322	513.74322	SR81	2.76958	0.0276958	SR81
	164.29843	164.29843	SR82	10.94849	10.94849	SR82	2.34632	0.0234632	SR82	233.91492	233.91492	SR82	282.99219	282.99219	SR82	1.42183	0.0142183	SR82
	149.70562	149.70562	SR83	13.45554	13.45554	SR83	2.64943	0.0264943	SR83	209.70535	209.70535	SR83	306.65092	306.65092	SR83	1.64245	0.0164245	SR83
	165.85804	165.85804	SR84	22.69736	22.69736	SR84	4.02221	0.0402221	SR84	183.68414	183.68414	SR84	485.84993	485.84993	SR84	2.56967	0.0256967	SR84
	573.51465	573.51465	SR85	78.27444	78.27444	SR85	12.88487	0.1288487	SR85	191.05316	191.05316	SR85	1566.9546	1566.9546	SR85	8.4186	0.084186	SR85
	215.46899	215.46899	SR86	30.82624	30.82624	SR86	5.36596	0.0536596	SR86	169.2411	169.2411	SR86	693.58601	693.58601	SR86	3.44626	0.0344626	SR86
	181.47514	181.47514	SR87	16.13442	16.13442	SR87	3.13034	0.0313034	SR87	179.66222	179.66222	SR87	376.44062	376.44062	SR87	1.94852	0.0194852	SR87
	147.2684	147.2684	SR88	11.40685	11.40685	SR88	2.27288	0.0227288	SR88	148.58486	148.58486	SR88	272.1575	272.1575	SR88	1.40444	0.0140444	SR88
	128.65271	128.65271	SR89	8.88529	8.88529	SR89	1.86901	0.0186901	SR89	142.47194	142.47194	SR89	207.96489	207.96489	SR89	1.13786	0.0113786	SR89
	144.7167	144.7167	SR90	8.19083	8.19083	SR90	1.8515	0.018515	SR90	167.13309	167.13309	SR90	204.46722	204.46722	SR90	1.1071	0.011071	SR90
	127.21533	127.21533	SR91	7.51457	7.51457	SR91	1.709	0.01709	SR91	158.5193	158.5193	SR91	189.03877	189.03877	SR91	1.02035	0.0102035	SR91
	114.04808	114.04808	SR92	7.56437	7.56437	SR92	1.59402	0.0159402	SR92	146.75661	146.75661	SR92	196.35036	196.35036	SR92	0.97031	0.0097031	SR92
	131.43016	131.43016	SR93	8.98747	8.98747	SR93	1.86133	0.0186133	SR93	156.01192	156.01192	SR93	234.48813	234.48813	SR93	1.13826	0.0113826	SR93
	153.2404	153.2404	SR94	13.9929	13.9929	SR94	2.69092	0.0269092	SR94	169.5745	169.5745	SR94	355.36454	355.36454	SR94	1.67914	0.0167914	SR94
	223.26941	223.26941	SR95	31.78676	31.78676	SR95	5.54319	0.0554319	SR95	201.82988	201.82988	SR95	722.71627	722.71627	SR95	3.55838	0.0355838	SR95
	494.32889	494.32889	SR96	54.92414	54.92414	SR96	9.33526	0.0933526	SR96	350.53386	350.53386	SR96	1152.33256	1152.33256	SR96	6.03953	0.0603953	SR96
	144.72158	144.72158	CR1	11.09722	11.09722	CR1	2.24152	0.0224152	CR1	148.81285	148.81285	CR1	199.27971	199.27971	CR1	1.37995	0.0137995	CR1
	127.1328	127.1328	CR2	7.17529	7.17529	CR2	1.39701	0.0139701	CR2	63.42974	63.42974	CR2	120.28908	120.28908	CR2	0.86878	0.0086878	CR2
	239.89784	239.89784	CR3	14.87293	14.87293	CR3	2.7584	0.027584	CR3	93.24915	93.24915	CR3	234.19348	234.19348	CR3	1.73907	0.0173907	CR3
	196.46953	196.46953	CR4	15.26811	15.26811	CR4	2.83935	0.0283935	CR4	94.80011	94.80011	CR4	242.28501	242.28501	CR4	1.78875	0.0178875	CR4
	242.08411	242.08411	CR5	35.35347	35.35347	CR5	6.04676	0.0604676	CR5	214.21449	214.21449	CR5	1115.67282	1115.67282	CR5	3.90442	0.0390442	CR5
	248.50251	248.50251	CR6	18.66297	18.66297	CR6	3.94017	0.0394017	CR6	220.2095	220.2095	CR6	305.43764	305.43764	CR6	2.39763	0.0239763	CR6
	327.18026	327.18026	CR7	31.58847	31.58847	CR7	6.01968	0.0601968	CR7	288.03276	288.03276	CR7	513.9746	513.9746	CR7	3.76809	0.0376809	CR7
	133.63574	133.63574	CR8	19.58944	19.58944	CR8	3.3235	0.033235	CR8	127.54458	127.54458	CR8	322.56601	322.56601	CR8	2.15129	0.0215129	CR8
	348.31293	348.31293	CR9	43.59005	43.59005	CR9	7.51167	0.0751167	CR9	250.14541	250.14541	CR9	923.47563	923.47563	CR9	4.8393	0.048393	CR9
	86.17403	86.17403	CR10	10.23179	10.23179	CR10	1.90341	0.0190341	CR10	166.63615	166.63615	CR10	351.48713	351.48713	CR10	1.1983	0.011983	CR10
	1560.45901	1560.45901	CR11	170.55326	170.55326	CR11	27.76616	0.2776616	CR11	304.62475	304.62475	CR11	2222.59937	2222.59937	CR11	18.20451	0.1820451	CR11
	255.25516	255.25516	CR12	19.08759	19.08759	CR12	3.3685	0.033685	CR12	120.49591	120.49591	CR12	246.18134	246.18134	CR12	2.15468	0.0215468	CR12
	588.25362	588.25362	CR13	91.2059	91.2059	CR13	15.12932	0.1512932	CR13	232.89682	232.89682	CR13	1238.43286	1238.43286	CR13	9.8614	0.098614	CR13
	170.95481	170.95481	CR14	15.5712	15.5712	CR14	3.11141	0.0311141	CR14	422.69945	422.69945	CR14	663.11727	663.11727	CR14	1.9211	0.019211	CR14
	153.90964	153.90964	CR15	15.7062	15.7062	CR15	2.95236	0.0295236	CR15	303.70611	303.70611	CR15	798.88068	798.88068	CR15	1.84437	0.0184437	CR15
	131.35297	131.35297	CR16	10.73301	10.73301	CR16	2.08667	0.0208667	CR16	233.01973	233.01973	CR16	481.59439	481.59439	CR16	1.29813	0.0129813	CR16
	155.34806	155.34806	CR17	11.10577	11.10577	CR17	2.10906	0.0210906	CR17	80.93677	80.93677	CR17	179.89095	179.89095	CR17	1.32079	0.0132079	CR17
MAX SR	**1694.69**	**1694.69**	**SR48**	**178.46**	**178.46**	**SR48**	**29.21**	**0.29**	**SR48**	**541.04**	**541.04**	**SR64**	**2961.10**	**2961.10**	**SR48**	**19.12**	**1.91E-01**	**SR48**
MAX CR	**1560.46**	**1560.46**	**CR11**	**170.55**	**170.55**	**CR11**	**27.77**	**0.28**	**CR11**	**422.70**	**422.70**	**CR14**	**2222.60**	**2222.60**	**CR11**	**18.20**	**1.82E-01**	**CR11**
MAX Conc.	**1694.69**	**1694.69**	**SR48**	**178.46**	**178.46**	**SR48**	**29.21**	**0.29**	**SR48**	**541.04**	**541.04**	**SR64**	**2961.10**	**2961.10**	**SR48**	**19.12**	**1.91E-01**	**SR48**

Air Quality Impact Assessment
Appendix J
Future No Build Condition

								Maximum Concentration Results (1-hour)		
1000			100			1000				100000
1,3-Butadiene		Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	30 -MI	Benzo(a)pyrene (10^5)
0.21096	0.00021096	SR1	36.17591	0.3617591	SR1	299.80919	0.29980919	SR1	0.364026785	1.10473
0.18759	0.00018759	SR2	32.14444	0.3214444	SR2	266.29521	0.26629521	SR2	0.323334282	1.00571
0.19195	0.00019195	SR3	33.00245	0.3300245	SR3	273.87278	0.27387278	SR3	0.332534928	0.92116
0.18817	0.00018817	SR4	32.295	0.32295	SR4	267.7629	0.2677629	SR4	0.325116343	0.95813
0.17234	0.00017234	SR5	29.60643	0.2960643	SR5	245.58865	0.24558865	SR5	0.298192482	0.85059
0.1581	0.0001581	SR6	27.25567	0.2725567	SR6	226.49445	0.22649445	SR6	0.275008403	0.68866
0.18215	0.00018215	SR7	31.41792	0.3141792	SR7	261.15208	0.26115208	SR7	0.31708952	0.77526
0.15406	0.00015406	SR8	26.55787	0.2655787	SR8	220.68845	0.22068845	SR8	0.267958787	0.67097
0.14698	0.00014698	SR9	25.33374	0.2533374	SR9	210.50005	0.21050005	SR9	0.255588084	0.6439
0.13848	0.00013848	SR10	23.86266	0.2386266	SR10	198.25398	0.19825398	SR10	0.240718968	0.61189
0.11949	0.00011949	SR11	20.5671	0.205671	SR11	170.77954	0.17077954	SR11	0.207359644	0.55508
0.11052	0.00011052	SR12	19.00041	0.1900041	SR12	157.66785	0.15766785	SR12	0.191439497	0.53227
0.1115	0.0001115	SR13	19.17932	0.1917932	SR13	159.19845	0.15919845	SR13	0.193297944	0.52638
0.18119	0.00018119	SR14	31.22307	0.3122307	SR14	259.4088	0.2594088	SR14	0.314972838	0.79978
0.18673	0.00018673	SR15	32.1739	0.321739	SR15	267.28866	0.26728866	SR15	0.324540524	0.82884
0.19231	0.00019231	SR16	33.13571	0.3313571	SR16	275.28099	0.27528099	SR16	0.33424477	0.85316
0.18258	0.00018258	SR17	31.45187	0.3145187	SR17	261.26315	0.26126315	SR17	0.31722438	0.81901
0.18096	0.00018096	SR18	31.16845	0.3116845	SR18	258.89006	0.25889006	SR18	0.314342986	0.81379
0.18362	0.00018362	SR19	31.62302	0.3162302	SR19	262.6545	0.2626545	SR19	0.31891375	0.82833
0.20772	0.00020772	SR20	35.82196	0.3582196	SR20	297.73374	0.29773374	SR20	0.361506784	0.89001
0.19219	0.00019219	SR21	33.15342	0.3315342	SR21	275.59221	0.27559221	SR21	0.334622652	0.81469
0.19137	0.00019137	SR22	32.98997	0.3298997	SR22	274.14311	0.27414311	SR22	0.332863162	0.83211
0.24131	0.00024131	SR23	41.64596	0.4164596	SR23	346.27269	0.34627269	SR23	0.420442529	1.00317
0.17602	0.00017602	SR24	30.35004	0.3035004	SR24	252.22898	0.25222898	SR24	0.306255137	0.78912
0.2366	0.0002366	SR25	40.82913	0.4082913	SR25	339.4651	0.3394651	SR25	0.412176788	0.98728
0.21829	0.00021829	SR26	37.65547	0.3765547	SR26	313.01555	0.31301555	SR26	0.38006188	0.9256
0.28516	0.00028516	SR27	49.22358	0.4922358	SR27	409.32001	0.40932001	SR27	0.496994262	1.17579
0.27955	0.00027955	SR28	48.24529	0.4824529	SR28	401.13886	0.40113886	SR28	0.487060752	1.16337
0.43437	0.00043437	SR29	75.0133	0.750133	SR29	623.91467	0.62391467	SR29	0.757554001	1.7587
0.42734	0.00042734	SR30	73.78552	0.7378552	SR30	613.64527	0.61364527	SR30	0.745084948	1.74355
0.47388	0.00047388	SR31	81.81858	0.8181858	SR31	680.44042	0.68044042	SR31	0.826187277	1.93638
0.26007	0.00026007	SR32	44.87943	0.4487943	SR32	373.13413	0.37313413	SR32	0.453057552	1.08671
0.26556	0.00026556	SR33	45.82432	0.4582432	SR33	380.98678	0.38098678	SR33	0.462592199	1.11039
0.223	0.000223	SR34	38.47738	0.3847738	SR34	319.88789	0.31988789	SR34	0.38840624	0.93612
0.21517	0.00021517	SR35	37.12347	0.3712347	SR35	308.6194	0.3086194	SR35	0.374724097	0.90615
0.1759	0.0001759	SR36	30.34285	0.3034285	SR36	252.22827	0.25222827	SR36	0.306254275	0.74579
0.63294	0.00063294	SR37	109.03302	1.0903302	SR37	905.71804	0.90571804	SR37	1.099718211	2.82955
0.79326	0.00079326	SR38	136.7064	1.367064	SR38	1135.8341	1.1358341	SR38	1.379123954	3.49122
0.58809	0.00058809	SR39	101.13139	1.0113139	SR39	839.33792	0.83933792	SR39	1.019119809	2.80069
0.50277	0.00050277	SR40	86.40848	0.8640848	SR40	716.93083	0.71693083	SR40	0.870493746	2.44388
0.47262	0.00047262	SR41	81.21928	0.8121928	SR41	673.84092	0.67384092	SR41	0.818174198	2.30544
0.65686	0.00065686	SR42	113.21107	1.1321107	SR42	940.66909	0.94066909	SR42	1.142155597	2.87993
1.82508	0.00182508	SR43	315.36294	3.1536294	SR43	2623.75067	2.62375067	SR43	3.185744641	7.21464
1.81002	0.00181002	SR44	312.65638	3.1265638	SR44	2600.79608	2.60079608	SR44	3.157873296	7.25632
0.80995	0.00080995	SR45	139.41433	1.3941433	SR45	1157.61946	1.15761946	SR45	1.405575626	3.72967
0.56081	0.00056081	SR46	96.4103	0.964103	SR46	800.03061	0.80003061	SR46	0.971393074	2.69953
0.45764	0.00045764	SR47	78.5731	0.785731	SR47	651.58093	0.65158093	SR47	0.791146232	2.30288
3.0242	0.0030242	SR48	522.77508	5.2277508	SR48	4350.26762	4.35026762	SR48	5.28207269	11.74774
0.98128	0.00098128	SR49	169.28258	1.6928258	SR49	1407.22444	1.40722444	SR49	1.708644716	4.1502
0.59185	0.00059185	SR50	101.81043	1.0181043	SR50	845.10834	0.84510834	SR50	1.026126223	2.78754
0.4205	0.0004205	SR51	72.18905	0.7218905	SR51	598.60879	0.59860879	SR51	0.726827731	2.12319
0.36007	0.00036007	SR52	61.73496	0.6173496	SR52	511.58613	0.51158613	SR52	0.621165262	1.89527
0.3592	0.0003592	SR53	61.53686	0.6153686	SR53	509.73221	0.50973221	SR53	0.618914242	1.93944
0.41865	0.00041865	SR54	71.92616	0.7192616	SR54	596.661	0.596661	SR54	0.724462734	2.06038
0.58674	0.00058674	SR55	101.03813	1.0103813	SR55	839.15214	0.83915214	SR55	1.018894236	2.65856
1.84019	0.00184019	SR56	317.98626	3.1798626	SR56	2645.62975	2.64562975	SR56	3.212310108	7.26193

Air Quality Impact Assessment
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								Maximum Concentration Results (1-hour)		
1000			100			1000				100000
1,3-Butadiene		Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	30 -MI	Benzo(a)pyrene (10^5)
1.29661	0.00129661	SR57	223.91012	2.2391012	SR57	1862.30601	1.86230601	SR57	2.261202431	5.26301
0.60142	0.00060142	SR58	103.49372	1.0349372	SR58	859.24199	0.85924199	SR58	1.043287229	2.79542
0.48945	0.00048945	SR59	84.20234	0.8420234	SR59	698.97497	0.69897497	SR59	0.848691833	2.29881
0.52196	0.00052196	SR60	89.80454	0.8980454	SR60	745.51955	0.74551955	SR60	0.905206024	2.44227
0.6284	0.0006284	SR61	108.16384	1.0816384	SR61	898.12699	0.89812699	SR61	1.090501197	2.89854
0.62211	0.00062211	SR62	107.22164	1.0722164	SR62	890.89897	0.89089897	SR62	1.081724972	2.72852
0.4147	0.0004147	SR63	71.57539	0.7157539	SR63	595.14709	0.59514709	SR63	0.722624552	1.71919
0.99328	0.00099328	SR64	171.61227	1.7161227	SR64	1427.69037	1.42769037	SR64	1.733494344	3.94647
0.51845	0.00051845	SR65	89.45472	0.8945472	SR65	743.69751	0.74369751	SR65	0.902993712	2.17606
0.33556	0.00033556	SR66	57.84569	0.5784569	SR66	480.68552	0.48068552	SR66	0.583645899	1.46046
0.29153	0.00029153	SR67	50.01481	0.5001481	SR67	414.5931	0.4145931	SR67	0.503396821	1.5046
0.32995	0.00032995	SR68	56.7279	0.567279	SR68	470.75789	0.47075789	SR68	0.571591822	1.58385
0.68704	0.00068704	SR69	118.66247	1.1866247	SR69	987.02238	0.98702238	SR69	1.198437525	2.87982
0.31165	0.00031165	SR70	53.63803	0.5363803	SR70	445.35464	0.44535464	SR70	0.540747326	1.44108
0.20971	0.00020971	SR71	35.93758	0.3593758	SR71	297.73398	0.29773398	SR71	0.361507075	1.1208
0.20353	0.00020353	SR72	34.86417	0.3486417	SR72	288.77924	0.28877924	SR72	0.350634276	1.10198
0.30126	0.00030126	SR73	51.79628	0.5179628	SR73	429.83879	0.42983879	SR73	0.52190806	1.44472
0.89184	0.00089184	SR74	154.09979	1.5409979	SR74	1282.05469	1.28205469	SR74	1.556664246	3.53056
0.19294	0.00019294	SR75	33.04656	0.3304656	SR75	273.70852	0.27370852	SR75	0.332335485	1.0482
0.15173	0.00015173	SR76	25.99713	0.2599713	SR76	215.35699	0.21535699	SR76	0.261485356	0.81619
0.16632	0.00016632	SR77	28.49435	0.2849435	SR77	236.03423	0.23603423	SR77	0.286591555	0.89683
0.19706	0.00019706	SR78	33.83451	0.3383451	SR78	280.5832	0.2805832	SR78	0.340682686	0.99058
0.343	0.000343	SR79	59.07513	0.5907513	SR79	490.67803	0.49067803	SR79	0.595778754	1.54463
0.20916	0.00020916	SR80	35.92239	0.3592239	SR80	297.93811	0.29793811	SR80	0.361754929	1.04203
0.41134	0.00041134	SR81	70.86005	0.7086005	SR81	588.62354	0.58862354	SR81	0.714703691	1.83853
0.19054	0.00019054	SR82	32.62381	0.3262381	SR82	270.15661	0.27015661	SR82	0.328022774	1.04945
0.23209	0.00023209	SR83	39.86446	0.3986446	SR83	330.65713	0.33065713	SR83	0.401482196	1.15077
0.38743	0.00038743	SR84	66.79665	0.6679665	SR84	555.10874	0.55510874	SR84	0.674010192	1.67635
1.32711	0.00132711	SR85	229.36672	2.2936672	SR85	1908.49367	1.90849367	SR85	2.317283251	5.19682
0.5252	0.0005252	SR86	90.60433	0.9060433	SR86	753.18937	0.75318937	SR86	0.91451868	2.21959
0.27787	0.00027787	SR87	47.7544	0.477544	SR87	396.21107	0.39621107	SR87	0.481077454	1.3523
0.19699	0.00019699	SR88	33.82177	0.3382177	SR88	280.47203	0.28047203	SR88	0.340547704	0.99147
0.15432	0.00015432	SR89	26.44208	0.2644208	SR89	219.04573	0.21904573	SR89	0.265964205	0.83109
0.14345	0.00014345	SR90	24.50626	0.2450626	SR90	202.70092	0.20270092	SR90	0.24611842	0.84195
0.1317	0.0001317	SR91	22.49335	0.2249335	SR91	186.02694	0.18602694	SR91	0.225872959	0.77858
0.13142	0.00013142	SR92	22.51563	0.2251563	SR92	186.50843	0.18650843	SR92	0.226457582	0.7206
0.15585	0.00015585	SR93	26.71898	0.2671898	SR93	221.40368	0.22140368	SR93	0.268827216	0.82787
0.24077	0.00024077	SR94	41.39197	0.4139197	SR94	343.47984	0.34347984	SR94	0.417051465	1.15862
0.54176	0.00054176	SR95	93.45607	0.9345607	SR95	776.87457	0.77687457	SR95	0.943277129	2.29449
0.93389	0.00093389	SR96	161.23891	1.6123891	SR96	1340.91501	1.34091501	SR96	1.628132146	3.82221
0.19192	0.00019192	CR1	32.93414	0.3293414	CR1	273.03919	0.27303919	CR1	0.331522788	0.98252
0.12362	0.00012362	CR2	21.24232	0.2124232	CR2	176.23246	0.17623246	CR2	0.213980551	0.60434
0.25499	0.00025499	CR3	43.89324	0.4389324	CR3	364.47771	0.36447771	CR3	0.442546971	1.17129
0.26183	0.00026183	CR4	45.06724	0.4506724	CR4	374.20785	0.37420785	CR4	0.454361257	1.20699
0.60147	0.00060147	CR5	103.8237	1.038237	CR5	863.34136	0.86334136	CR5	1.048264663	2.48175
0.32432	0.00032432	CR6	55.5592	0.555592	CR6	460.20589	0.46020589	CR6	0.558779637	1.75371
0.54307	0.00054307	CR7	93.39067	0.9339067	CR7	775.09582	0.77509582	CR7	0.94111738	2.58664
0.33303	0.00033303	CR8	57.50181	0.5750181	CR8	478.21857	0.47821857	CR8	0.580650541	1.35912
0.74211	0.00074211	CR9	128.06864	1.2806864	CR9	1064.81449	1.06481449	CR9	1.292892307	3.09322
0.17541	0.00017541	CR10	30.19513	0.3019513	CR10	250.7348	0.2507348	CR10	0.304440911	0.80973
2.88885	0.00288885	CR11	499.46036	4.9946036	CR11	4156.60633	4.15660633	CR11	5.046930142	11.14033
0.32568	0.00032568	CR12	56.15929	0.5615929	CR12	466.74128	0.46674128	CR12	0.566714875	1.40143
1.54741	0.00154741	CR13	267.37569	2.6737569	CR13	2224.47737	2.22447737	CR13	2.700949043	6.12391
0.26899	0.00026899	CR14	46.17801	0.4617801	CR14	382.91722	0.38291722	CR14	0.46493613	1.35861
0.26928	0.00026928	CR15	46.35268	0.4635268	CR15	384.89946	0.38489946	CR15	0.467342955	1.26925
0.18488	0.00018488	CR16	31.7717	0.317717	CR16	263.59486	0.26359486	CR16	0.320055531	0.90211
0.19085	0.00019085	CR17	32.82511	0.3282511	CR17	272.45303	0.27245303	CR17	0.330811075	0.90389
3.02	**3.02E-03**	**SR48**	**522.78**	**5.23**	**SR48**	**4350.27**	**4.35**	**SR48**		**11.75**
2.89	**2.89E-03**	**CR11**	**499.46**	**4.99**	**CR11**	**4156.61**	**4.16**	**CR11**		**11.14**
3.02	**3.02E-03**	**SR48**	**522.78**	**5.23**	**SR48**	**4350.27**	**4.35**	**SR48**	**5.28207269**	**11.75**

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		1000		
Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID
1.10473E-05	SR1	1.12532	0.00112532	SR1
1.00571E-05	SR2	1.00277	0.00100277	SR2
9.2116E-06	SR3	1.01653	0.00101653	SR3
9.5813E-06	SR4	1.00136	0.00100136	SR4
8.5059E-06	SR5	0.91476	0.00091476	SR5
6.8866E-06	SR6	0.83089	0.00083089	SR6
7.7526E-06	SR7	0.95585	0.00095585	SR7
6.7097E-06	SR8	0.80982	0.00080982	SR8
0.000006439	SR9	0.77294	0.00077294	SR9
6.1189E-06	SR10	0.72869	0.00072869	SR10
5.5508E-06	SR11	0.63067	0.00063067	SR11
5.3227E-06	SR12	0.58547	0.00058547	SR12
5.2638E-06	SR13	0.58971	0.00058971	SR13
7.9978E-06	SR14	0.95335	0.00095335	SR14
8.2884E-06	SR15	0.98293	0.00098293	SR15
8.5316E-06	SR16	1.01226	0.00101226	SR16
8.1901E-06	SR17	0.96162	0.00096162	SR17
8.1379E-06	SR18	0.95348	0.00095348	SR18
8.2833E-06	SR19	0.9677	0.0009677	SR19
8.9001E-06	SR20	1.09055	0.00109055	SR20
8.1469E-06	SR21	1.00826	0.00100826	SR21
8.3211E-06	SR22	1.00579	0.00100579	SR22
1.00317E-05	SR23	1.26417	0.00126417	SR23
7.8912E-06	SR24	0.92466	0.00092466	SR24
9.8728E-06	SR25	1.23982	0.00123982	SR25
0.000009256	SR26	1.14519	0.00114519	SR26
1.17579E-05	SR27	1.49303	0.00149303	SR27
1.16337E-05	SR28	1.46464	0.00146464	SR28
0.000017587	SR29	2.27141	0.00227141	SR29
1.74355E-05	SR30	2.23582	0.00223582	SR30
1.93638E-05	SR31	2.47959	0.00247959	SR31
1.08671E-05	SR32	1.36298	0.00136298	SR32
1.11039E-05	SR33	1.39177	0.00139177	SR33
9.3612E-06	SR34	1.16907	0.00116907	SR34
9.0615E-06	SR35	1.12828	0.00112828	SR35
7.4579E-06	SR36	0.9228	0.0009228	SR36
2.82955E-05	SR37	3.33344	0.00333344	SR37
3.49122E-05	SR38	4.17289	0.00417289	SR38
2.80069E-05	SR39	3.11244	0.00311244	SR39
2.44388E-05	SR40	2.66527	0.00266527	SR40
2.30544E-05	SR41	2.50618	0.00250618	SR41
2.87993E-05	SR42	3.45439	0.00345439	SR42
7.21464E-05	SR43	9.52829	0.00952829	SR43
7.25632E-05	SR44	9.45862	0.00945862	SR44
3.72967E-05	SR45	4.27532	0.00427532	SR45
2.69953E-05	SR46	2.97059	0.00297059	SR46
2.30288E-05	SR47	2.433	0.002433	SR47
0.000117477	SR48	15.77024	0.01577024	SR48
0.000041502	SR49	5.14706	0.00514706	SR49
2.78754E-05	SR50	3.1296	0.0031296	SR50
2.12319E-05	SR51	2.23618	0.00223618	SR51
1.89527E-05	SR52	1.92163	0.00192163	SR52
1.93944E-05	SR53	1.92134	0.00192134	SR53
2.06038E-05	SR54	2.22161	0.00222161	SR54
2.65856E-05	SR55	3.09327	0.00309327	SR55
7.26193E-05	SR56	9.60607	0.00960607	SR56

Maximum Concentration Results (24-hour)

Multiplier	1			1			100			1		
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID
	108.77917	108.77917	SR1	3.06768	3.06768	SR1	0.70541	0.0070541	SR1	52.05872	52.05872	SR1
	98.96621	98.96621	SR2	2.95296	2.95296	SR2	0.65606	0.0065606	SR2	44.35299	44.35299	SR2
	79.3445	79.3445	SR3	2.86935	2.86935	SR3	0.59611	0.0059611	SR3	37.23068	37.23068	SR3
	75.14789	75.14789	SR4	2.7579	2.7579	SR4	0.56341	0.0056341	SR4	32.6922	32.6922	SR4
	66.64537	66.64537	SR5	2.39883	2.39883	SR5	0.48482	0.0048482	SR5	29.03628	29.03628	SR5
	72.93937	72.93937	SR6	2.90142	2.90142	SR6	0.53636	0.0053636	SR6	27.84769	27.84769	SR6
	70.9029	70.9029	SR7	3.10527	3.10527	SR7	0.56568	0.0056568	SR7	30.48186	30.48186	SR7
	71.82727	71.82727	SR8	2.80313	2.80313	SR8	0.51942	0.0051942	SR8	28.4131	28.4131	SR8
	70.9822	70.9822	SR9	2.64119	2.64119	SR9	0.49298	0.0049298	SR9	28.8286	28.8286	SR9
	69.72526	69.72526	SR10	2.49516	2.49516	SR10	0.47005	0.0047005	SR10	29.41797	29.41797	SR10
	60.91246	60.91246	SR11	2.14511	2.14511	SR11	0.41908	0.0041908	SR11	34.31231	34.31231	SR11
	60.60741	60.60741	SR12	2.08449	2.08449	SR12	0.40984	0.0040984	SR12	33.6929	33.6929	SR12
	60.65429	60.65429	SR13	1.98547	1.98547	SR13	0.39455	0.0039455	SR13	32.68249	32.68249	SR13
	61.36901	61.36901	SR14	1.88672	1.88672	SR14	0.37744	0.0037744	SR14	31.63725	31.63725	SR14
	61.30435	61.30435	SR15	1.89196	1.89196	SR15	0.37712	0.0037712	SR15	30.95256	30.95256	SR15
	68.9753	68.9753	SR16	2.19626	2.19626	SR16	0.42712	0.0042712	SR16	29.10729	29.10729	SR16
	68.97881	68.97881	SR17	2.21186	2.21186	SR17	0.42985	0.0042985	SR17	29.31107	29.31107	SR17
	69.63061	69.63061	SR18	2.23982	2.23982	SR18	0.43527	0.0043527	SR18	29.70391	29.70391	SR18
	64.4505	64.4505	SR19	2.11421	2.11421	SR19	0.40217	0.0040217	SR19	29.88532	29.88532	SR19
	73.16456	73.16456	SR20	2.43679	2.43679	SR20	0.46669	0.0046669	SR20	29.94971	29.94971	SR20
	65.72639	65.72639	SR21	2.22562	2.22562	SR21	0.41932	0.0041932	SR21	30.39053	30.39053	SR21
	76.10607	76.10607	SR22	2.50271	2.50271	SR22	0.47764	0.0047764	SR22	29.895	29.895	SR22
	68.5233	68.5233	SR23	2.52602	2.52602	SR23	0.46765	0.0046765	SR23	31.17739	31.17739	SR23
	78.97837	78.97837	SR24	2.72145	2.72145	SR24	0.51225	0.0051225	SR24	28.42393	28.42393	SR24
	75.6557	75.6557	SR25	2.91946	2.91946	SR25	0.53294	0.0053294	SR25	29.57592	29.57592	SR25
	84.51035	84.51035	SR26	3.25172	3.25172	SR26	0.59737	0.0059737	SR26	29.04158	29.04158	SR26
	83.55587	83.55587	SR27	3.36246	3.36246	SR27	0.60574	0.0060574	SR27	30.4434	30.4434	SR27
	95.2293	95.2293	SR28	3.97444	3.97444	SR28	0.71488	0.0071488	SR28	31.62767	31.62767	SR28
	97.83738	97.83738	SR29	4.16723	4.16723	SR29	0.74128	0.0074128	SR29	35.00199	35.00199	SR29
	123.601	123.601	SR30	5.74036	5.74036	SR30	1.0084	0.010084	SR30	37.4116	37.4116	SR30
	114.25646	114.25646	SR31	4.12439	4.12439	SR31	0.75271	0.0075271	SR31	44.63552	44.63552	SR31
	72.39826	72.39826	SR32	3.25109	3.25109	SR32	0.57678	0.0057678	SR32	30.43149	30.43149	SR32
	71.44237	71.44237	SR33	2.98296	2.98296	SR33	0.52534	0.0052534	SR33	25.16751	25.16751	SR33
	61.84628	61.84628	SR34	2.6743	2.6743	SR34	0.47369	0.0047369	SR34	25.27602	25.27602	SR34
	58.13213	58.13213	SR35	2.36941	2.36941	SR35	0.41872	0.0041872	SR35	21.25743	21.25743	SR35
	48.17486	48.17486	SR36	1.99062	1.99062	SR36	0.35259	0.0035259	SR36	18.93133	18.93133	SR36
	179.20251	179.20251	SR37	7.49286	7.49286	SR37	1.37614	0.0137614	SR37	55.17329	55.17329	SR37
	230.72202	230.72202	SR38	10.32757	10.32757	SR38	1.8455	0.018455	SR38	60.67533	60.67533	SR38
	163.134	163.134	SR39	6.14273	6.14273	SR39	1.18853	0.0118853	SR39	65.49934	65.49934	SR39
	151.18795	151.18795	SR40	5.07027	5.07027	SR40	1.00521	0.0100521	SR40	62.07473	62.07473	SR40
	166.99423	166.99423	SR41	5.85627	5.85627	SR41	1.10144	0.0110144	SR41	60.23254	60.23254	SR41
	220.72012	220.72012	SR42	9.381	9.381	SR42	1.66898	0.0166898	SR42	60.33406	60.33406	SR42
	626.7318	626.7318	SR43	30.32227	30.32227	SR43	5.05074	0.0505074	SR43	58.07923	58.07923	SR43
	738.41096	738.41096	SR44	28.27031	28.27031	SR44	4.81386	0.0481386	SR44	85.28207	85.28207	SR44
	286.10888	286.10888	SR45	10.46022	10.46022	SR45	1.94735	0.0194735	SR45	90.44467	90.44467	SR45
	177.49926	177.49926	SR46	6.25621	6.25621	SR46	1.22229	0.0122229	SR46	64.90033	64.90033	SR46
	154.81484	154.81484	SR47	4.69172	4.69172	SR47	0.96686	0.0096686	SR47	63.4974	63.4974	SR47
	1515.93546	1515.93546	SR48	56.41287	56.41287	SR48	9.3205	0.093205	SR48	65.69426	65.69426	SR48
	367.37251	367.37251	SR49	14.12835	14.12835	SR49	2.50038	0.0250038	SR49	70.48004	70.48004	SR49
	201.2114	201.2114	SR50	7.5365	7.5365	SR50	1.42618	0.0142618	SR50	56.79128	56.79128	SR50
	158.1335	158.1335	SR51	4.77361	4.77361	SR51	0.97495	0.0097495	SR51	55.6526	55.6526	SR51
	148.02377	148.02377	SR52	3.96875	3.96875	SR52	0.84738	0.0084738	SR52	55.45478	55.45478	SR52
	183.27338	183.27338	SR53	3.92339	3.92339	SR53	0.9044	0.009044	SR53	75.36527	75.36527	SR53
	152.05876	152.05876	SR54	4.50769	4.50769	SR54	0.92759	0.0092759	SR54	54.72229	54.72229	SR54
	184.28855	184.28855	SR55	7.31299	7.31299	SR55	1.36312	0.0136312	SR55	53.4884	53.4884	SR55
	625.77769	625.77769	SR56	31.49519	31.49519	SR56	5.24742	0.0524742	SR56	49.07077	49.07077	SR56

Air Quality Impact Assessment
Appendix J
Future No Build Condition

		1000			Maximum Concentration Results (24-hour)											
	Multiplier	1			1			100			1					
	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID
	5.26301E-05	SR57	6.78115	0.00678115	SR57	413.60502	413.60502	SR57	17.30904	17.30904	SR57	2.98108	0.0298108	SR57	48.14411	48.14411	SR57
	2.79542E-05	SR58	3.17688	0.00317688	SR58	211.47857	211.47857	SR58	8.02859	8.02859	SR58	1.49406	0.0149406	SR58	50.90868	50.90868	SR58
	2.29881E-05	SR59	2.58757	0.00258757	SR59	171.54092	171.54092	SR59	5.35275	5.35275	SR59	1.06259	0.0106259	SR59	52.17529	52.17529	SR59
	2.44227E-05	SR60	2.75861	0.00275861	SR60	161.34888	161.34888	SR60	5.41978	5.41978	SR60	1.0825	0.010825	SR60	54.55755	54.55755	SR60
	2.89854E-05	SR61	3.31743	0.00331743	SR61	201.99149	201.99149	SR61	6.87219	6.87219	SR61	1.35263	0.0135263	SR61	73.25393	73.25393	SR61
	2.72852E-05	SR62	3.27175	0.00327175	SR62	184.34866	184.34866	SR62	7.42562	7.42562	SR62	1.37455	0.0137455	SR62	56.86304	56.86304	SR62
	1.71919E-05	SR63	2.17211	0.00217211	SR63	121.08815	121.08815	SR63	6.38478	6.38478	SR63	1.12548	0.0112548	SR63	58.06623	58.06623	SR63
	3.94647E-05	SR64	5.18744	0.00518744	SR64	520.29991	520.29991	SR64	19.819	19.819	SR64	3.32169	0.0332169	SR64	162.23599	162.23599	SR64
	2.17606E-05	SR65	2.71789	0.00271789	SR65	159.97148	159.97148	SR65	6.99423	6.99423	SR65	1.22124	0.0122124	SR65	98.4597	98.4597	SR65
	1.46046E-05	SR66	1.76375	0.00176375	SR66	114.31961	114.31961	SR66	4.16855	4.16855	SR66	0.7541	0.007541	SR66	80.61403	80.61403	SR66
	0.000015046	SR67	1.55322	0.00155322	SR67	126.01534	126.01534	SR67	3.37832	3.37832	SR67	0.68348	0.0068348	SR67	115.74625	115.74625	SR67
	1.58385E-05	SR68	1.74737	0.00174737	SR68	113.58489	113.58489	SR68	3.74522	3.74522	SR68	0.71683	0.0071683	SR68	79.38871	79.38871	SR68
	2.87982E-05	SR69	3.59143	0.00359143	SR69	345.35778	345.35778	SR69	12.48332	12.48332	SR69	2.12296	0.0212296	SR69	79.60422	79.60422	SR69
	1.44108E-05	SR70	1.64559	0.00164559	SR70	142.96682	142.96682	SR70	4.86549	4.86549	SR70	0.9315	0.009315	SR70	92.56433	92.56433	SR70
	0.000011208	SR71	1.12068	0.00112068	SR71	83.60935	83.60935	SR71	2.25437	2.25437	SR71	0.47667	0.0047667	SR71	67.70402	67.70402	SR71
	1.10198E-05	SR72	1.08892	0.00108892	SR72	84.99503	84.99503	SR72	2.39946	2.39946	SR72	0.5082	0.005082	SR72	70.69819	70.69819	SR72
	1.44472E-05	SR73	1.59529	0.00159529	SR73	112.89341	112.89341	SR73	4.09233	4.09233	SR73	0.77507	0.0077507	SR73	66.24139	66.24139	SR73
	3.53056E-05	SR74	4.65654	0.00465654	SR74	487.49748	487.49748	SR74	17.31768	17.31768	SR74	2.91406	0.0291406	SR74	76.27228	76.27228	SR74
	0.000010482	SR75	1.03258	0.00103258	SR75	88.30101	88.30101	SR75	2.50005	2.50005	SR75	0.49621	0.0049621	SR75	69.43731	69.43731	SR75
	8.1619E-06	SR76	0.81133	0.00081133	SR76	83.14365	83.14365	SR76	2.06159	2.06159	SR76	0.43683	0.0043683	SR76	63.54314	63.54314	SR76
	8.9683E-06	SR77	0.88953	0.00088953	SR77	83.31445	83.31445	SR77	2.16452	2.16452	SR77	0.46909	0.0046909	SR77	68.2992	68.2992	SR77
	9.9058E-06	SR78	1.04755	0.00104755	SR78	88.68539	88.68539	SR78	2.55664	2.55664	SR78	0.52134	0.0052134	SR78	64.23591	64.23591	SR78
	1.54463E-05	SR79	1.80744	0.00180744	SR79	137.97532	137.97532	SR79	4.9471	4.9471	SR79	0.90842	0.0090842	SR79	73.60937	73.60937	SR79
	1.04203E-05	SR80	1.11107	0.00111107	SR80	94.35258	94.35258	SR80	2.7232	2.7232	SR80	0.55189	0.0055189	SR80	72.26207	72.26207	SR80
	1.83853E-05	SR81	2.16634	0.00216634	SR81	119.45053	119.45053	SR81	5.74129	5.74129	SR81	1.04566	0.0104566	SR81	57.58906	57.58906	SR81
	1.04945E-05	SR82	1.02077	0.00102077	SR82	115.32472	115.32472	SR82	2.57749	2.57749	SR82	0.61709	0.0061709	SR82	66.4384	66.4384	SR82
	1.15077E-05	SR83	1.23234	0.00123234	SR83	110.70027	110.70027	SR83	2.94267	2.94267	SR83	0.60603	0.0060603	SR83	50.52605	50.52605	SR83
	1.67635E-05	SR84	2.03549	0.00203549	SR84	134.88651	134.88651	SR84	4.56165	4.56165	SR84	0.82803	0.0082803	SR84	41.31317	41.31317	SR84
	5.19682E-05	SR85	6.92413	0.00692413	SR85	507.5993	507.5993	SR85	24.03195	24.03195	SR85	3.97708	0.0397708	SR85	44.0818	44.0818	SR85
	2.21959E-05	SR86	2.75464	0.00275464	SR86	183.75522	183.75522	SR86	7.6299	7.6299	SR86	1.3607	0.013607	SR86	38.91953	38.91953	SR86
	0.000013523	SR87	1.47318	0.00147318	SR87	111.42168	111.42168	SR87	3.92924	3.92924	SR87	0.76854	0.0076854	SR87	45.32023	45.32023	SR87
	9.9147E-06	SR88	1.04731	0.00104731	SR88	78.2293	78.2293	SR88	2.67922	2.67922	SR88	0.53962	0.0053962	SR88	34.53167	34.53167	SR88
	8.3109E-06	SR89	0.82514	0.00082514	SR89	72.17448	72.17448	SR89	2.0796	2.0796	SR89	0.44491	0.0044491	SR89	33.99363	33.99363	SR89
	8.4195E-06	SR90	0.77328	0.00077328	SR90	93.05371	93.05371	SR90	1.9254	1.9254	SR90	0.49773	0.0049773	SR90	51.17574	51.17574	SR90
	7.7858E-06	SR91	0.71044	0.00071044	SR91	84.54661	84.54661	SR91	1.79059	1.79059	SR91	0.44446	0.0044446	SR91	42.99598	42.99598	SR91
	0.000007206	SR92	0.70291	0.00070291	SR92	71.53979	71.53979	SR92	1.74184	1.74184	SR92	0.39783	0.0039783	SR92	33.87379	33.87379	SR92
	8.2787E-06	SR93	0.832	0.000832	SR93	91.73234	91.73234	SR93	2.06477	2.06477	SR93	0.50324	0.0050324	SR93	47.7906	47.7906	SR93
	1.15862E-05	SR94	1.27533	0.00127533	SR94	106.33229	106.33229	SR94	2.84407	2.84407	SR94	0.5789	0.005789	SR94	45.18898	45.18898	SR94
	2.29449E-05	SR95	2.84193	0.00284193	SR95	190.56839	190.56839	SR95	6.33413	6.33413	SR95	1.14833	0.0114833	SR95	50.28091	50.28091	SR95
	3.82221E-05	SR96	4.88708	0.00488708	SR96	433.99279	433.99279	SR96	17.80549	17.80549	SR96	3.0532	0.030532	SR96	96.12974	96.12974	SR96
	9.8252E-06	CR1	1.02181	0.00102181	CR1	101.88708	101.88708	CR1	2.41223	2.41223	CR1	0.55434	0.0055434	CR1	40.45775	40.45775	CR1
	6.0434E-06	CR2	0.65563	0.00065563	CR2	35.25062	35.25062	CR2	1.66385	1.66385	CR2	0.32459	0.0032459	CR2	14.03534	14.03534	CR2
	1.17129E-05	CR3	1.3457	0.0013457	CR3	54.89103	54.89103	CR3	2.6477	2.6477	CR3	0.49327	0.0049327	CR3	17.66955	17.66955	CR3
	1.20699E-05	CR4	1.3822	0.0013822	CR4	62.74872	62.74872	CR4	3.45174	3.45174	CR4	0.63892	0.0063892	CR4	19.42803	19.42803	CR4
	2.48175E-05	CR5	3.14934	0.00314934	CR5	176.48982	176.48982	CR5	8.58378	8.58378	CR5	1.47376	0.0147376	CR5	51.62753	51.62753	CR5
	1.75371E-05	CR6	1.73501	0.00173501	CR6	101.38454	101.38454	CR6	3.0234	3.0234	CR6	0.66817	0.0066817	CR6	40.2272	40.2272	CR6
	2.58664E-05	CR7	2.87416	0.00287416	CR7	152.5468	152.5468	CR7	5.97474	5.97474	CR7	1.17224	0.0117224	CR7	71.55356	71.55356	CR7
	1.35912E-05	CR8	1.74244	0.00174244	CR8	103.10166	103.10166	CR8	4.34132	4.34132	CR8	0.76397	0.0076397	CR8	36.51082	36.51082	CR8
	3.09322E-05	CR9	3.88851	0.00388851	CR9	279.98696	279.98696	CR9	11.81104	11.81104	CR9	2.07918	0.0207918	CR9	61.83236	61.83236	CR9
	8.0973E-06	CR10	0.92566	0.00092566	CR10	59.57046	59.57046	CR10	2.17893	2.17893	CR10	0.42245	0.0042245	CR10	35.15135	35.15135	CR10
	0.000111403	CR11	15.05717	0.01505717	CR11	1383.29685	1383.29685	CR11	59.4729	59.4729	CR11	9.72224	0.0972224	CR11	92.28087	92.28087	CR11
	1.40143E-05	CR12	1.7104	0.0017104	CR12	87.73309	87.73309	CR12	4.1277	4.1277	CR12	0.71683	0.0071683	CR12	25.36065	25.36065	CR12
	6.12391E-05	CR13	8.07925	0.00807925	CR13	504.75835	504.75835	CR13	22.42823	22.42823	CR13	3.72002	0.0372002	CR13	63.58141	63.58141	CR13
	1.35861E-05	CR14	1.4305	0.0014305	CR14	115.18085	115.18085	CR14	3.52457	3.52457	CR14	0.67326	0.0067326	CR14	101.45991	101.45991	CR14
	1.26925E-05	CR15	1.42152	0.00142152	CR15	120.35016	120.35016	CR15	3.51637	3.51637	CR15	0.69771	0.0069771	CR15	75.44337	75.44337	CR15
	9.0211E-06	CR16	0.98041	0.00098041	CR16	86.86724	86.86724	CR16	2.66627	2.66627	CR16	0.52995	0.0052995	CR16	56.41592	56.41592	CR16
	9.0389E-06	CR17	1.00963	0.00100963	CR17	44.6614	44.6614	CR17	2.44381	2.44381	CR17	0.46263	0.0046263	CR17	16.87897	16.87897	CR17
	1.17E-04	**SR48**	**15.77**	**1.58E-02**	**SR48**	**1515.94**	**1515.94**	**SR48**	**56.41**	**56.41**	**SR48**	**9.32**	**0.09**	**SR48**	**162.24**	**162.24**	**SR64**
	1.11E-04	**CR11**	**15.06**	**1.51E-02**	**CR11**	**1383.30**	**1383.30**	**CR11**	**59.47**	**59.47**	**CR11**	**9.72**	**0.10**	**CR11**	**101.46**	**101.46**	**CR14**
	1.17E-04	**SR48**	**15.77**	**1.58E-02**	**SR48**	**1515.94**	**1515.94**	**SR48**	**59.47**	**59.47**	**CR11**	**9.72**	**0.10**	**CR11**	**162.24**	**162.24**	**SR64**

Air Quality Impact Assessment
Appendix J
Future No Build Condition

												Maximum Concentration Result
1			100			1000			100			1000
PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)
12.60088	12.60088	SR1	0.42003	0.0042003	SR1	0.05383	0.00005383	SR1	9.19027	0.0919027	SR1	75.98814
10.73737	10.73737	SR2	0.394	0.00394	SR2	0.05161	0.00005161	SR2	8.82355	0.0882355	SR2	73.00989
9.01585	9.01585	SR3	0.36425	0.0036425	SR3	0.04977	0.00004977	SR3	8.5322	0.085322	SR3	70.69662
7.91792	7.91792	SR4	0.34581	0.0034581	SR4	0.04775	0.00004775	SR4	8.19123	0.0819123	SR4	67.89396
7.03254	7.03254	SR5	0.29843	0.0029843	SR5	0.04149	0.00004149	SR5	7.11951	0.0711951	SR5	59.02335
6.74877	6.74877	SR6	0.33845	0.0033845	SR6	0.04973	0.00004973	SR6	8.56091	0.0856091	SR6	71.09177
7.38373	7.38373	SR7	0.35847	0.0035847	SR7	0.05314	0.00005314	SR7	9.154	0.09154	SR7	76.03692
6.88512	6.88512	SR8	0.32754	0.0032754	SR8	0.04805	0.00004805	SR8	8.27215	0.0827215	SR8	68.6909
6.98486	6.98486	SR9	0.31022	0.0031022	SR9	0.04531	0.00004531	SR9	7.79783	0.0779783	SR9	64.74373
7.12669	7.12669	SR10	0.29501	0.0029501	SR10	0.04284	0.00004284	SR10	7.37103	0.0737103	SR10	61.18975
8.30883	8.30883	SR11	0.26036	0.0026036	SR11	0.03697	0.00003697	SR11	6.35197	0.0635197	SR11	52.69445
8.15865	8.15865	SR12	0.25417	0.0025417	SR12	0.03595	0.00003595	SR12	6.17506	0.0617506	SR12	51.22066
7.91367	7.91367	SR13	0.24397	0.0024397	SR13	0.03428	0.00003428	SR13	5.88592	0.0588592	SR13	48.81237
7.66035	7.66035	SR14	0.23297	0.0023297	SR14	0.0326	0.0000326	SR14	5.5957	0.055957	SR14	46.39962
7.49478	7.49478	SR15	0.233	0.00233	SR15	0.03267	0.00003267	SR15	5.60987	0.0560987	SR15	46.52037
7.04891	7.04891	SR16	0.26569	0.0026569	SR16	0.03783	0.00003783	SR16	6.50148	0.0650148	SR16	53.93938
7.09817	7.09817	SR17	0.26744	0.0026744	SR17	0.0381	0.0000381	SR17	6.54736	0.0654736	SR17	54.32073
7.19339	7.19339	SR18	0.27082	0.0027082	SR18	0.03858	0.00003858	SR18	6.63008	0.0663008	SR18	55.0071
7.23724	7.23724	SR19	0.25172	0.0025172	SR19	0.03634	0.00003634	SR19	6.24956	0.0624956	SR19	51.87075
7.25334	7.25334	SR20	0.29155	0.0029155	SR20	0.04191	0.00004191	SR20	7.20628	0.0720628	SR20	59.8039
7.35966	7.35966	SR21	0.26317	0.0026317	SR21	0.03822	0.00003822	SR21	6.57483	0.0657483	SR21	54.5801
7.24127	7.24127	SR22	0.29868	0.0029868	SR22	0.04303	0.00004303	SR22	7.39952	0.0739952	SR22	61.41155
7.55106	7.55106	SR23	0.29498	0.0029498	SR23	0.0433	0.0000433	SR23	7.45397	0.0745397	SR23	61.89781
6.88675	6.88675	SR24	0.32158	0.0032158	SR24	0.04673	0.00004673	SR24	8.03909	0.0803909	SR24	66.73658
7.16456	7.16456	SR25	0.33753	0.0033753	SR25	0.04997	0.00004997	SR25	8.60738	0.0860738	SR25	71.49374
7.03661	7.03661	SR26	0.37764	0.0037764	SR26	0.0557	0.0000557	SR26	9.59077	0.0959077	SR26	79.65289
7.37494	7.37494	SR27	0.38512	0.0038512	SR27	0.05748	0.00005748	SR27	9.90538	0.0990538	SR27	82.29437
7.66402	7.66402	SR28	0.45471	0.0045471	SR28	0.06794	0.00006794	SR28	11.70709	0.1170709	SR28	97.26561
8.47923	8.47923	SR29	0.47305	0.0047305	SR29	0.07116	0.00007116	SR29	12.26666	0.1226666	SR29	101.93453
9.06757	9.06757	SR30	0.64591	0.0064591	SR30	0.0979	0.0000979	SR30	16.88458	0.1688458	SR30	140.33923
10.81265	10.81265	SR31	0.47675	0.0047675	SR31	0.0706	0.0000706	SR31	12.15967	0.1215967	SR31	100.99982
7.37478	7.37478	SR32	0.36836	0.0036836	SR32	0.0555	0.0000555	SR32	9.56837	0.0956837	SR32	79.51568
6.10003	6.10003	SR33	0.33624	0.0033624	SR33	0.05089	0.00005089	SR33	8.77536	0.0877536	SR33	72.93481
6.12554	6.12554	SR34	0.30267	0.0030267	SR34	0.04565	0.00004565	SR34	7.87003	0.0787003	SR34	65.40384
5.15203	5.15203	SR35	0.26773	0.0026773	SR35	0.04043	0.00004043	SR35	6.97181	0.0697181	SR35	57.94155
4.58806	4.58806	SR36	0.22529	0.0022529	SR36	0.03398	0.00003398	SR36	5.85809	0.0585809	SR36	48.6836
13.37832	13.37832	SR37	0.86963	0.0086963	SR37	0.12833	0.00012833	SR37	22.09853	0.2209853	SR37	183.53477
14.70222	14.70222	SR38	1.17605	0.0117605	SR38	0.17642	0.00017642	SR38	30.40851	0.3040851	SR38	252.67143
15.8685	15.8685	SR39	0.74032	0.0074032	SR39	0.10576	0.00010576	SR39	18.17777	0.1817777	SR39	150.82626
15.03508	15.03508	SR40	0.62194	0.0062194	SR40	0.08752	0.00008752	SR40	15.02837	0.1502837	SR40	124.63723
14.59161	14.59161	SR41	0.69162	0.0069162	SR41	0.10054	0.00010054	SR41	17.29842	0.1729842	SR41	143.60509
14.6271	14.6271	SR42	1.06501	0.0106501	SR42	0.16019	0.00016019	SR42	27.61417	0.2761417	SR42	229.46986
14.15718	14.15718	SR43	3.28789	0.0328789	SR43	0.51464	0.00051464	SR43	88.9125	0.889125	SR43	739.67255
20.76216	20.76216	SR44	3.11254	0.0311254	SR44	0.48077	0.00048077	SR44	83.00087	0.8300087	SR44	690.24128
21.90815	21.90815	SR45	1.22633	0.0122633	SR45	0.1794	0.0001794	SR45	30.87759	0.3087759	SR45	256.38209
15.71692	15.71692	SR46	0.75934	0.0075934	SR46	0.10782	0.00010782	SR46	18.52548	0.1852548	SR46	153.6831
15.37354	15.37354	SR47	0.59202	0.0059202	SR47	0.08132	0.00008132	SR47	13.9432	0.139432	SR47	115.55017
16.16449	16.16449	SR48	6.08272	0.0608272	SR48	0.95677	0.00095677	SR48	165.3403	1.653403	SR48	1375.66658
17.0965	17.0965	SR49	1.59804	0.0159804	SR49	0.24113	0.00024113	SR49	41.57535	0.4157535	SR49	345.51688
13.75756	13.75756	SR50	0.89397	0.0089397	SR50	0.12947	0.00012947	SR50	22.27027	0.2227027	SR50	184.8588
13.47377	13.47377	SR51	0.59842	0.0059842	SR51	0.08266	0.00008266	SR51	14.17779	0.1417779	SR51	117.51504
13.4239	13.4239	SR52	0.51407	0.0051407	SR52	0.06905	0.00006905	SR52	11.82424	0.1182424	SR52	97.91999
18.23776	18.23776	SR53	0.53558	0.0053558	SR53	0.06882	0.00006882	SR53	11.75022	0.1175022	SR53	97.1631
13.24771	13.24771	SR54	0.56821	0.0056821	SR54	0.07811	0.00007811	SR54	13.39499	0.1339499	SR54	111.01016
12.95727	12.95727	SR55	0.85813	0.0085813	SR55	0.12544	0.00012544	SR55	21.58899	0.2158899	SR55	179.25312
11.97778	11.97778	SR56	3.41566	0.0341566	SR56	0.53456	0.00053456	SR56	92.35313	0.9235313	SR56	768.29235

Air Quality Impact Assessment
Appendix J
Future No Build Condition

												Maximum Concentration Result
1			100			1000			100			1000
PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)
11.71169	11.71169	SR57	1.92086	0.0192086	SR57	0.29467	0.00029467	SR57	50.85269	0.5085269	SR57	422.81389
12.33777	12.33777	SR58	0.941	0.00941	SR58	0.13769	0.00013769	SR58	23.69907	0.2369907	SR58	196.77888
12.63627	12.63627	SR59	0.65675	0.0065675	SR59	0.09234	0.00009234	SR59	15.85964	0.1585964	SR59	131.54554
13.21002	13.21002	SR60	0.66845	0.0066845	SR60	0.09362	0.00009362	SR60	16.07243	0.1607243	SR60	133.27693
17.73227	17.73227	SR61	0.83862	0.0083862	SR61	0.11853	0.00011853	SR61	20.35956	0.2035956	SR61	168.8743
13.78146	13.78146	SR62	0.86705	0.0086705	SR62	0.12728	0.00012728	SR62	21.91188	0.2191188	SR62	181.95687
14.06534	14.06534	SR63	0.72017	0.0072017	SR63	0.10893	0.00010893	SR63	18.78394	0.1878394	SR63	156.11685
39.34368	39.34368	SR64	2.1582	0.021582	SR64	0.33656	0.00033656	SR64	58.13483	0.5813483	SR64	483.58069
23.84925	23.84925	SR65	0.78366	0.0078366	SR65	0.11922	0.00011922	SR65	20.56524	0.2056524	SR65	170.94952
19.51395	19.51395	SR66	0.47885	0.0047885	SR66	0.07129	0.00007129	SR66	12.28315	0.1228315	SR66	102.04147
28.01269	28.01269	SR67	0.41735	0.0041735	SR67	0.05829	0.00005829	SR67	10.01056	0.1001056	SR67	83.02899
19.21726	19.21726	SR68	0.44789	0.0044789	SR68	0.06441	0.00006441	SR68	11.0752	0.110752	SR68	91.91256
19.30745	19.30745	SR69	1.37319	0.0137319	SR69	0.21227	0.00021227	SR69	36.64798	0.3664798	SR69	304.77375
22.41236	22.41236	SR70	0.58198	0.0058198	SR70	0.08368	0.00008368	SR70	14.38826	0.1438826	SR70	119.40696
16.3861	16.3861	SR71	0.28947	0.0028947	SR71	0.03908	0.00003908	SR71	6.70034	0.0670034	SR71	55.5256
17.11102	17.11102	SR72	0.30895	0.0030895	SR72	0.04171	0.00004171	SR72	7.14469	0.0714469	SR72	59.177
16.04145	16.04145	SR73	0.48572	0.0048572	SR73	0.07031	0.00007031	SR73	12.09344	0.1209344	SR73	100.38239
18.5087	18.5087	SR74	1.89103	0.0189103	SR74	0.29419	0.00029419	SR74	50.80936	0.5080936	SR74	422.61774
16.8055	16.8055	SR75	0.30587	0.0030587	SR75	0.04314	0.00004314	SR75	7.40842	0.0740842	SR75	61.44567
15.37837	15.37837	SR76	0.26553	0.0026553	SR76	0.03584	0.00003584	SR76	6.13881	0.0613881	SR76	50.84517
16.52951	16.52951	SR77	0.28349	0.0028349	SR77	0.03772	0.00003772	SR77	6.4558	0.064558	SR77	53.44598
15.5455	15.5455	SR78	0.32013	0.0032013	SR78	0.04426	0.00004426	SR78	7.59249	0.0759249	SR78	62.93358
17.81771	17.81771	SR79	0.57435	0.0057435	SR79	0.08473	0.00008473	SR79	14.59079	0.1459079	SR79	121.17984
17.49136	17.49136	SR80	0.33945	0.0033945	SR80	0.04711	0.00004711	SR80	8.0837	0.080837	SR80	67.01329
13.95614	13.95614	SR81	0.66269	0.0066269	SR81	0.09826	0.00009826	SR81	16.92452	0.1692452	SR81	140.58245
16.0778	16.0778	SR82	0.36387	0.0036387	SR82	0.04545	0.00004545	SR82	7.74621	0.0774621	SR82	63.9909
12.23121	12.23121	SR83	0.36641	0.0036641	SR83	0.0509	0.0000509	SR83	8.73377	0.0873377	SR83	72.40564
10.00606	10.00606	SR84	0.52528	0.0052528	SR84	0.07804	0.00007804	SR84	13.44431	0.1344431	SR84	111.68099
10.70672	10.70672	SR85	2.5942	0.025942	SR85	0.40764	0.00040764	SR85	70.44177	0.7044177	SR85	586.07465
9.44825	9.44825	SR86	0.86767	0.0086767	SR86	0.13031	0.00013031	SR86	22.46284	0.2246284	SR86	186.65524
10.97386	10.97386	SR87	0.47731	0.0047731	SR87	0.06773	0.00006773	SR87	11.63592	0.1163592	SR87	96.52675
8.36305	8.36305	SR88	0.33247	0.0033247	SR88	0.04632	0.00004632	SR88	7.94977	0.0794977	SR88	65.91098
8.22981	8.22981	SR89	0.26977	0.0026977	SR89	0.03619	0.00003619	SR89	6.19674	0.0619674	SR89	51.31488
12.3826	12.3826	SR90	0.28834	0.0028834	SR90	0.03429	0.00003429	SR90	5.82334	0.0582334	SR90	48.02009
10.40434	10.40434	SR91	0.25987	0.0025987	SR91	0.03172	0.00003172	SR91	5.39713	0.0539713	SR91	44.54838
8.19866	8.19866	SR92	0.23728	0.0023728	SR92	0.03054	0.00003054	SR92	5.21555	0.0521555	SR92	43.13026
11.56505	11.56505	SR93	0.29549	0.0029549	SR93	0.03649	0.00003649	SR93	6.21425	0.0621425	SR93	51.3146
10.93904	10.93904	SR94	0.35565	0.0035565	SR94	0.04923	0.00004923	SR94	8.44501	0.0844501	SR94	70.00254
12.18753	12.18753	SR95	0.72874	0.0072874	SR95	0.10835	0.00010835	SR95	18.66681	0.1866681	SR95	155.06734
23.32888	23.32888	SR96	1.96995	0.0196995	SR96	0.303	0.000303	SR96	52.29781	0.5229781	SR96	434.86135
9.79137	9.79137	CR1	0.33013	0.0033013	CR1	0.04233	0.00004233	CR1	7.2263	0.072263	CR1	59.75017
3.40145	3.40145	CR2	0.20174	0.0020174	CR2	0.02867	0.00002867	CR2	4.92644	0.0492644	CR2	40.86968
4.28515	4.28515	CR3	0.31058	0.0031058	CR3	0.04541	0.00004541	CR3	7.81615	0.0781615	CR3	64.89796
4.71389	4.71389	CR4	0.40304	0.0040304	CR4	0.05917	0.00005917	CR4	10.18557	0.1018557	CR4	84.5812
12.52929	12.52929	CR5	0.95051	0.0095051	CR5	0.14609	0.00014609	CR5	25.21391	0.2521391	CR5	209.6517
9.73951	9.73951	CR6	0.40183	0.0040183	CR6	0.05281	0.00005281	CR6	9.03053	0.0903053	CR6	74.73082
17.32134	17.32134	CR7	0.72777	0.0072777	CR7	0.10302	0.00010302	CR7	17.6978	0.176978	CR7	146.80313
8.85205	8.85205	CR8	0.48908	0.0048908	CR8	0.07405	0.00007405	CR8	12.77079	0.1277079	CR8	106.14355
15.00074	15.00074	CR9	1.33094	0.0133094	CR9	0.20148	0.00020148	CR9	34.74508	0.3474508	CR9	288.77972
8.51208	8.51208	CR10	0.26301	0.0026301	CR10	0.03752	0.00003752	CR10	6.44886	0.0644886	CR10	53.50596
22.55974	22.55974	CR11	6.366	0.06366	CR11	1.00772	0.00100772	CR11	174.2048	1.742048	CR11	1449.67037
6.15392	6.15392	CR12	0.46073	0.0046073	CR12	0.07032	0.00007032	CR12	12.13283	0.1213283	CR12	100.86402
15.48959	15.48959	CR13	2.42482	0.0242482	CR13	0.38052	0.00038052	CR13	65.74934	0.6574934	CR13	547.01374
24.55691	24.55691	CR14	0.4209	0.004209	CR14	0.0606	0.0000606	CR14	10.42136	0.1042136	CR14	86.48961
18.26419	18.26419	CR15	0.43162	0.0043162	CR15	0.0607	0.0000607	CR15	10.42322	0.1042322	CR15	86.44312
13.65757	13.65757	CR16	0.32678	0.0032678	CR16	0.04593	0.00004593	CR16	7.89292	0.0789292	CR16	65.4832
4.09277	4.09277	CR17	0.28997	0.0028997	CR17	0.04198	0.00004198	CR17	7.22164	0.0722164	CR17	59.94417
39.34	**39.34**	**SR64**	**6.08**	**6.08E-02**	**SR48**	**0.96**	**9.57E-04**	**SR48**	**165.34**	**1.65**	**SR48**	**1375.67**
24.56	**24.56**	**CR14**	**6.37**	**6.37E-02**	**CR11**	**1.01**	**1.01E-03**	**CR11**	**174.20**	**1.74**	**CR11**	**1449.67**
39.34	**39.34**	**SR64**	**6.37**	**6.37E-02**	**CR11**	**1.01**	**1.01E-03**	**CR11**	**174.20**	**1.74**	**CR11**	**1449.67**

Air Quality Impact Assessment
Appendix J
Future No Build Condition

s (24-hour)

		100000			1000		
Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID
0.07598814	SR1	0.32244	3.2244E-06	SR1	0.29077	0.00029077	SR1
0.07300989	SR2	0.29677	2.9677E-06	SR2	0.27768	0.00027768	SR2
0.07069662	SR3	0.26385	2.6385E-06	SR3	0.26581	0.00026581	SR3
0.06789396	SR4	0.24796	2.4796E-06	SR4	0.25456	0.00025456	SR4
0.05902335	SR5	0.21257	2.1257E-06	SR5	0.22091	0.00022091	SR5
0.07109177	SR6	0.22743	2.2743E-06	SR6	0.26234	0.00026234	SR6
0.07603692	SR7	0.23845	2.3845E-06	SR7	0.27997	0.00027997	SR7
0.0686909	SR8	0.22046	2.2046E-06	SR8	0.25358	0.00025358	SR8
0.06474373	SR9	0.20983	2.0983E-06	SR9	0.23927	0.00023927	SR9
0.06118975	SR10	0.20079	2.0079E-06	SR10	0.22646	0.00022646	SR10
0.05269445	SR11	0.1815	0.000001815	SR11	0.19614	0.00019614	SR11
0.05122066	SR12	0.17792	1.7792E-06	SR12	0.19085	0.00019085	SR12
0.04881237	SR13	0.17194	1.7194E-06	SR13	0.18219	0.00018219	SR13
0.04639962	SR14	0.16488	1.6488E-06	SR14	0.17337	0.00017337	SR14
0.04652037	SR15	0.16453	1.6453E-06	SR15	0.17372	0.00017372	SR15
0.05393938	SR16	0.18468	1.8468E-06	SR16	0.20063	0.00020063	SR16
0.05432073	SR17	0.18581	1.8581E-06	SR17	0.20203	0.00020203	SR17
0.0550071	SR18	0.18815	1.8815E-06	SR18	0.20458	0.00020458	SR18
0.05187075	SR19	0.17245	1.7245E-06	SR19	0.19226	0.00019226	SR19
0.0598039	SR20	0.20063	2.0063E-06	SR20	0.22191	0.00022191	SR20
0.0545801	SR21	0.17914	1.7914E-06	SR21	0.202	0.000202	SR21
0.06141155	SR22	0.20507	2.0507E-06	SR22	0.22775	0.00022775	SR22
0.06189781	SR23	0.19842	1.9842E-06	SR23	0.22847	0.00022847	SR23
0.06673658	SR24	0.21876	2.1876E-06	SR24	0.24696	0.00024696	SR24
0.07149374	SR25	0.22485	2.2485E-06	SR25	0.26332	0.00026332	SR25
0.07965289	SR26	0.25268	2.5268E-06	SR26	0.29366	0.00029366	SR26
0.08229437	SR27	0.25419	2.5419E-06	SR27	0.3025	0.0003025	SR27
0.09726561	SR28	0.2998	0.000002998	SR28	0.35745	0.00035745	SR28
0.10193453	SR29	0.30944	3.0944E-06	SR29	0.37399	0.00037399	SR29
0.14033923	SR30	0.41872	4.1872E-06	SR30	0.51393	0.00051393	SR30
0.10099982	SR31	0.31755	3.1755E-06	SR31	0.37199	0.00037199	SR31
0.07951568	SR32	0.2405	0.000002405	SR32	0.29162	0.00029162	SR32
0.07293481	SR33	0.21837	2.1837E-06	SR33	0.26719	0.00026719	SR33
0.06540384	SR34	0.19738	1.9738E-06	SR34	0.23981	0.00023981	SR34
0.05794155	SR35	0.17431	1.7431E-06	SR35	0.21237	0.00021237	SR35
0.0486836	SR36	0.14692	1.4692E-06	SR36	0.1785	0.0001785	SR36
0.18353477	SR37	0.58152	5.8152E-06	SR37	0.67655	0.00067655	SR37
0.25267143	SR38	0.77176	7.7176E-06	SR38	0.92764	0.00092764	SR38
0.15082626	SR39	0.51284	5.1284E-06	SR39	0.56054	0.00056054	SR39
0.12463723	SR40	0.43763	4.3763E-06	SR40	0.46502	0.00046502	SR40
0.14360509	SR41	0.47023	4.7023E-06	SR41	0.53135	0.00053135	SR41
0.22946986	SR42	0.69674	6.9674E-06	SR42	0.84192	0.00084192	SR42
0.73967255	SR43	2.04831	2.04831E-05	SR43	2.68804	0.00268804	SR43
0.69024128	SR44	1.97185	1.97185E-05	SR44	2.51629	0.00251629	SR44
0.25638209	SR45	0.82803	8.2803E-06	SR45	0.94713	0.00094713	SR45
0.1536831	SR46	0.52936	5.2936E-06	SR46	0.57205	0.00057205	SR46
0.11555017	SR47	0.42674	4.2674E-06	SR47	0.43386	0.00043386	SR47
1.37566658	SR48	3.76566	3.76566E-05	SR48	4.99358	0.00499358	SR48
0.34551688	SR49	1.0415	0.000010415	SR49	1.2667	0.0012667	SR49
0.1848588	SR50	0.61031	6.1031E-06	SR50	0.68464	0.00068464	SR50
0.11751504	SR51	0.42899	4.2899E-06	SR51	0.44058	0.00044058	SR51
0.09791999	SR52	0.37848	3.7848E-06	SR52	0.36986	0.00036986	SR52
0.0971631	SR53	0.42245	4.2245E-06	SR53	0.37153	0.00037153	SR53
0.11101016	SR54	0.40922	4.0922E-06	SR54	0.41672	0.00041672	SR54
0.17925312	SR55	0.57992	5.7992E-06	SR55	0.66233	0.00066233	SR55
0.76829235	SR56	2.12832	2.12832E-05	SR56	2.79215	0.00279215	SR56

Multiplier	1			1			100
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)
	37.66706	37.66706	SR1	0.53537	0.53537	SR1	0.13753
	34.23611	34.23611	SR2	0.54706	0.54706	SR2	0.13161
	26.64396	26.64396	SR3	0.46791	0.46791	SR3	0.10664
	25.28308	25.28308	SR4	0.48415	0.48415	SR4	0.10578
	21.96738	21.96738	SR5	0.44831	0.44831	SR5	0.09537
	23.28433	23.28433	SR6	0.60248	0.60248	SR6	0.11376
	22.58912	22.58912	SR7	0.58921	0.58921	SR7	0.11026
	22.67454	22.67454	SR8	0.58296	0.58296	SR8	0.11037
	22.11104	22.11104	SR9	0.56318	0.56318	SR9	0.10708
	21.63206	21.63206	SR10	0.54703	0.54703	SR10	0.1044
	18.70144	18.70144	SR11	0.45569	0.45569	SR11	0.08841
	18.56782	18.56782	SR12	0.45168	0.45168	SR12	0.08791
	18.51065	18.51065	SR13	0.45025	0.45025	SR13	0.08776
	18.43144	18.43144	SR14	0.44864	0.44864	SR14	0.08748
	18.38958	18.38958	SR15	0.44868	0.44868	SR15	0.08749
	20.4268	20.4268	SR16	0.49562	0.49562	SR16	0.09723
	20.4224	20.4224	SR17	0.49372	0.49372	SR17	0.09693
	20.59946	20.59946	SR18	0.49801	0.49801	SR18	0.09768
	18.94434	18.94434	SR19	0.46823	0.46823	SR19	0.09072
	21.37307	21.37307	SR20	0.52498	0.52498	SR20	0.10203
	19.6139	19.6139	SR21	0.4917	0.4917	SR21	0.0944
	22.56055	22.56055	SR22	0.56976	0.56976	SR22	0.10924
	20.7158	20.7158	SR23	0.52987	0.52987	SR23	0.10052
	23.72165	23.72165	SR24	0.61234	0.61234	SR24	0.11604
	22.47959	22.47959	SR25	0.59075	0.59075	SR25	0.1107
	25.73899	25.73899	SR26	0.67454	0.67454	SR26	0.12632
	24.93714	24.93714	SR27	0.66583	0.66583	SR27	0.12329
	29.71837	29.71837	SR28	0.79577	0.79577	SR28	0.1465
	29.51957	29.51957	SR29	0.7898	0.7898	SR29	0.1449
	39.46788	39.46788	SR30	1.07741	1.07741	SR30	0.1945
	35.20597	35.20597	SR31	0.90851	0.90851	SR31	0.16918
	23.69272	23.69272	SR32	0.68215	0.68215	SR32	0.12213
	22.96229	22.96229	SR33	0.68051	0.68051	SR33	0.12038
	19.76929	19.76929	SR34	0.57841	0.57841	SR34	0.10312
	18.18575	18.18575	SR35	0.53977	0.53977	SR35	0.09581
	14.83848	14.83848	SR36	0.44069	0.44069	SR36	0.0785
	61.45801	61.45801	SR37	1.52243	1.52243	SR37	0.28796
	80.83565	80.83565	SR38	2.05663	2.05663	SR38	0.37542
	55.17874	55.17874	SR39	1.23393	1.23393	SR39	0.2453
	50.86079	50.86079	SR40	1.11123	1.11123	SR40	0.2236
	56.27866	56.27866	SR41	1.28994	1.28994	SR41	0.25187
	76.26471	76.26471	SR42	1.90546	1.90546	SR42	0.35169
	234.35543	234.35543	SR43	6.28649	6.28649	SR43	1.05753
	277.68369	277.68369	SR44	7.14402	7.14402	SR44	1.2192
	101.37939	101.37939	SR45	2.21404	2.21404	SR45	0.43417
	60.20823	60.20823	SR46	1.28107	1.28107	SR46	0.26021
	51.87678	51.87678	SR47	1.01168	1.01168	SR47	0.21644
	590.19726	590.19726	SR48	13.73043	13.73043	SR48	2.27283
	132.70316	132.70316	SR49	3.20562	3.20562	SR49	0.58653
	69.09567	69.09567	SR50	1.53614	1.53614	SR50	0.30301
	52.93323	52.93323	SR51	1.00351	1.00351	SR51	0.21785
	49.40363	49.40363	SR52	0.87314	0.87314	SR52	0.19728
	63.17335	63.17335	SR53	0.9135	0.9135	SR53	0.22882
	51.27162	51.27162	SR54	0.9139	0.9139	SR54	0.20503
	62.95562	62.95562	SR55	1.32663	1.32663	SR55	0.26925
	233.89722	233.89722	SR56	6.25345	6.25345	SR56	1.05757

Air Quality Impact Assessment
Appendix J
Future No Build Condition

s (24-hour)

		100000			1000		
Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID
0.42281389	SR57	1.22727	1.22727E-05	SR57	1.54391	0.00154391	SR57
0.19677888	SR58	0.63521	6.3521E-06	SR58	0.7269	0.0007269	SR58
0.13154554	SR59	0.46335	4.6335E-06	SR59	0.49035	0.00049035	SR59
0.13327693	SR60	0.4726	0.000004726	SR60	0.49786	0.00049786	SR60
0.1688743	SR61	0.58743	5.8743E-06	SR61	0.62934	0.00062934	SR61
0.18195687	SR62	0.58318	5.8318E-06	SR62	0.6716	0.0006716	SR62
0.15611685	SR63	0.46802	4.6802E-06	SR63	0.57201	0.00057201	SR63
0.48358069	SR64	1.35093	1.35093E-05	SR64	1.75892	0.00175892	SR64
0.17094952	SR65	0.50578	5.0578E-06	SR65	0.62548	0.00062548	SR65
0.10204147	SR66	0.31699	3.1699E-06	SR66	0.37532	0.00037532	SR66
0.08302899	SR67	0.30276	3.0276E-06	SR67	0.30957	0.00030957	SR67
0.09191256	SR68	0.30809	3.0809E-06	SR68	0.34101	0.00034101	SR68
0.30477375	SR69	0.86911	8.6911E-06	SR69	1.11086	0.00111086	SR69
0.11940696	SR70	0.40039	4.0039E-06	SR70	0.44304	0.00044304	SR70
0.0555256	SR71	0.21263	2.1263E-06	SR71	0.20869	0.00020869	SR71
0.059177	SR72	0.22639	2.2639E-06	SR72	0.22322	0.00022322	SR72
0.10038239	SR73	0.33179	3.3179E-06	SR73	0.37183	0.00037183	SR73
0.42261774	SR74	1.1873	0.000011873	SR74	1.53805	0.00153805	SR74
0.06144567	SR75	0.22186	2.2186E-06	SR75	0.22912	0.00022912	SR75
0.05084517	SR76	0.19569	1.9569E-06	SR76	0.1918	0.0001918	SR76
0.05344598	SR77	0.21053	2.1053E-06	SR77	0.20239	0.00020239	SR77
0.06293358	SR78	0.22927	2.2927E-06	SR78	0.23589	0.00023589	SR78
0.12117984	SR79	0.38418	3.8418E-06	SR79	0.44673	0.00044673	SR79
0.06701329	SR80	0.24219	2.4219E-06	SR80	0.25093	0.00025093	SR80
0.14058245	SR81	0.44076	4.4076E-06	SR81	0.51761	0.00051761	SR81
0.0639909	SR82	0.28536	2.8536E-06	SR82	0.24667	0.00024667	SR82
0.07240564	SR83	0.27185	2.7185E-06	SR83	0.27101	0.00027101	SR83
0.11168099	SR84	0.34855	3.4855E-06	SR84	0.41099	0.00041099	SR84
0.58607465	SR85	1.60807	1.60807E-05	SR85	2.12791	0.00212791	SR85
0.18665524	SR86	0.56861	5.6861E-06	SR86	0.68508	0.00068508	SR86
0.09652675	SR87	0.333	0.00000333	SR87	0.35937	0.00035937	SR87
0.06591098	SR88	0.23629	2.3629E-06	SR88	0.24655	0.00024655	SR88
0.05131488	SR89	0.19885	1.9885E-06	SR89	0.19389	0.00019389	SR89
0.04802009	SR90	0.23495	2.3495E-06	SR90	0.18782	0.00018782	SR90
0.04454838	SR91	0.20759	2.0759E-06	SR91	0.17289	0.00017289	SR91
0.04313026	SR92	0.18148	1.8148E-06	SR92	0.16484	0.00016484	SR92
0.0513146	SR93	0.23387	2.3387E-06	SR93	0.19846	0.00019846	SR93
0.07000254	SR94	0.25805	2.5805E-06	SR94	0.26231	0.00026231	SR94
0.15506734	SR95	0.48314	4.8314E-06	SR95	0.57054	0.00057054	SR95
0.43486135	SR96	1.25455	1.25455E-05	SR96	1.5869	0.0015869	SR96
0.05975017	CR1	0.25334	2.5334E-06	CR1	0.22861	0.00022861	CR1
0.04086968	CR2	0.14051	1.4051E-06	CR2	0.15209	0.00015209	CR2
0.06489796	CR3	0.20982	2.0982E-06	CR3	0.23978	0.00023978	CR3
0.0845812	CR4	0.27109	2.7109E-06	CR4	0.31219	0.00031219	CR4
0.2096517	CR5	0.6059	0.000006059	CR5	0.7652	0.0007652	CR5
0.07473082	CR6	0.30178	3.0178E-06	CR6	0.28396	0.00028396	CR6
0.14680313	CR7	0.50896	5.0896E-06	CR7	0.54687	0.00054687	CR7
0.10614355	CR8	0.31745	3.1745E-06	CR8	0.38881	0.00038881	CR8
0.28877972	CR9	0.86409	8.6409E-06	CR9	1.05786	0.00105786	CR9
0.05350596	CR10	0.18245	1.8245E-06	CR10	0.19892	0.00019892	CR10
1.44967037	CR11	3.90841	3.90841E-05	CR11	5.2544	0.0052544	CR11
0.10086402	CR12	0.29618	2.9618E-06	CR12	0.36875	0.00036875	CR12
0.54701374	CR13	1.50569	1.50569E-05	CR13	1.98671	0.00198671	CR13
0.08648961	CR14	0.29246	2.9246E-06	CR14	0.32079	0.00032079	CR14
0.08644312	CR15	0.30389	3.0389E-06	CR15	0.32257	0.00032257	CR15
0.0654832	CR16	0.2318	0.000002318	CR16	0.24358	0.00024358	CR16
0.05994417	CR17	0.19802	1.9802E-06	CR17	0.22202	0.00022202	CR17
1.38	**SR48**	**3.77**	**3.77E-05**	**SR48**	**4.99**	**4.99E-03**	**SR48**
1.45	**CR11**	**3.91**	**3.91E-05**	**CR11**	**5.25**	**5.25E-03**	**CR11**
1.45	**CR11**	**3.91**	**3.91E-05**	**CR11**	**5.25**	**5.25E-03**	**CR11**

Multiplier	1			1			100
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)
	150.91942	150.91942	SR57	4.07003	4.07003	SR57	0.70437
	73.44977	73.44977	SR58	1.73711	1.73711	SR58	0.33248
	58.52377	58.52377	SR59	1.23385	1.23385	SR59	0.25296
	54.85193	54.85193	SR60	1.06886	1.06886	SR60	0.22866
	69.734	69.734	SR61	1.16788	1.16788	SR61	0.26877
	61.59428	61.59428	SR62	1.32198	1.32198	SR62	0.26618
	42.15791	42.15791	SR63	1.07658	1.07658	SR63	0.19835
	198.21364	198.21364	SR64	4.77154	4.77154	SR64	0.80776
	55.84374	55.84374	SR65	1.44408	1.44408	SR65	0.26331
	38.63767	38.63767	SR66	0.93971	0.93971	SR66	0.18004
	43.42908	43.42908	SR67	0.87297	0.87297	SR67	0.18337
	38.88343	38.88343	SR68	0.9165	0.9165	SR68	0.17806
	130.42204	130.42204	SR69	3.25314	3.25314	SR69	0.55526
	50.14528	50.14528	SR70	1.11821	1.11821	SR70	0.21898
	28.1636	28.1636	SR71	0.58271	0.58271	SR71	0.1225
	28.41507	28.41507	SR72	0.57577	0.57577	SR72	0.12257
	38.80319	38.80319	SR73	0.91601	0.91601	SR73	0.17676
	187.13721	187.13721	SR74	4.42095	4.42095	SR74	0.74676
	29.53882	29.53882	SR75	0.6188	0.6188	SR75	0.12878
	27.75256	27.75256	SR76	0.52549	0.52549	SR76	0.11552
	27.82467	27.82467	SR77	0.52465	0.52465	SR77	0.11602
	29.74023	29.74023	SR78	0.59475	0.59475	SR78	0.12698
	48.53457	48.53457	SR79	1.13153	1.13153	SR79	0.2162
	31.5514	31.5514	SR80	0.6768	0.6768	SR80	0.13893
	41.16366	41.16366	SR81	0.96951	0.96951	SR81	0.18763
	39.51676	39.51676	SR82	0.65132	0.65132	SR82	0.15539
	37.55672	37.55672	SR83	0.76417	0.76417	SR83	0.16204
	46.77074	46.77074	SR84	1.22977	1.22977	SR84	0.22653
	192.22396	192.22396	SR85	5.50098	5.50098	SR85	0.9187
	65.38717	65.38717	SR86	1.64316	1.64316	SR86	0.29985
	38.62332	38.62332	SR87	0.73696	0.73696	SR87	0.15939
	26.18398	26.18398	SR88	0.50239	0.50239	SR88	0.11006
	23.9034	23.9034	SR89	0.42157	0.42157	SR89	0.09733
	31.73113	31.73113	SR90	0.44542	0.44542	SR90	0.11763
	28.59162	28.59162	SR91	0.42674	0.42674	SR91	0.10893
	23.54944	23.54944	SR92	0.41932	0.41932	SR92	0.09677
	30.90247	30.90247	SR93	0.50344	0.50344	SR93	0.12157
	36.06861	36.06861	SR94	0.71418	0.71418	SR94	0.15352
	68.16992	68.16992	SR95	1.78359	1.78359	SR95	0.3244
	162.46121	162.46121	SR96	4.44021	4.44021	SR96	0.76129
	33.75207	33.75207	CR1	0.55492	0.55492	CR1	0.13016
	10.20277	10.20277	CR2	0.25088	0.25088	CR2	0.04881
	14.04535	14.04535	CR3	0.36558	0.36558	CR3	0.06833
	18.73188	18.73188	CR4	0.47507	0.47507	CR4	0.0892
	63.5615	63.5615	CR5	1.75409	1.75409	CR5	0.30378
	34.80404	34.80404	CR6	0.5946	0.5946	CR6	0.13782
	52.09327	52.09327	CR7	0.9379	0.9379	CR7	0.21161
	32.4624	32.4624	CR8	0.8745	0.8745	CR8	0.15757
	97.88929	97.88929	CR9	2.66131	2.66131	CR9	0.47699
	18.51751	18.51751	CR10	0.44163	0.44163	CR10	0.08623
	524.91736	524.91736	CR11	15.4635	15.4635	CR11	2.53178
	27.06046	27.06046	CR12	0.84177	0.84177	CR12	0.14572
	184.6754	184.6754	CR13	5.29942	5.29942	CR13	0.87858
	38.9038	38.9038	CR14	0.83016	0.83016	CR14	0.17061
	41.33801	41.33801	CR15	0.95474	0.95474	CR15	0.18704
	28.62153	28.62153	CR16	0.61015	0.61015	CR16	0.12546
	12.82205	12.82205	CR17	0.32103	0.32103	CR17	0.06148
	590.20	**590.20**	**SR48**	**13.73**	**13.73**	**SR48**	**2.27**
	524.92	**524.92**	**CR11**	**15.46**	**15.46**	**CR11**	**2.53**
	590.20	**590.20**	**SR48**	**15.46**	**15.46**	**CR11**	**2.53**

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (Annual)

		1			1			100			1000			100	
SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde
0.0013753	SR1	26.43865	26.43865	SR1	2.84887	2.84887	SR1	0.07978	0.0007978	SR1	0.00953	0.00000953	SR1	1.61834	0.0161834
0.0013161	SR2	23.6351	23.6351	SR2	2.3913	2.3913	SR2	0.07752	0.0007752	SR2	0.00965	0.00000965	SR2	1.64474	0.0164474
0.0010664	SR3	19.67649	19.67649	SR3	1.8433	1.8433	SR3	0.06363	0.0006363	SR3	0.0082	0.0000082	SR3	1.40081	0.0140081
0.0010578	SR4	18.15335	18.15335	SR4	1.60059	1.60059	SR4	0.06379	0.0006379	SR4	0.00845	0.00000845	SR4	1.44487	0.0144487
0.0009537	SR5	17.37592	17.37592	SR5	1.45009	1.45009	SR5	0.05791	0.0005791	SR5	0.0078	0.0000078	SR5	1.33531	0.0133531
0.0011376	SR6	21.30981	21.30981	SR6	1.53803	1.53803	SR6	0.07135	0.0007135	SR6	0.01035	0.00001035	SR6	1.78005	0.0178005
0.0011026	SR7	21.33524	21.33524	SR7	1.54739	1.54739	SR7	0.06933	0.0006933	SR7	0.01011	0.00001011	SR7	1.73987	0.0173987
0.0011037	SR8	20.99482	20.99482	SR8	1.53529	1.53529	SR8	0.06917	0.0006917	SR8	0.01001	0.00001001	SR8	1.72269	0.0172269
0.0010708	SR9	20.61849	20.61849	SR9	1.53206	1.53206	SR9	0.06703	0.0006703	SR9	0.00968	0.00000968	SR9	1.66468	0.0166468
0.001044	SR10	20.23506	20.23506	SR10	1.52145	1.52145	SR10	0.06528	0.0006528	SR10	0.00941	0.00000941	SR10	1.61734	0.0161734
0.0008841	SR11	18.18318	18.18318	SR11	1.43266	1.43266	SR11	0.05503	0.0005503	SR11	0.00785	0.00000785	SR11	1.34873	0.0134873
0.0008791	SR12	18.09954	18.09954	SR12	1.43152	1.43152	SR12	0.05467	0.0005467	SR12	0.00778	0.00000778	SR12	1.33717	0.0133717
0.0008776	SR13	17.58428	17.58428	SR13	1.39181	1.39181	SR13	0.05456	0.0005456	SR13	0.00776	0.00000776	SR13	1.33304	0.0133304
0.0008748	SR14	17.28562	17.28562	SR14	1.36997	1.36997	SR14	0.05438	0.0005438	SR14	0.00773	0.00000773	SR14	1.32833	0.0132833
0.0008749	SR15	17.21534	17.21534	SR15	1.36599	1.36599	SR15	0.05438	0.0005438	SR15	0.00773	0.00000773	SR15	1.32844	0.0132844
0.0009723	SR16	17.30707	17.30707	SR16	1.38412	1.38412	SR16	0.06034	0.0006034	SR16	0.00855	0.00000855	SR16	1.46799	0.0146799
0.0009693	SR17	17.18463	17.18463	SR17	1.38349	1.38349	SR17	0.06014	0.0006014	SR17	0.00851	0.00000851	SR17	1.46244	0.0146244
0.0009768	SR18	17.22397	17.22397	SR18	1.39006	1.39006	SR18	0.06062	0.0006062	SR18	0.00859	0.00000859	SR18	1.47508	0.0147508
0.0009072	SR19	17.14621	17.14621	SR19	1.36984	1.36984	SR19	0.05649	0.0005649	SR19	0.00806	0.00000806	SR19	1.38574	0.0138574
0.0010203	SR20	17.43764	17.43764	SR20	1.39791	1.39791	SR20	0.06348	0.0006348	SR20	0.00904	0.00000904	SR20	1.55401	0.0155401
0.000944	SR21	17.49009	17.49009	SR21	1.39326	1.39326	SR21	0.05893	0.0005893	SR21	0.00846	0.00000846	SR21	1.45432	0.0145432
0.0010924	SR22	18.11668	18.11668	SR22	1.42807	1.42807	SR22	0.06822	0.0006822	SR22	0.0098	0.0000098	SR22	1.68506	0.0168506
0.0010052	SR23	18.13545	18.13545	SR23	1.44004	1.44004	SR23	0.06296	0.0006296	SR23	0.0091	0.0000091	SR23	1.56601	0.0156601
0.0011604	SR24	18.83666	18.83666	SR24	1.48454	1.48454	SR24	0.07271	0.0007271	SR24	0.01052	0.00001052	SR24	1.80962	0.0180962
0.001107	SR25	19.38575	19.38575	SR25	1.53541	1.53541	SR25	0.06958	0.0006958	SR25	0.01014	0.00001014	SR25	1.74456	0.0174456
0.0012632	SR26	19.88286	19.88286	SR26	1.58581	1.58581	SR26	0.07941	0.0007941	SR26	0.01158	0.00001158	SR26	1.99192	0.0199192
0.0012329	SR27	20.77868	20.77868	SR27	1.6601	1.6601	SR27	0.07776	0.0007776	SR27	0.01141	0.00001141	SR27	1.96481	0.0196481
0.001465	SR28	21.9139	21.9139	SR28	1.76176	1.76176	SR28	0.09255	0.0009255	SR28	0.01363	0.00001363	SR28	2.34738	0.0234738
0.001449	SR29	23.14623	23.14623	SR29	1.91039	1.91039	SR29	0.09164	0.0009164	SR29	0.01353	0.00001353	SR29	2.32928	0.0232928
0.001945	SR30	26.44026	26.44026	SR30	2.13727	2.13727	SR30	0.12358	0.0012358	SR30	0.01842	0.00001842	SR30	3.17432	0.0317432
0.0016918	SR31	28.0776	28.0776	SR31	2.52538	2.52538	SR31	0.10654	0.0010654	SR31	0.01558	0.00001558	SR31	2.68188	0.0268188
0.0012213	SR32	17.81747	17.81747	SR32	1.4186	1.4186	SR32	0.07779	0.0007779	SR32	0.01166	0.00001166	SR32	2.00877	0.0200877
0.0012038	SR33	16.33771	16.33771	SR33	1.24596	1.24596	SR33	0.07695	0.0007695	SR33	0.01161	0.00001161	SR33	2.00248	0.0200248
0.0010312	SR34	14.94879	14.94879	SR34	1.15173	1.15173	SR34	0.06576	0.0006576	SR34	0.00988	0.00000988	SR34	1.70285	0.0170285
0.0009581	SR35	13.46639	13.46639	SR35	1.01548	1.01548	SR35	0.06118	0.0006118	SR35	0.00921	0.00000921	SR35	1.58865	0.0158865
0.000785	SR36	11.4869	11.4869	SR36	0.86066	0.86066	SR36	0.05007	0.0005007	SR36	0.00753	0.00000753	SR36	1.29732	0.0129732
0.0028796	SR37	44.04851	44.04851	SR37	3.37841	3.37841	SR37	0.18047	0.0018047	SR37	0.02615	0.00002615	SR37	4.49848	0.0449848
0.0037542	SR38	66.01296	66.01296	SR38	3.57285	3.57285	SR38	0.23776	0.0023776	SR38	0.0352	0.0000352	SR38	6.06349	0.0606349
0.002453	SR39	47.42617	47.42617	SR39	3.80036	3.80036	SR39	0.15167	0.0015167	SR39	0.0213	0.0000213	SR39	3.65807	0.0365807
0.002236	SR40	42.81473	42.81473	SR40	3.63336	3.63336	SR40	0.13779	0.0013779	SR40	0.01921	0.00001921	SR40	3.29701	0.0329701
0.0025187	SR41	44.27758	44.27758	SR41	3.56411	3.56411	SR41	0.1565	0.001565	SR41	0.02223	0.00002223	SR41	3.81954	0.0381954
0.0035169	SR42	53.60878	53.60878	SR42	3.57491	3.57491	SR42	0.22203	0.0022203	SR42	0.03265	0.00003265	SR42	5.62168	0.0562168
0.0105753	SR43	120.48773	120.48773	SR43	3.46126	3.46126	SR43	0.68633	0.0068633	SR43	0.10679	0.00010679	SR43	18.44399	0.1844399
0.012192	SR44	148.94563	148.94563	SR44	5.22647	5.22647	SR44	0.78777	0.0078777	SR44	0.12152	0.00012152	SR44	20.97738	0.2097738
0.0043417	SR45	69.71326	69.71326	SR45	5.51941	5.51941	SR45	0.26945	0.0026945	SR45	0.03817	0.00003817	SR45	6.55769	0.0655769
0.0026021	SR46	44.50037	44.50037	SR46	3.84718	3.84718	SR46	0.15995	0.0015995	SR46	0.02217	0.00002217	SR46	3.80338	0.0380338
0.0021644	SR47	39.57448	39.57448	SR47	3.7729	3.7729	SR47	0.13124	0.0013124	SR47	0.01761	0.00001761	SR47	3.01458	0.0301458
0.0227283	SR48	266.35102	266.35102	SR48	3.91525	3.91525	SR48	1.48241	0.0148241	SR48	0.23291	0.00023291	SR48	40.24678	0.4024678
0.0058653	SR49	75.91828	75.91828	SR49	4.10098	4.10098	SR49	0.37122	0.0037122	SR49	0.05489	0.00005489	SR49	9.45241	0.0945241
0.0030301	SR50	43.87654	43.87654	SR50	3.24035	3.24035	SR50	0.18775	0.0018775	SR50	0.0265	0.0000265	SR50	4.55164	0.0455164
0.0021785	SR51	34.71689	34.71689	SR51	3.19565	3.19565	SR51	0.13159	0.0013159	SR51	0.01749	0.00001749	SR51	2.9934	0.029934
0.0019728	SR52	32.34994	32.34994	SR52	3.18644	3.18644	SR52	0.11797	0.0011797	SR52	0.01529	0.00001529	SR52	2.61226	0.0261226
0.0022882	SR53	39.38955	39.38955	SR53	4.39123	4.39123	SR53	0.13351	0.0013351	SR53	0.0162	0.0000162	SR53	2.75551	0.0275551
0.0020503	SR54	32.32937	32.32937	SR54	3.20547	3.20547	SR54	0.12283	0.0012283	SR54	0.01599	0.00001599	SR54	2.73275	0.0273275
0.0026925	SR55	37.04207	37.04207	SR55	3.0817	3.0817	SR55	0.16555	0.0016555	SR55	0.02296	0.00002296	SR55	3.93843	0.0393843
0.0105757	SR56	105.29037	105.29037	SR56	2.82155	2.82155	SR56	0.68524	0.0068524	SR56	0.10628	0.00010628	SR56	18.35267	0.1835267

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (Annual)

		1			1			100			1000			100	
SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde
0.0070437	SR57	69.15385	69.15385	SR57	2.75091	2.75091	SR57	0.4532	0.004532	SR57	0.06932	0.00006932	SR57	11.96086	0.1196086
0.0033248	SR58	40.161	40.161	SR58	2.88893	2.88893	SR58	0.20774	0.0020774	SR58	0.02988	0.00002988	SR58	5.13692	0.0513692
0.0025296	SR59	34.03914	34.03914	SR59	2.96891	2.96891	SR59	0.15511	0.0015511	SR59	0.02137	0.00002137	SR59	3.66555	0.0366555
0.0022866	SR60	32.56533	32.56533	SR60	3.10376	3.10376	SR60	0.13865	0.0013865	SR60	0.0186	0.0000186	SR60	3.18493	0.0318493
0.0026877	SR61	40.56493	40.56493	SR61	4.31012	4.31012	SR61	0.16	0.0016	SR61	0.0205	0.0000205	SR61	3.49899	0.0349899
0.0026618	SR62	36.67393	36.67393	SR62	3.27257	3.27257	SR62	0.16401	0.0016401	SR62	0.02286	0.00002286	SR62	3.92249	0.0392249
0.0019835	SR63	34.09412	34.09412	SR63	2.96725	2.96725	SR63	0.12528	0.0012528	SR63	0.01845	0.00001845	SR63	3.17588	0.0317588
0.0080776	SR64	295.01689	295.01689	SR64	10.17975	10.17975	SR64	0.52321	0.0052321	SR64	0.0811	0.0000811	SR64	14.00437	0.1400437
0.0026331	SR65	87.01205	87.01205	SR65	6.16834	6.16834	SR65	0.16682	0.0016682	SR65	0.02472	0.00002472	SR65	4.25724	0.0425724
0.0018004	SR66	58.70648	58.70648	SR66	5.19354	5.19354	SR66	0.11246	0.0011246	SR66	0.01616	0.00001616	SR66	2.77905	0.0277905
0.0018337	SR67	74.04252	74.04252	SR67	7.74688	7.74688	SR67	0.11172	0.0011172	SR67	0.01516	0.00001516	SR67	2.59785	0.0259785
0.0017806	SR68	65.58979	65.58979	SR68	5.15542	5.15542	SR68	0.11079	0.0011079	SR68	0.01579	0.00001579	SR68	2.71287	0.0271287
0.0055526	SR69	224.6801	224.6801	SR69	4.8252	4.8252	SR69	0.35876	0.0035876	SR69	0.05534	0.00005534	SR69	9.55246	0.0955246
0.0021898	SR70	86.21568	86.21568	SR70	5.98444	5.98444	SR70	0.13595	0.0013595	SR70	0.01928	0.00001928	SR70	3.3117	0.033117
0.001225	SR71	43.59889	43.59889	SR71	4.10648	4.10648	SR71	0.07462	0.0007462	SR71	0.01012	0.00001012	SR71	1.73417	0.0173417
0.0012257	SR72	45.04958	45.04958	SR72	4.22049	4.22049	SR72	0.07442	0.0007442	SR72	0.01001	0.00001001	SR72	1.71505	0.0171505
0.0017676	SR73	67.65738	67.65738	SR73	4.07708	4.07708	SR73	0.11019	0.0011019	SR73	0.01577	0.00001577	SR73	2.71022	0.0271022
0.0074676	SR74	292.84233	292.84233	SR74	4.8555	4.8555	SR74	0.48403	0.0048403	SR74	0.07513	0.00007513	SR74	12.97373	0.1297373
0.0012878	SR75	46.85598	46.85598	SR75	3.93245	3.93245	SR75	0.07865	0.0007865	SR75	0.01074	0.00001074	SR75	1.84025	0.0184025
0.0011552	SR76	42.39123	42.39123	SR76	4.18698	4.18698	SR76	0.06956	0.0006956	SR76	0.00917	0.00000917	SR76	1.56894	0.0156894
0.0011602	SR77	42.88631	42.88631	SR77	4.29345	4.29345	SR77	0.06975	0.0006975	SR77	0.00916	0.00000916	SR77	1.56711	0.0156711
0.0012698	SR78	47.32555	47.32555	SR78	4.28051	4.28051	SR78	0.07703	0.0007703	SR78	0.01035	0.00001035	SR78	1.77195	0.0177195
0.002162	SR79	86.43854	86.43854	SR79	4.83077	4.83077	SR79	0.13515	0.0013515	SR79	0.01946	0.00001946	SR79	3.34575	0.0334575
0.0013893	SR80	50.52396	50.52396	SR80	4.55285	4.55285	SR80	0.08516	0.0008516	SR80	0.01173	0.00001173	SR80	2.01083	0.0201083
0.0018763	SR81	35.25651	35.25651	SR81	2.92036	2.92036	SR81	0.11687	0.0011687	SR81	0.01669	0.00001669	SR81	2.86908	0.0286908
0.0015539	SR82	37.05491	37.05491	SR82	4.06548	4.06548	SR82	0.0917	0.000917	SR82	0.01148	0.00001148	SR82	1.95687	0.0195687
0.0016204	SR83	34.32654	34.32654	SR83	3.12206	3.12206	SR83	0.09848	0.0009848	SR83	0.01329	0.00001329	SR83	2.27559	0.0227559
0.0022653	SR84	39.87221	39.87221	SR84	2.25793	2.25793	SR84	0.14309	0.0014309	SR84	0.02107	0.00002107	SR84	3.62775	0.0362775
0.009187	SR85	135.37323	135.37323	SR85	2.51989	2.51989	SR85	0.59756	0.0059756	SR85	0.09339	0.00009339	SR85	16.13267	0.1613267
0.0029985	SR86	53.61455	53.61455	SR86	2.51917	2.51917	SR86	0.18992	0.0018992	SR86	0.02813	0.00002813	SR86	4.8444	0.048444
0.0015939	SR87	32.16158	32.16158	SR87	2.78847	2.78847	SR87	0.09638	0.0009638	SR87	0.01284	0.00001284	SR87	2.19771	0.0219771
0.0011006	SR88	22.33007	22.33007	SR88	2.02985	2.02985	SR88	0.06633	0.0006633	SR88	0.00877	0.00000877	SR88	1.49959	0.0149959
0.0009733	SR89	20.41583	20.41583	SR89	2.03084	2.03084	SR89	0.0579	0.000579	SR89	0.0074	0.0000074	SR89	1.26334	0.0126334
0.0011763	SR90	26.66604	26.66604	SR90	3.06547	3.06547	SR90	0.06782	0.0006782	SR90	0.00795	0.00000795	SR90	1.34965	0.0134965
0.0010893	SR91	24.44469	24.44469	SR91	2.71787	2.71787	SR91	0.06328	0.0006328	SR91	0.00759	0.00000759	SR91	1.28927	0.0128927
0.0009677	SR92	20.9297	20.9297	SR92	2.06543	2.06543	SR92	0.05757	0.0005757	SR92	0.00736	0.00000736	SR92	1.25657	0.0125657
0.0012157	SR93	27.29111	27.29111	SR93	2.83193	2.83193	SR93	0.07154	0.0007154	SR93	0.00889	0.00000889	SR93	1.51406	0.0151406
0.0015352	SR94	32.93699	32.93699	SR94	2.88469	2.88469	SR94	0.09297	0.0009297	SR94	0.01244	0.00001244	SR94	2.12883	0.0212883
0.003244	SR95	60.10405	60.10405	SR95	3.3005	3.3005	SR95	0.20567	0.0020567	SR95	0.03052	0.00003052	SR95	5.25732	0.0525732
0.0076129	SR96	146.01086	146.01086	SR96	6.37385	6.37385	SR96	0.49121	0.0049121	SR96	0.07556	0.00007556	SR96	13.04158	0.1304158
0.0013016	CR1	22.87363	22.87363	CR1	2.23138	2.23138	CR1	0.07713	0.0007713	CR1	0.00976	0.00000976	CR1	1.66503	0.0166503
0.0004881	CR2	7.89571	7.89571	CR2	0.54102	0.54102	CR2	0.03036	0.0003036	CR2	0.00432	0.00000432	CR2	0.7427	0.007427
0.0006833	CR3	9.66425	9.66425	CR3	0.56842	0.56842	CR3	0.04298	0.0004298	CR3	0.00627	0.00000627	CR3	1.07943	0.0107943
0.000892	CR4	12.58084	12.58084	CR4	0.7428	0.7428	CR4	0.05604	0.0005604	CR4	0.00815	0.00000815	CR4	1.40311	0.0140311
0.0030378	CR5	72.70276	72.70276	CR5	2.30654	2.30654	CR5	0.19541	0.0019541	CR5	0.02988	0.00002988	CR5	5.15506	0.0515506
0.0013782	CR6	20.49452	20.49452	CR6	1.90374	1.90374	CR6	0.0819	0.000819	CR6	0.01044	0.00001044	CR6	1.78243	0.0178243
0.0021161	CR7	39.0309	39.0309	CR7	4.03618	4.03618	CR7	0.12665	0.0012665	CR7	0.01642	0.00001642	CR7	2.80584	0.0280584
0.0015757	CR8	27.70563	27.70563	CR8	1.85453	1.85453	CR8	0.10017	0.0010017	CR8	0.01495	0.00001495	CR8	2.57619	0.0257619
0.0047699	CR9	80.38258	80.38258	CR9	3.90329	3.90329	CR9	0.30371	0.0030371	CR9	0.04548	0.00004548	CR9	7.83741	0.0783741
0.0008623	CR10	20.33192	20.33192	CR10	1.65109	1.65109	CR10	0.05358	0.0005358	CR10	0.00761	0.00000761	CR10	1.30768	0.0130768
0.0253178	CR11	248.89421	248.89421	CR11	4.66393	4.66393	CR11	1.65698	0.0165698	CR11	0.26205	0.00026205	CR11	45.29879	0.4529879
0.0014572	CR12	17.65581	17.65581	CR12	1.187	1.187	CR12	0.09375	0.0009375	CR12	0.01434	0.00001434	CR12	2.4738	0.024738
0.0087858	CR13	89.14227	89.14227	CR13	2.92299	2.92299	CR13	0.57276	0.0057276	CR13	0.08991	0.00008991	CR13	15.53508	0.1553508
0.0017061	CR14	66.30995	66.30995	CR14	6.62461	6.62461	CR14	0.10455	0.0010455	CR14	0.01438	0.00001438	CR14	2.46666	0.0246666
0.0018704	CR15	74.61753	74.61753	CR15	4.7364	4.7364	CR15	0.11611	0.0011611	CR15	0.01646	0.00001646	CR15	2.82763	0.0282763
0.0012546	CR16	45.53337	45.53337	CR16	3.67994	3.67994	CR16	0.07687	0.0007687	CR16	0.01057	0.00001057	CR16	1.813	0.01813
0.0006148	CR17	9.31563	9.31563	CR17	0.60251	0.60251	CR17	0.03841	0.0003841	CR17	0.00552	0.00000552	CR17	0.94936	0.0094936
0.02	**SR48**	**295.02**	**295.02**	**SR64**	**10.18**	**10.18**	**SR64**	**1.48**	**1.48E-02**	**SR48**	**0.23**	**2.33E-04**	**SR48**	**40.25**	**0.40**
0.03	**CR11**	**248.89**	**248.89**	**CR11**	**6.62**	**6.62**	**CR14**	**1.66**	**1.66E-02**	**CR11**	**0.26**	**2.62E-04**	**CR11**	**45.30**	**0.45**
0.03	**CR11**	**295.02**	**295.02**	**SR64**	**10.18**	**10.18**	**SR64**	**1.66**	**1.66E-02**	**CR11**	**0.26**	**2.62E-04**	**CR11**	**45.30**	**0.45**

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (Annual)									Maximum Concentration Results (8-hour)		
	1000			100000			1000		1		
Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID	CO (10^0)	CO	Receptor ID
SR1	13.34706	0.01334706	SR1	0.06482	6.482E-07	SR1	0.05214	0.00005214	SR1	140.96016	140.96016	SR1
SR2	13.58558	0.01358558	SR2	0.06094	6.094E-07	SR2	0.05242	0.00005242	SR2	131.16433	131.16433	SR2
SR3	11.58459	0.01158459	SR3	0.04861	4.861E-07	SR3	0.04426	0.00004426	SR3	108.93224	108.93224	SR3
SR4	11.95968	0.01195968	SR4	0.0476	0.000000476	SR4	0.04535	0.00004535	SR4	104.90391	104.90391	SR4
SR5	11.05891	0.01105891	SR5	0.04255	4.255E-07	SR5	0.04175	0.00004175	SR5	91.32724	91.32724	SR5
SR6	14.77625	0.01477625	SR6	0.04863	4.863E-07	SR6	0.05471	0.00005471	SR6	93.85995	93.85995	SR6
SR7	14.44513	0.01444513	SR7	0.04698	4.698E-07	SR7	0.05341	0.00005341	SR7	91.77473	91.77473	SR7
SR8	14.29941	0.01429941	SR8	0.04724	4.724E-07	SR8	0.05296	0.00005296	SR8	91.82483	91.82483	SR8
SR9	13.8168	0.0138168	SR9	0.0459	0.000000459	SR9	0.05121	0.00005121	SR9	89.82088	89.82088	SR9
SR10	13.42301	0.01342301	SR10	0.04482	4.482E-07	SR10	0.04978	0.00004978	SR10	87.9922	87.9922	SR10
SR11	11.1902	0.0111902	SR11	0.03819	3.819E-07	SR11	0.04161	0.00004161	SR11	77.21663	77.21663	SR11
SR12	11.09363	0.01109363	SR12	0.03802	3.802E-07	SR12	0.04127	0.00004127	SR12	76.22982	76.22982	SR12
SR13	11.05911	0.01105911	SR13	0.03798	3.798E-07	SR13	0.04115	0.00004115	SR13	76.02397	76.02397	SR13
SR14	11.0199	0.0110199	SR14	0.03786	3.786E-07	SR14	0.04101	0.00004101	SR14	75.41307	75.41307	SR14
SR15	11.02079	0.01102079	SR15	0.03786	3.786E-07	SR15	0.04101	0.00004101	SR15	76.09069	76.09069	SR15
SR16	12.17713	0.01217713	SR16	0.04217	4.217E-07	SR16	0.04536	0.00004536	SR16	88.63597	88.63597	SR16
SR17	12.13096	0.01213096	SR17	0.04205	4.205E-07	SR17	0.04519	0.00004519	SR17	88.56836	88.56836	SR17
SR18	12.23596	0.01223596	SR18	0.04237	4.237E-07	SR18	0.04557	0.00004557	SR18	88.55527	88.55527	SR18
SR19	11.49759	0.01149759	SR19	0.03917	3.917E-07	SR19	0.04274	0.00004274	SR19	84.90496	84.90496	SR19
SR20	12.893	0.012893	SR20	0.04411	4.411E-07	SR20	0.04795	0.00004795	SR20	93.09001	93.09001	SR20
SR21	12.06869	0.01206869	SR21	0.04062	4.062E-07	SR21	0.0448	0.0000448	SR21	89.1109	89.1109	SR21
SR22	13.98382	0.01398382	SR22	0.04698	4.698E-07	SR22	0.0519	0.0000519	SR22	96.192	96.192	SR22
SR23	12.99839	0.01299839	SR23	0.04305	4.305E-07	SR23	0.04816	0.00004816	SR23	93.78512	93.78512	SR23
SR24	15.02074	0.01502074	SR24	0.04968	4.968E-07	SR24	0.05564	0.00005564	SR24	98.0824	98.0824	SR24
SR25	14.48368	0.01448368	SR25	0.04719	4.719E-07	SR25	0.05356	0.00005356	SR25	98.38765	98.38765	SR25
SR26	16.5375	0.0165375	SR26	0.05384	5.384E-07	SR26	0.06115	0.00006115	SR26	105.41092	105.41092	SR26
SR27	16.31576	0.01631576	SR27	0.05232	5.232E-07	SR27	0.06022	0.00006022	SR27	107.10265	107.10265	SR27
SR28	19.49467	0.01949467	SR28	0.06202	6.202E-07	SR28	0.07189	0.00007189	SR28	120.74225	120.74225	SR28
SR29	19.34552	0.01934552	SR29	0.06126	6.126E-07	SR29	0.07131	0.00007131	SR29	124.20594	124.20594	SR29
SR30	26.37141	0.02637141	SR30	0.08169	8.169E-07	SR30	0.09697	0.00009697	SR30	153.86126	153.86126	SR30
SR31	22.26803	0.02226803	SR31	0.07195	7.195E-07	SR31	0.08227	0.00008227	SR31	141.69794	141.69794	SR31
SR32	16.6908	0.0166908	SR32	0.05112	5.112E-07	SR32	0.0613	0.0000613	SR32	95.92517	95.92517	SR32
SR33	16.64194	0.01664194	SR33	0.05014	5.014E-07	SR33	0.06101	0.00006101	SR33	90.67695	90.67695	SR33
SR34	14.14989	0.01414989	SR34	0.04309	4.309E-07	SR34	0.05193	0.00005193	SR34	79.99526	79.99526	SR34
SR35	13.20198	0.01320198	SR35	0.03996	3.996E-07	SR35	0.04842	0.00004842	SR35	73.20888	73.20888	SR35
SR36	10.78032	0.01078032	SR36	0.03279	3.279E-07	SR36	0.03956	0.00003956	SR36	60.70085	60.70085	SR36
SR37	37.3412	0.0373412	SR37	0.12313	1.2313E-06	SR37	0.13828	0.00013828	SR37	213.69892	213.69892	SR37
SR38	50.36396	0.05036396	SR38	0.15839	1.5839E-06	SR38	0.1855	0.0001855	SR38	277.66929	277.66929	SR38
SR39	30.33645	0.03033645	SR39	0.10691	1.0691E-06	SR39	0.11324	0.00011324	SR39	198.37757	198.37757	SR39
SR40	27.3358	0.0273358	SR40	0.09787	9.787E-07	SR40	0.10224	0.00010224	SR40	183.98751	183.98751	SR40
SR41	31.68634	0.03168634	SR41	0.10906	1.0906E-06	SR41	0.11793	0.00011793	SR41	199.84222	199.84222	SR41
SR42	46.68504	0.04668504	SR42	0.14904	1.4904E-06	SR42	0.17224	0.00017224	SR42	259.59583	259.59583	SR42
SR43	153.4126	0.1534126	SR43	0.43082	4.3082E-06	SR43	0.5583	0.0005583	SR43	707.96657	707.96657	SR43
SR44	174.44295	0.17444295	SR44	0.49991	4.9991E-06	SR44	0.63614	0.00063614	SR44	831.20631	831.20631	SR44
SR45	54.39719	0.05439719	SR45	0.1883	0.000001883	SR45	0.2026	0.0002026	SR45	333.13212	333.13212	SR45
SR46	31.52838	0.03152838	SR46	0.11428	1.1428E-06	SR46	0.1181	0.0001181	SR46	210.99623	210.99623	SR46
SR47	24.9636	0.0249636	SR47	0.09674	9.674E-07	SR47	0.09432	0.00009432	SR47	184.97207	184.97207	SR47
SR48	334.85144	0.33485144	SR48	0.91908	9.1908E-06	SR48	1.21581	0.00121581	SR48	1670.49392	1670.49392	SR48
SR49	78.50945	0.07850945	SR49	0.24769	2.4769E-06	SR49	0.28927	0.00028927	SR49	422.25765	422.25765	SR49
SR50	37.75246	0.03775246	SR50	0.13169	1.3169E-06	SR50	0.14074	0.00014074	SR50	236.84239	236.84239	SR50
SR51	24.78077	0.02478077	SR51	0.09782	9.782E-07	SR51	0.09387	0.00009387	SR51	187.77192	187.77192	SR51
SR52	21.60727	0.02160727	SR52	0.08969	8.969E-07	SR52	0.08242	0.00008242	SR52	176.49836	176.49836	SR52
SR53	22.73938	0.02273938	SR53	0.10713	1.0713E-06	SR53	0.0884	0.0000884	SR53	216.49856	216.49856	SR53
SR54	22.60728	0.02260728	SR54	0.09302	9.302E-07	SR54	0.08613	0.00008613	SR54	183.51682	183.51682	SR54
SR55	32.64832	0.03264832	SR55	0.11822	1.1822E-06	SR55	0.12228	0.00012228	SR55	220.23602	220.23602	SR55
SR56	152.63953	0.15263953	SR56	0.43187	4.3187E-06	SR56	0.55591	0.00055591	SR56	710.07754	710.07754	SR56

Air Quality Impact Assessment
Appendix J
Future No Build Condition

Maximum Concentration Results (Annual)									Maximum Concentration Results (8-hour)		
	1000			100000			1000		1		
Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID	CO (10^0)	CO	Receptor ID
SR57	99.44026	0.09944026	SR57	0.29059	2.9059E-06	SR57	0.36336	0.00036336	SR57	478.52046	478.52046	SR57
SR58	42.63106	0.04263106	SR58	0.1429	0.000001429	SR58	0.15817	0.00015817	SR58	253.71302	253.71302	SR58
SR59	30.38025	0.03038025	SR59	0.11145	1.1145E-06	SR59	0.11397	0.00011397	SR59	208.06107	208.06107	SR59
SR60	26.37426	0.02637426	SR60	0.10219	1.0219E-06	SR60	0.09965	0.00009965	SR60	195.92939	195.92939	SR60
SR61	28.9303	0.0289303	SR61	0.12288	1.2288E-06	SR61	0.11072	0.00011072	SR61	238.93219	238.93219	SR61
SR62	32.52124	0.03252124	SR62	0.11655	1.1655E-06	SR62	0.12164	0.00012164	SR62	216.24574	216.24574	SR62
SR63	26.37485	0.02637485	SR63	0.08399	8.399E-07	SR63	0.09728	0.00009728	SR63	164.67191	164.67191	SR63
SR64	116.47269	0.11647269	SR64	0.33001	3.3001E-06	SR64	0.42425	0.00042425	SR64	587.16282	587.16282	SR64
SR65	35.36175	0.03536175	SR65	0.11104	1.1104E-06	SR65	0.13022	0.00013022	SR65	192.61514	192.61514	SR65
SR66	23.06275	0.02306275	SR66	0.07741	7.741E-07	SR66	0.08558	0.00008558	SR66	140.08073	140.08073	SR66
SR67	21.52067	0.02152067	SR67	0.08146	8.146E-07	SR67	0.08106	0.00008106	SR67	152.41704	152.41704	SR67
SR68	22.50771	0.02250771	SR68	0.07696	7.696E-07	SR68	0.08371	0.00008371	SR68	139.16529	139.16529	SR68
SR69	79.43582	0.07943582	SR69	0.22769	2.2769E-06	SR69	0.28968	0.00028968	SR69	393.21514	393.21514	SR69
SR70	27.47184	0.02747184	SR70	0.09492	9.492E-07	SR70	0.1023	0.0001023	SR70	169.39878	169.39878	SR70
SR71	14.36568	0.01436568	SR71	0.05443	5.443E-07	SR71	0.05412	0.00005412	SR71	104.49206	104.49206	SR71
SR72	14.2037	0.0142037	SR72	0.05469	5.469E-07	SR72	0.05362	0.00005362	SR72	103.74288	103.74288	SR72
SR73	22.48855	0.02248855	SR73	0.07621	7.621E-07	SR73	0.08354	0.00008354	SR73	134.21628	134.21628	SR73
SR74	107.90496	0.10790496	SR74	0.30479	3.0479E-06	SR74	0.39292	0.00039292	SR74	543.23022	543.23022	SR74
SR75	15.24757	0.01524757	SR75	0.05703	5.703E-07	SR75	0.05734	0.00005734	SR75	106.55078	106.55078	SR75
SR76	12.98505	0.01298505	SR76	0.05208	5.208E-07	SR76	0.04929	0.00004929	SR76	100.78198	100.78198	SR76
SR77	12.96824	0.01296824	SR77	0.0524	0.000000524	SR77	0.04928	0.00004928	SR77	101.18547	101.18547	SR77
SR78	14.67403	0.01467403	SR78	0.05671	5.671E-07	SR78	0.05543	0.00005543	SR78	107.44506	107.44506	SR78
SR79	27.76715	0.02776715	SR79	0.09286	9.286E-07	SR79	0.10299	0.00010299	SR79	162.62668	162.62668	SR79
SR80	16.66548	0.01666548	SR80	0.06124	6.124E-07	SR80	0.06253	0.00006253	SR80	114.07626	114.07626	SR80
SR81	23.80542	0.02380542	SR81	0.08098	8.098E-07	SR81	0.08848	0.00008848	SR81	146.28584	146.28584	SR81
SR82	16.16682	0.01616682	SR82	0.07178	7.178E-07	SR82	0.06228	0.00006228	SR82	137.05142	137.05142	SR82
SR83	18.84749	0.01884749	SR83	0.07221	7.221E-07	SR83	0.07111	0.00007111	SR83	132.16518	132.16518	SR83
SR84	30.12755	0.03012755	SR84	0.09592	9.592E-07	SR84	0.11112	0.00011112	SR84	160.27543	160.27543	SR84
SR85	134.20359	0.13420359	SR85	0.37302	3.7302E-06	SR85	0.48789	0.00048789	SR85	570.87125	570.87125	SR85
SR86	40.23832	0.04023832	SR86	0.12649	1.2649E-06	SR86	0.1482	0.0001482	SR86	214.39412	214.39412	SR86
SR87	18.19507	0.01819507	SR87	0.07149	7.149E-07	SR87	0.06888	0.00006888	SR87	133.83158	133.83158	SR87
SR88	12.41198	0.01241198	SR88	0.04956	4.956E-07	SR88	0.04709	0.00004709	SR88	95.78963	95.78963	SR88
SR89	10.44479	0.01044479	SR89	0.04454	4.454E-07	SR89	0.04	0.00004	SR89	88.18364	88.18364	SR89
SR90	11.12365	0.01112365	SR90	0.05583	5.583E-07	SR90	0.04369	0.00004369	SR90	111.16655	111.16655	SR90
SR91	10.63475	0.01063475	SR91	0.05125	5.125E-07	SR91	0.04149	0.00004149	SR91	101.54728	101.54728	SR91
SR92	10.38895	0.01038895	SR92	0.04428	4.428E-07	SR92	0.03978	0.00003978	SR92	86.82264	86.82264	SR92
SR93	12.50506	0.01250506	SR93	0.05636	5.636E-07	SR93	0.04828	0.00004828	SR93	109.3553	109.3553	SR93
SR94	17.62697	0.01762697	SR94	0.06872	6.872E-07	SR94	0.06666	0.00006666	SR94	126.01078	126.01078	SR94
SR95	43.67067	0.04367067	SR95	0.13666	1.3666E-06	SR95	0.16076	0.00016076	SR95	222.21648	222.21648	SR95
SR96	108.44224	0.10844224	SR96	0.31279	3.1279E-06	SR96	0.39572	0.00039572	SR96	492.12231	492.12231	SR96
CR1	13.76099	0.01376099	CR1	0.05984	5.984E-07	CR1	0.05285	0.00005285	CR1	121.87553	121.87553	CR1
CR2	6.16176	0.00616176	CR2	0.02111	2.111E-07	CR2	0.02292	0.00002292	CR2	44.31968	44.31968	CR2
CR3	8.96204	0.00896204	CR3	0.0291	0.000000291	CR3	0.03313	0.00003313	CR3	78.92352	78.92352	CR3
CR4	11.64846	0.01164846	CR4	0.03806	3.806E-07	CR4	0.04309	0.00004309	CR4	80.17176	80.17176	CR4
CR5	42.85764	0.04285764	CR5	0.12537	1.2537E-06	CR5	0.15662	0.00015662	CR5	208.13245	208.13245	CR5
CR6	14.73517	0.01473517	CR6	0.06314	6.314E-07	CR6	0.05647	0.00005647	CR6	135.11269	135.11269	CR6
CR7	23.20886	0.02320886	CR7	0.09625	9.625E-07	CR7	0.08852	0.00008852	CR7	183.73038	183.73038	CR7
CR8	21.40299	0.02140299	CR8	0.06613	6.613E-07	CR8	0.07868	0.00007868	CR8	123.24384	123.24384	CR8
CR9	65.11945	0.06511945	CR9	0.19973	1.9973E-06	CR9	0.23918	0.00023918	CR9	327.93652	327.93652	CR9
CR10	10.84831	0.01084831	CR10	0.03734	3.734E-07	CR10	0.04038	0.00004038	CR10	78.46936	78.46936	CR10
CR11	376.95092	0.37695092	CR11	1.01854	1.01854E-05	CR11	1.36657	0.00136657	CR11	1551.64981	1551.64981	CR11
CR12	20.56657	0.02056657	CR12	0.06013	6.013E-07	CR12	0.07516	0.00007516	CR12	105.63513	105.63513	CR12
CR13	129.24793	0.12924793	CR13	0.35553	3.5553E-06	CR13	0.46939	0.00046939	CR13	584.96889	584.96889	CR13
CR14	20.44281	0.02044281	CR14	0.07524	7.524E-07	CR14	0.07672	0.00007672	CR14	138.29821	138.29821	CR14
CR15	23.45616	0.02345616	CR15	0.08109	8.109E-07	CR15	0.08735	0.00008735	CR15	141.3795	141.3795	CR15
CR16	15.02538	0.01502538	CR16	0.05533	5.533E-07	CR16	0.0564	0.0000564	CR16	103.5702	103.5702	CR16
CR17	7.87864	0.00787864	CR17	0.02643	2.643E-07	CR17	0.02923	0.00002923	CR17	56.85231	56.85231	CR17
SR48	**334.85**	**0.33**	**SR48**	**0.92**	**9.19E-06**	**SR48**	**1.22**	**1.22E-03**	**SR48**	**1670.49**	**1.67E+03**	**SR48**
CR11	**376.95**	**0.38**	**CR11**	**1.02**	**1.02E-05**	**CR11**	**1.37**	**1.37E-03**	**CR11**	**1551.65**	**1.55E+03**	**CR11**
CR11	**376.95**	**0.38**	**CR11**	**1.02**	**1.02E-05**	**CR11**	**1.37**	**1.37E-03**	**CR11**	**1670.49**	**1.67E+03**	**SR48**

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (1-hour)

Multiplier	1			1			100			1			1			100			1000			100	
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	
	53.08747	53.08747	SR1	18.97937	18.97937	SR1	3.28643	0.0328643	SR1	30.5877	30.5877	SR1	7.3652	7.3652	SR1	14.85066	0.1485066	SR1	4.12133	0.00412133	SR1	16.85172	
	49.51983	49.51983	SR2	13.18577	13.18577	SR2	2.20218	0.0220218	SR2	27.88078	27.88078	SR2	6.72188	6.72188	SR2	13.81046	0.1381046	SR2	2.73733	0.00273733	SR2	14.09253	
	50.05769	50.05769	SR3	12.22072	12.22072	SR3	2.07831	0.0207831	SR3	29.0742	29.0742	SR3	7.00344	7.00344	SR3	14.0041	0.140041	SR3	2.59495	0.00259495	SR3	14.13549	
	53.01963	53.01963	SR4	9.79722	9.79722	SR4	1.46165	0.0146165	SR4	29.81856	29.81856	SR4	7.1891	7.1891	SR4	14.78609	0.1478609	SR4	1.78854	0.00178854	SR4	15.08976	
	53.49779	53.49779	SR5	8.25844	8.25844	SR5	1.2936	0.012936	SR5	30.66923	30.66923	SR5	7.38497	7.38497	SR5	14.96005	0.1496005	SR5	1.5824	0.0015824	SR5	15.106	
	41.73102	41.73102	SR6	15.25782	15.25782	SR6	2.60418	0.0260418	SR6	40.34935	40.34935	SR6	9.73246	9.73246	SR6	11.69843	0.1169843	SR6	2.47332	0.00247332	SR6	14.05866	
	39.35593	39.35593	SR7	21.83889	21.83889	SR7	3.81643	0.0381643	SR7	27.23909	27.23909	SR7	6.57024	6.57024	SR7	8.87942	0.0887942	SR7	3.64691	0.00364691	SR7	18.29998	
	41.60109	41.60109	SR8	11.19172	11.19172	SR8	1.88306	0.0188306	SR8	43.03183	43.03183	SR8	10.38156	10.38156	SR8	11.662	0.11662	SR8	1.78319	0.00178319	SR8	11.93969	
	51.59686	51.59686	SR9	10.06081	10.06081	SR9	1.34359	0.0134359	SR9	52.763	52.763	SR9	12.73018	12.73018	SR9	14.28719	0.1428719	SR9	1.24453	0.00124453	SR9	16.20413	
	51.27054	51.27054	SR10	8.68317	8.68317	SR10	1.01931	0.0101931	SR10	53.03657	53.03657	SR10	12.79644	12.79644	SR10	14.09337	0.1409337	SR10	0.93207	0.00093207	SR10	16.30519	
	37.8178	37.8178	SR11	4.99046	4.99046	SR11	0.51972	0.0051972	SR11	40.20073	40.20073	SR11	9.6996	9.6996	SR11	10.56901	0.1056901	SR11	0.47596	0.00047596	SR11	11.05275	
	42.70724	42.70724	SR12	5.09632	5.09632	SR12	0.47319	0.0047319	SR12	45.33124	45.33124	SR12	10.9375	10.9375	SR12	11.94772	0.1194772	SR12	0.41961	0.00041961	SR12	12.26144	
	47.91062	47.91062	SR13	5.24213	5.24213	SR13	0.43186	0.0043186	SR13	50.08162	50.08162	SR13	12.08531	12.08531	SR13	13.41443	0.1341443	SR13	0.35651	0.00035651	SR13	13.65274	
	39.80345	39.80345	SR14	4.52833	4.52833	SR14	0.38473	0.0038473	SR14	40.88007	40.88007	SR14	9.86463	9.86463	SR14	11.12724	0.1112724	SR14	0.32517	0.00032517	SR14	11.54393	
	54.71394	54.71394	SR15	5.67736	5.67736	SR15	0.43408	0.0043408	SR15	55.54258	55.54258	SR15	13.40162	13.40162	SR15	15.30857	0.1530857	SR15	0.32725	0.00032725	SR15	15.67561	
	55.03676	55.03676	SR16	5.74325	5.74325	SR16	0.44381	0.0044381	SR16	56.50042	56.50042	SR16	13.63925	13.63925	SR16	15.37466	0.1537466	SR16	0.34345	0.00034345	SR16	15.587	
	52.36686	52.36686	SR17	5.36115	5.36115	SR17	0.41477	0.0041477	SR17	50.72151	50.72151	SR17	12.24359	12.24359	SR17	14.60645	0.1460645	SR17	0.31268	0.00031268	SR17	14.89655	
	49.41446	49.41446	SR18	4.9626	4.9626	SR18	0.3834	0.003834	SR18	47.56816	47.56816	SR18	11.4856	11.4856	SR18	13.77739	0.1377739	SR18	0.28368	0.00028368	SR18	14.07309	
	59.52603	59.52603	SR19	5.86378	5.86378	SR19	0.42352	0.0042352	SR19	58.5329	58.5329	SR19	14.12249	14.12249	SR19	16.61637	0.1661637	SR19	0.30016	0.00030016	SR19	16.99493	
	48.82228	48.82228	SR20	4.71492	4.71492	SR20	0.3548	0.003548	SR20	46.79948	46.79948	SR20	11.30005	11.30005	SR20	13.61135	0.1361135	SR20	0.25564	0.00025564	SR20	13.90721	
	65.07963	65.07963	SR21	6.28377	6.28377	SR21	0.43442	0.0043442	SR21	64.13618	64.13618	SR21	15.47396	15.47396	SR21	18.22442	0.1822442	SR21	0.29965	0.00029965	SR21	18.50331	
	43.7644	43.7644	SR22	4.27151	4.27151	SR22	0.30364	0.0030364	SR22	41.88388	41.88388	SR22	10.11426	10.11426	SR22	12.19412	0.1219412	SR22	0.22341	0.00022341	SR22	12.48747	
	58.02343	58.02343	SR23	5.64736	5.64736	SR23	0.39296	0.0039296	SR23	56.9529	56.9529	SR23	13.7409	13.7409	SR23	16.24271	0.1624271	SR23	0.27347	0.00027347	SR23	16.54875	
	37.94487	37.94487	SR24	3.75647	3.75647	SR24	0.25239	0.0025239	SR24	36.23007	36.23007	SR24	8.74999	8.74999	SR24	10.566	0.10566	SR24	0.20162	0.00020162	SR24	10.84646	
	59.84608	59.84608	SR25	5.72186	5.72186	SR25	0.38031	0.0038031	SR25	58.70161	58.70161	SR25	14.16255	14.16255	SR25	16.69383	0.1669383	SR25	0.25457	0.00025457	SR25	17.02057	
	35.66726	35.66726	SR26	3.54164	3.54164	SR26	0.23363	0.0023363	SR26	34.1051	34.1051	SR26	8.23681	8.23681	SR26	9.93174	0.0993174	SR26	0.1871	0.0001871	SR26	10.19553	
	49.43106	49.43106	SR27	4.79452	4.79452	SR27	0.32965	0.0032965	SR27	48.10085	48.10085	SR27	11.60508	11.60508	SR27	13.7796	0.137796	SR27	0.2265	0.0002265	SR27	14.085	
	36.87093	36.87093	SR28	3.64156	3.64156	SR28	0.23724	0.0023724	SR28	35.38854	35.38854	SR28	8.54634	8.54634	SR28	10.26998	0.1026998	SR28	0.18497	0.00018497	SR28	10.53056	
	58.59789	58.59789	SR29	5.55159	5.55159	SR29	0.35866	0.0035866	SR29	57.43725	57.43725	SR29	13.85719	13.85719	SR29	16.35371	0.1635371	SR29	0.23516	0.00023516	SR29	16.64181	
	29.0458	29.0458	SR30	2.88829	2.88829	SR30	0.19742	0.0019742	SR30	27.41387	27.41387	SR30	6.62118	6.62118	SR30	8.08462	0.0808462	SR30	0.16624	0.00016624	SR30	8.3126	
	48.65597	48.65597	SR31	4.68668	4.68668	SR31	0.30957	0.0030957	SR31	47.79485	47.79485	SR31	11.53135	11.53135	SR31	13.62452	0.1362452	SR31	0.21062	0.00021062	SR31	13.79061	
	16.15237	16.15237	SR32	1.80434	1.80434	SR32	0.15618	0.0015618	SR32	14.8203	14.8203	SR32	3.57646	3.57646	SR32	4.46831	0.0446831	SR32	0.12549	0.00012549	SR32	4.70383	
	13.13813	13.13813	SR33	1.51115	1.51115	SR33	0.12668	0.0012668	SR33	11.99656	11.99656	SR33	2.90254	2.90254	SR33	3.6245	0.036245	SR33	0.10713	0.00010713	SR33	3.85536	
	12.86366	12.86366	SR34	1.49644	1.49644	SR34	0.13406	0.0013406	SR34	11.74674	11.74674	SR34	2.83507	2.83507	SR34	3.55168	0.0355168	SR34	0.11023	0.00011023	SR34	3.76629	
	10.0336	10.0336	SR35	1.2683	1.2683	SR35	0.11672	0.0011672	SR35	9.24798	9.24798	SR35	2.23948	2.23948	SR35	2.75589	0.0275589	SR35	0.09772	0.00009772	SR35	2.98243	
	8.9867	8.9867	SR36	1.13091	1.13091	SR36	0.11092	0.0011092	SR36	8.14221	8.14221	SR36	1.96573	1.96573	SR36	2.50626	0.0250626	SR36	0.09559	0.00009559	SR36	2.60913	
	8.17974	8.17974	SR37	2.74455	2.74455	SR37	0.42168	0.0042168	SR37	6.63602	6.63602	SR37	1.60013	1.60013	SR37	2.2194	0.022194	SR37	0.39229	0.00039229	SR37	3.24303	
	11.03691	11.03691	SR38	3.22964	3.22964	SR38	0.49224	0.0049224	SR38	10.76173	10.76173	SR38	2.59638	2.59638	SR38	3.09397	0.0309397	SR38	0.45928	0.00045928	SR38	4.13694	
	11.6493	11.6493	SR39	3.92718	3.92718	SR39	0.60407	0.0060407	SR39	10.79057	10.79057	SR39	2.60337	2.60337	SR39	3.24508	0.0324508	SR39	0.56092	0.00056092	SR39	4.62725	
	11.60971	11.60971	SR40	3.17013	3.17013	SR40	0.49608	0.0049608	SR40	10.65417	10.65417	SR40	2.57048	2.57048	SR40	3.25454	0.0325454	SR40	0.46245	0.00046245	SR40	3.98056	
	11.68508	11.68508	SR41	3.5493	3.5493	SR41	0.56411	0.0056411	SR41	10.57317	10.57317	SR41	2.55095	2.55095	SR41	3.27561	0.0327561	SR41	0.5277	0.0005277	SR41	3.83678	
	11.69504	11.69504	SR42	3.18075	3.18075	SR42	0.51653	0.0051653	SR42	10.58279	10.58279	SR42	2.55329	2.55329	SR42	3.27764	0.0327764	SR42	0.48547	0.00048547	SR42	3.37638	
	12.04938	12.04938	SR43	2.99649	2.99649	SR43	0.45998	0.0045998	SR43	10.69481	10.69481	SR43	2.58034	2.58034	SR43	3.37777	0.0337777	SR43	0.42692	0.00042692	SR43	3.8416	
	12.53727	12.53727	SR44	2.97419	2.97419	SR44	0.43616	0.0043616	SR44	10.77391	10.77391	SR44	2.59953	2.59953	SR44	3.51451	0.0351451	SR44	0.4084	0.0004084	SR44	4.31188	
	12.73103	12.73103	SR45	3.00138	3.00138	SR45	0.47833	0.0047833	SR45	10.92246	10.92246	SR45	2.63536	2.63536	SR45	3.56844	0.0356844	SR45	0.44773	0.00044773	SR45	4.06244	
	12.79988	12.79988	SR46	2.58757	2.58757	SR46	0.40326	0.0040326	SR46	11.0828	11.0828	SR46	2.67445	2.67445	SR46	3.5862	0.035862	SR46	0.37557	0.00037557	SR46	3.83897	
	12.94261	12.94261	SR47	2.73603	2.73603	SR47	0.42746	0.0042746	SR47	11.31042	11.31042	SR47	2.73842	2.73842	SR47	3.62034	0.0362034	SR47	0.39834	0.00039834	SR47	4.00671	
	13.69519	13.69519	SR48	2.28564	2.28564	SR48	0.3214	0.003214	SR48	12.46841	12.46841	SR48	3.01084	3.01084	SR48	3.79823	0.0379823	SR48	0.29505	0.00029505	SR48	4.29821	
	13.98655	13.98655	SR49	2.36652	2.36652	SR49	0.28058	0.0028058	SR49	12.48918	12.48918	SR49	3.01406	3.01406	SR49	3.85711	0.0385711	SR49	0.24672	0.00024672	SR49	4.37456	
	14.24046	14.24046	SR50	2.34022	2.34022	SR50	0.27511	0.0027511	SR50	12.47734	12.47734	SR50	3.02804	3.02804	SR50	3.90592	0.0390592	SR50	0.23725	0.00023725	SR50	4.38601	
	14.5117	14.5117	SR51	2.18104	2.18104	SR51	0.24593	0.0024593	SR51	12.9478	12.9478	SR51	3.13798	3.13798	SR51	3.95924	0.0395924	SR51	0.20916	0.00020916	SR51	4.39673	
	14.58866	14.58866	SR52	2.04317	2.04317	SR52	0.2218	0.002218	SR52	13.09764	13.09764	SR52	3.17131	3.17131	SR52	3.98626	0.0398626	SR52	0.19964	0.00019964	SR52	4.45202	
	14.61697	14.61697	SR53	2.08304	2.08304	SR53	0.21461	0.0021461	SR53	13.1305	13.1305	SR53	3.17587	3.17587	SR53	3.99866	0.0399866	SR53	0.18601	0.00018601	SR53	4.46589	
	15.22942	15.22942	SR54	2.12544	2.12544	SR54	0.22133	0.0022133	SR54	13.53516	13.53516	SR54	3.27003	3.27003	SR54	4.18545	0.0418545	SR54	0.19814	0.00019814	SR54	4.60869	
	15.23161	15.23161	SR55	2.07448	2.07448	SR55	0.20984	0.0020984	SR55	13.5342	13.5342	SR55	3.26842	3.26842	SR55	4.1724	0.041724	SR55	0.1873	0.0001873	SR55	4.56967	
	15.3536	15.3536	SR56	2.02242	2.02242	SR56	0.19525	0.0019525	SR56	13.66558	13.66558	SR56	3.31012	3.31012	SR56	4.19505	0.0419505	SR56	0.15785	0.00015785	SR56	4.62571	
	15.36457	15.36457	SR57	2.05358	2.05358	SR57	0.19893	0.0019893	SR57	13.84395	13.84395	SR57	3.35335	3.35335	SR57	4.19335	0.0419335	SR57	0.16036	0.00016036	SR57	4.64286	
	15.31202	15.31202	SR58	2.06686	2.06686	SR58	0.20213	0.0020213	SR58	13.77059	13.77059	SR58	3.33643	3.33643	SR58	4.17579	0.0417579	SR58	0.16352	0.00016352	SR58	4.63647	
	15.28693	15.28693	SR59	2.07062	2.07062	SR59	0.20317	0.0020317	SR59	13.83229	13.83229	SR59	3.35083	3.35083	SR59	4.16782	0.0416782	SR59	0.16449	0.00016449	SR59	4.63222	

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (1-hour)

Multiplier	1			1			100			1			1			100			1000			100	
	CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	
	15.12582	15.12582	SR60	2.03987	2.03987	SR60	0.19932	0.0019932	SR60	13.72784	13.72784	SR60	3.32418	3.32418	SR60	4.12531	0.0412531	SR60	0.16105	0.00016105	SR60	4.57923	
	14.16598	14.16598	SR61	1.88139	1.88139	SR61	0.18112	0.0018112	SR61	12.75415	12.75415	SR61	3.08756	3.08756	SR61	3.86813	0.0386813	SR61	0.14571	0.00014571	SR61	4.27506	
	13.23512	13.23512	SR62	1.73179	1.73179	SR62	0.16559	0.0016559	SR62	11.80734	11.80734	SR62	2.86156	2.86156	SR62	3.65397	0.0365397	SR62	0.13278	0.00013278	SR62	3.95662	
	15.86944	15.86944	SR63	1.52308	1.52308	SR63	0.14962	0.0014962	SR63	14.29296	14.29296	SR63	3.45004	3.45004	SR63	4.42837	0.0442837	SR63	0.12771	0.00012771	SR63	4.50852	
	9.93165	9.93165	SR64	1.27925	1.27925	SR64	0.13544	0.0013544	SR64	8.63376	8.63376	SR64	2.08327	2.08327	SR64	2.73162	0.0273162	SR64	0.11623	0.00011623	SR64	2.93906	
	10.17221	10.17221	SR65	1.28896	1.28896	SR65	0.13753	0.0013753	SR65	8.87349	8.87349	SR65	2.14127	2.14127	SR65	2.79162	0.0279162	SR65	0.11856	0.00011856	SR65	3.02845	
	9.84164	9.84164	SR66	1.26542	1.26542	SR66	0.13596	0.0013596	SR66	8.58699	8.58699	SR66	2.07238	2.07238	SR66	2.69393	0.0269393	SR66	0.11778	0.00011778	SR66	2.95061	
	7.87877	7.87877	SR67	1.13819	1.13819	SR67	0.12893	0.0012893	SR67	6.82705	6.82705	SR67	1.64824	1.64824	SR67	2.13683	0.0213683	SR67	0.11416	0.00011416	SR67	2.42056	
	8.0292	8.0292	SR68	1.18825	1.18825	SR68	0.13089	0.0013089	SR68	6.90902	6.90902	SR68	1.66833	1.66833	SR68	2.17314	0.0217314	SR68	0.11609	0.00011609	SR68	2.48001	
	8.21473	8.21473	SR69	1.26342	1.26342	SR69	0.138	0.00138	SR69	6.98917	6.98917	SR69	1.68729	1.68729	SR69	2.2158	0.022158	SR69	0.1178	0.0001178	SR69	2.5596	
	6.95267	6.95267	SR70	1.23577	1.23577	SR70	0.14862	0.0014862	SR70	6.40465	6.40465	SR70	1.54511	1.54511	SR70	1.86233	0.0186233	SR70	0.13013	0.00013013	SR70	2.24406	
	7.91598	7.91598	SR71	1.38681	1.38681	SR71	0.16536	0.0016536	SR71	7.27272	7.27272	SR71	1.75455	1.75455	SR71	2.10842	0.0210842	SR71	0.144	0.000144	SR71	2.54559	
	7.85498	7.85498	SR72	1.45219	1.45219	SR72	0.17863	0.0017863	SR72	7.17801	7.17801	SR72	1.73171	1.73171	SR72	2.0881	0.020881	SR72	0.1587	0.0001587	SR72	2.56148	
	7.71658	7.71658	SR73	1.47424	1.47424	SR73	0.19289	0.0019289	SR73	7.12244	7.12244	SR73	1.7183	1.7183	SR73	2.06444	0.0206444	SR73	0.1778	0.0001778	SR73	2.53858	
	7.79709	7.79709	SR74	1.50197	1.50197	SR74	0.20631	0.0020631	SR74	7.19093	7.19093	SR74	1.73482	1.73482	SR74	2.09301	0.0209301	SR74	0.19066	0.00019066	SR74	2.57083	
	8.08782	8.08782	SR75	1.5017	1.5017	SR75	0.22004	0.0022004	SR75	7.24624	7.24624	SR75	1.74814	1.74814	SR75	2.14076	0.0214076	SR75	0.20387	0.00020387	SR75	2.6405	
	8.126	8.126	SR76	1.64705	1.64705	SR76	0.21248	0.0021248	SR76	7.0896	7.0896	SR76	1.71033	1.71033	SR76	2.12898	0.0212898	SR76	0.19621	0.00019621	SR76	2.71754	
	8.1828	8.1828	SR77	1.74417	1.74417	SR77	0.249	0.00249	SR77	6.99096	6.99096	SR77	1.68654	1.68654	SR77	2.13031	0.0213031	SR77	0.23133	0.00023133	SR77	2.77652	
	8.21301	8.21301	SR78	1.78137	1.78137	SR78	0.27913	0.0027913	SR78	6.92512	6.92512	SR78	1.67065	1.67065	SR78	2.13422	0.0213422	SR78	0.26029	0.00026029	SR78	2.79844	
	8.19465	8.19465	SR79	2.13788	2.13788	SR79	0.33911	0.0033911	SR79	6.90029	6.90029	SR79	1.6645	1.6645	SR79	2.13901	0.0213901	SR79	0.31784	0.00031784	SR79	2.76398	
	8.78847	8.78847	SR80	2.82416	2.82416	SR80	0.46708	0.0046708	SR80	7.04053	7.04053	SR80	1.6983	1.6983	SR80	2.17593	0.0217593	SR80	0.44072	0.00044072	SR80	3.3127	
	8.49722	8.49722	SR81	3.76154	3.76154	SR81	0.6423	0.006423	SR81	5.91719	5.91719	SR81	1.42685	1.42685	SR81	1.97431	0.0197431	SR81	0.61008	0.00061008	SR81	3.58508	
	7.24268	7.24268	SR82	2.40521	2.40521	SR82	0.38355	0.0038355	SR82	5.40466	5.40466	SR82	1.30445	1.30445	SR82	1.86542	0.0186542	SR82	0.35906	0.00035906	SR82	2.57573	
	7.34268	7.34268	SR83	2.22978	2.22978	SR83	0.35085	0.0035085	SR83	5.39348	5.39348	SR83	1.30416	1.30416	SR83	1.91028	0.0191028	SR83	0.32748	0.00032748	SR83	2.52296	
	7.54166	7.54166	SR84	1.90198	1.90198	SR84	0.29134	0.0029134	SR84	5.35076	5.35076	SR84	1.29679	1.29679	SR84	1.93794	0.0193794	SR84	0.27026	0.00027026	SR84	2.6341	
	7.5234	7.5234	SR85	1.76252	1.76252	SR85	0.25334	0.0025334	SR85	5.24289	5.24289	SR85	1.27405	1.27405	SR85	1.93349	0.0193349	SR85	0.23691	0.00023691	SR85	2.627	
	7.35163	7.35163	SR86	1.70988	1.70988	SR86	0.25592	0.0025592	SR86	5.13973	5.13973	SR86	1.24968	1.24968	SR86	1.91561	0.0191561	SR86	0.23611	0.00023611	SR86	2.48953	
	7.14419	7.14419	SR87	1.6088	1.6088	SR87	0.23749	0.0023749	SR87	5.05885	5.05885	SR87	1.23301	1.23301	SR87	1.89288	0.0189288	SR87	0.21838	0.00021838	SR87	2.39426	
	7.15458	7.15458	SR88	1.51998	1.51998	SR88	0.21856	0.0021856	SR88	4.97335	4.97335	SR88	1.21434	1.21434	SR88	1.89015	0.0189015	SR88	0.2002	0.0002002	SR88	2.42529	
	7.11159	7.11159	SR89	1.48066	1.48066	SR89	0.19987	0.0019987	SR89	4.85379	4.85379	SR89	1.18643	1.18643	SR89	1.88131	0.0188131	SR89	0.20236	0.00020236	SR89	2.39662	
	6.81414	6.81414	SR90	1.36889	1.36889	SR90	0.20036	0.0020036	SR90	4.63044	4.63044	SR90	1.13156	1.13156	SR90	1.8121	0.018121	SR90	0.24662	0.00024662	SR90	2.2731	
	6.90816	6.90816	SR91	1.36913	1.36913	SR91	0.21494	0.0021494	SR91	4.58527	4.58527	SR91	1.11739	1.11739	SR91	1.84105	0.0184105	SR91	0.2629	0.0002629	SR91	2.21839	
	6.85114	6.85114	SR92	1.61187	1.61187	SR92	0.26709	0.0026709	SR92	4.50696	4.50696	SR92	1.09041	1.09041	SR92	1.8382	0.018382	SR92	0.33133	0.00033133	SR92	2.16364	
	6.46926	6.46926	SR93	1.73627	1.73627	SR93	0.27752	0.0027752	SR93	4.34254	4.34254	SR93	1.0488	1.0488	SR93	1.73639	0.0173639	SR93	0.34504	0.00034504	SR93	2.04111	
	6.5285	6.5285	SR94	2.01765	2.01765	SR94	0.34101	0.0034101	SR94	4.59653	4.59653	SR94	1.11184	1.11184	SR94	1.76969	0.0176969	SR94	0.42513	0.00042513	SR94	2.00848	
	6.52894	6.52894	SR95	2.23656	2.23656	SR95	0.36618	0.0036618	SR95	4.64827	4.64827	SR95	1.12529	1.12529	SR95	1.78067	0.0178067	SR95	0.45289	0.00045289	SR95	2.18204	
	6.38504	6.38504	SR96	2.68696	2.68696	SR96	0.46468	0.0046468	SR96	4.67753	4.67753	SR96	1.13321	1.13321	SR96	1.7492	0.017492	SR96	0.58256	0.00058256	SR96	2.36589	
	19.16586	19.16586	CR1	12.39366	12.39366	CR1	2.19436	0.0219436	CR1	11.25365	11.25365	CR1	2.71835	2.71835	CR1	5.31545	0.0531545	CR1	2.76631	0.00276631	CR1	8.93078	
	8.58597	8.58597	CR2	2.56188	2.56188	CR2	0.44416	0.0044416	CR2	6.00491	6.00491	CR2	1.4502	1.4502	CR2	2.3854	0.023854	CR2	0.55716	0.00055716	CR2	2.47033	
	10.79616	10.79616	CR3	1.83243	1.83243	CR3	0.31073	0.0031073	CR3	7.4944	7.4944	CR3	1.81405	1.81405	CR3	2.97367	0.0297367	CR3	0.3877	0.0003877	CR3	3.18232	
	9.20219	9.20219	CR4	2.6151	2.6151	CR4	0.4471	0.004471	CR4	6.10219	6.10219	CR4	1.47709	1.47709	CR4	2.54993	0.0254993	CR4	0.55897	0.00055897	CR4	2.72698	
	5.42627	5.42627	CR5	3.01902	3.01902	CR5	0.52496	0.0052496	CR5	4.62551	4.62551	CR5	1.12183	1.12183	CR5	1.49923	0.0149923	CR5	0.65988	0.00065988	CR5	2.46754	
	13.92604	13.92604	CR6	1.6553	1.6553	CR6	0.26694	0.0026694	CR6	9.81224	9.81224	CR6	2.37018	2.37018	CR6	3.8722	0.038722	CR6	0.32885	0.00032885	CR6	4.01085	
	10.01844	10.01844	CR7	1.89468	1.89468	CR7	0.23609	0.0023609	CR7	6.57711	6.57711	CR7	1.58825	1.58825	CR7	2.68559	0.0268559	CR7	0.21172	0.00021172	CR7	3.28458	
	18.99001	18.99001	CR8	13.00174	13.00174	CR8	2.26139	0.0226139	CR8	10.48189	10.48189	CR8	2.52769	2.52769	CR8	3.85857	0.0385857	CR8	2.15592	0.00215592	CR8	10.34818	
	13.76439	13.76439	CR9	4.18629	4.18629	CR9	0.65783	0.0065783	CR9	12.79626	12.79626	CR9	3.08707	3.08707	CR9	3.63243	0.0363243	CR9	0.61713	0.00061713	CR9	5.25537	
	15.26372	15.26372	CR10	2.00027	2.00027	CR10	0.21976	0.0021976	CR10	14.63275	14.63275	CR10	3.5303	3.5303	CR10	4.23955	0.0423955	CR10	0.20129	0.00020129	CR10	4.55424	
	6.62514	6.62514	CR11	0.8397	0.8397	CR11	0.09174	0.0009174	CR11	6.11766	6.11766	CR11	1.48102	1.48102	CR11	1.82134	0.0182134	CR11	0.08713	0.00008713	CR11	1.97364	
	6.34765	6.34765	CR12	0.84292	0.84292	CR12	0.09678	0.0009678	CR12	6.09559	6.09559	CR12	1.47262	1.47262	CR12	1.7675	0.017675	CR12	0.09121	0.00009121	CR12	1.82981	
	5.728	5.728	CR13	0.83347	0.83347	CR13	0.08714	0.0008714	CR13	5.19401	5.19401	CR13	1.25509	1.25509	CR13	1.55256	0.0155256	CR13	0.07252	0.00007252	CR13	1.76258	
	6.62947	6.62947	CR14	1.09473	1.09473	CR14	0.12573	0.0012573	CR14	6.17587	6.17587	CR14	1.48989	1.48989	CR14	1.77631	0.0177631	CR14	0.10834	0.00010834	CR14	2.10072	
	7.05532	7.05532	CR15	1.23329	1.23329	CR15	0.17444	0.0017444	CR15	6.40751	6.40751	CR15	1.5458	1.5458	CR15	1.87961	0.0187961	CR15	0.16124	0.00016124	CR15	2.26759	
	7.38201	7.38201	CR16	1.4861	1.4861	CR16	0.19966	0.0019966	CR16	6.44626	6.44626	CR16	1.55512	1.55512	CR16	1.93567	0.0193567	CR16	0.18462	0.00018462	CR16	2.46399	
	9.1377	9.1377	CR17	2.63823	2.63823	CR17	0.45715	0.0045715	CR17	5.90776	5.90776	CR17	1.43047	1.43047	CR17	2.51424	0.0251424	CR17	0.57338	0.00057338	CR17	2.70121	
MAX SR	**65.08**	**65.08**	**SR21**	**21.84**	**21.84**	**SR7**	**3.82**	**0.04**	**SR7**	**64.14**	**64.14**	**SR21**	**15.47**	**15.47**	**SR21**	**18.22**	**1.82E-01**	**SR21**	**4.12**	**4.12E-03**	**SR1**	**18.50**	
MAX CR	**19.17**	**19.17**	**CR1**	**13.00**	**13.00**	**CR8**	**2.26**	**0.02**	**CR8**	**14.63**	**14.63**	**CR10**	**3.53**	**3.53**	**CR10**	**5.32**	**5.32E-02**	**CR1**	**2.77**	**2.77E-03**	**CR1**	**10.35**	
MAX Conc.	**65.08**	**65.08**	**SR21**	**21.84**	**21.84**	**SR7**	**3.82**	**0.04**	**SR7**	**64.14**	**64.14**	**SR21**	**15.47**	**15.47**	**SR21**	**18.22**	**1.82E-01**	**SR21**	**4.12**	**4.12E-03**	**SR1**	**18.50**	

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (1-hour)

		1000				100000			1000		
Formaldehyde	**Receptor ID**	**Acetaldehyde (10^3)**	**Acetaldehyde**	**Receptor ID**	**30-MI**	**Benzo(a)pyrene (10^5)**	**Benzo(a)pyrene**	**Receptor ID**	**Acrolein (10^3)**	**Acrolein**	**Receptor ID**
0.1685172	SR1	120.86818	0.12086818	SR1	0.146757526	8.79016	8.79016E-05	SR1	10.34947	0.01034947	SR1
0.1409253	SR2	113.17253	0.11317253	SR2	0.137413507	5.9657	0.000059657	SR2	6.91718	0.00691718	SR2
0.1413549	SR3	113.99802	0.11399802	SR3	0.138415813	5.59407	5.59407E-05	SR3	6.5366	0.0065366	SR3
0.1508976	SR4	121.17524	0.12117524	SR4	0.147130357	4.04768	4.04768E-05	SR4	4.57041	0.00457041	SR4
0.15106	SR5	121.85696	0.12185696	SR5	0.147958097	3.5839	0.000035839	SR5	4.04457	0.00404457	SR5
0.1405866	SR6	95.25765	0.09525765	SR6	0.115661351	6.99814	6.99814E-05	SR6	8.21349	0.00821349	SR6
0.1829998	SR7	114.30073	0.11430073	SR7	0.138783362	10.17154	0.000101715	SR7	12.05681	0.01205681	SR7
0.1193969	SR8	94.46798	0.09446798	SR8	0.114702538	5.08596	5.08596E-05	SR8	5.93297	0.00593297	SR8
0.1620413	SR9	123.05028	0.12305028	SR9	0.14940702	3.9337	0.000039337	SR9	4.2008	0.0042008	SR9
0.1630519	SR10	122.82025	0.12282025	SR10	0.149127719	3.17161	3.17161E-05	SR10	3.17279	0.00317279	SR10
0.1105275	SR11	86.45393	0.08645393	SR11	0.10497192	1.6961	0.000016961	SR11	1.60411	0.00160411	SR11
0.1226144	SR12	97.22646	0.09722646	SR12	0.11805187	1.64706	1.64706E-05	SR12	1.42974	0.00142974	SR12
0.1365274	SR13	108.96091	0.10896091	SR13	0.13229978	1.59866	1.59866E-05	SR13	1.25727	0.00125727	SR13
0.1154393	SR14	91.69267	0.09169267	SR14	0.111332771	1.40131	1.40131E-05	SR14	1.12551	0.00112551	SR14
0.1567561	SR15	125.21245	0.12521245	SR15	0.152032316	1.67284	1.67284E-05	SR15	1.24802	0.00124802	SR15
0.15587	SR16	125.52184	0.12552184	SR16	0.152407976	1.7004	0.000017004	SR16	1.2785	0.0012785	SR16
0.1489655	SR17	119.65909	0.11965909	SR17	0.145289455	1.58812	1.58812E-05	SR17	1.19509	0.00119509	SR17
0.1407309	SR18	112.9691	0.1129691	SR18	0.137166503	1.46912	1.46912E-05	SR18	1.10441	0.00110441	SR18
0.1699493	SR19	136.2299	0.1362299	SR19	0.165409648	1.68456	1.68456E-05	SR19	1.20517	0.00120517	SR19
0.1390721	SR20	111.62475	0.11162475	SR20	0.1355342	1.37325	1.37325E-05	SR20	1.01876	0.00101876	SR20
0.1850331	SR21	148.48678	0.14848678	SR21	0.180291889	1.76505	1.76505E-05	SR21	1.22734	0.00122734	SR21
0.1248747	SR22	100.13282	0.10013282	SR22	0.121580758	1.1878	0.000011878	SR22	0.86886	0.00086886	SR22
0.1654875	SR23	132.73209	0.13273209	SR23	0.161162625	1.58686	1.58686E-05	SR23	1.11251	0.00111251	SR23
0.1084646	SR24	86.88473	0.08688473	SR24	0.105494995	1.03666	1.03666E-05	SR24	0.72142	0.00072142	SR24
0.1702057	SR25	136.7367	0.1367367	SR25	0.166025002	1.58439	1.58439E-05	SR25	1.06512	0.00106512	SR25
0.1019553	SR26	81.66996	0.08166996	SR26	0.099163248	0.97886	9.7886E-06	SR26	0.66997	0.00066997	SR26
0.14085	SR27	113.03151	0.11303151	SR27	0.137242281	1.34841	1.34841E-05	SR27	0.92915	0.00092915	SR27
0.1053056	SR28	84.39503	0.08439503	SR28	0.102472014	1.00129	1.00129E-05	SR28	0.66701	0.00066701	SR28
0.1664181	SR29	133.80325	0.13380325	SR29	0.162463222	1.51729	1.51729E-05	SR29	0.99898	0.00099898	SR29
0.083126	SR30	66.54211	0.06654211	SR30	0.08079509	0.79219	7.9219E-06	SR30	0.58803	0.00058803	SR30
0.1379061	SR31	110.65977	0.11065977	SR31	0.134362527	1.2761	0.000012761	SR31	0.87022	0.00087022	SR31
0.0470383	SR32	37.283	0.037283	SR32	0.045268828	0.56338	5.6338E-06	SR32	0.45814	0.00045814	SR32
0.0385536	SR33	30.4264	0.0304264	SR33	0.036943579	0.46372	4.6372E-06	SR33	0.36997	0.00036997	SR33
0.0376629	SR34	29.76139	0.02976139	SR34	0.036136127	0.47514	4.7514E-06	SR34	0.39527	0.00039527	SR34
0.0298243	SR35	23.35952	0.02335952	SR35	0.02836301	0.4081	0.000004081	SR35	0.34546	0.00034546	SR35
0.0260913	SR36	20.53843	0.02053843	SR36	0.024937657	0.37581	3.7581E-06	SR36	0.33115	0.00033115	SR36
0.0324303	SR37	21.83323	0.02183323	SR37	0.026509796	1.17742	1.17742E-05	SR37	1.31939	0.00131939	SR37
0.0413694	SR38	28.54356	0.02854356	SR38	0.034657445	1.36302	1.36302E-05	SR38	1.54289	0.00154289	SR38
0.0462725	SR39	31.12375	0.03112375	SR39	0.037790298	1.68598	1.68598E-05	SR39	1.89027	0.00189027	SR39
0.0398056	SR40	27.7343	0.0277343	SR40	0.033674845	1.37569	1.37569E-05	SR40	1.55446	0.00155446	SR40
0.0383678	SR41	26.53517	0.02653517	SR41	0.032218868	1.55536	1.55536E-05	SR41	1.76976	0.00176976	SR41
0.0337638	SR42	26.56547	0.02656547	SR42	0.032255658	1.41299	1.41299E-05	SR42	1.62315	0.00162315	SR42
0.038416	SR43	28.36297	0.02836297	SR43	0.034438173	1.2848	0.000012848	SR43	1.43916	0.00143916	SR43
0.0431188	SR44	30.75044	0.03075044	SR44	0.037337027	1.20291	1.20291E-05	SR44	1.36882	0.00136882	SR44
0.0406244	SR45	29.58294	0.02958294	SR45	0.035919454	1.31752	1.31752E-05	SR45	1.50097	0.00150097	SR45
0.0383897	SR46	29.08608	0.02908608	SR46	0.03531617	1.11999	1.11999E-05	SR46	1.26318	0.00126318	SR46
0.0400671	SR47	29.8945	0.0298945	SR47	0.036297749	1.18611	1.18611E-05	SR47	1.33927	0.00133927	SR47
0.0429821	SR48	32.38506	0.03238506	SR48	0.039321774	0.9136	0.000009136	SR48	1.00176	0.00100176	SR48
0.0437456	SR49	33.06481	0.03306481	SR49	0.040147123	0.87074	8.7074E-06	SR49	0.85711	0.00085711	SR49
0.0438601	SR50	33.36178	0.03336178	SR50	0.040507703	0.85696	8.5696E-06	SR50	0.83961	0.00083961	SR50
0.0439673	SR51	34.08065	0.03408065	SR51	0.041380551	0.78046	7.8046E-06	SR51	0.74715	0.00074715	SR51
0.0445202	SR52	34.37106	0.03437106	SR52	0.041733165	0.70409	7.0409E-06	SR52	0.68666	0.00068666	SR52
0.0446589	SR53	34.39266	0.03439266	SR53	0.041759392	0.71009	7.1009E-06	SR53	0.64504	0.00064504	SR53
0.0460869	SR54	35.67819	0.03567819	SR54	0.043320276	0.72496	7.2496E-06	SR54	0.68391	0.00068391	SR54
0.0456967	SR55	35.57448	0.03557448	SR55	0.043194352	0.69599	6.9599E-06	SR55	0.64777	0.00064777	SR55
0.0462571	SR56	35.96837	0.03596837	SR56	0.043672611	0.66348	6.6348E-06	SR56	0.58269	0.00058269	SR56
0.0464286	SR57	36.04165	0.03604165	SR57	0.043761587	0.67804	6.7804E-06	SR57	0.59318	0.00059318	SR57
0.0463647	SR58	35.95091	0.03595091	SR58	0.043651411	0.68576	6.8576E-06	SR58	0.60349	0.00060349	SR58
0.0463222	SR59	35.90347	0.03590347	SR59	0.04359381	0.68818	6.8818E-06	SR59	0.60685	0.00060685	SR59

Multiplier	**1**			**1**	
	CO (10^0)	**CO**	**Receptor ID**	**NOx (10^0)**	**NOx**
	13.63086	13.63086	SR1	5.00549	5.00549
	13.5968	13.5968	SR2	1.68012	1.68012
	11.23135	11.23135	SR3	2.76958	2.76958
	14.53893	14.53893	SR4	1.67827	1.67827
	15.6737	15.6737	SR5	2.12811	2.12811
	11.78474	11.78474	SR6	2.47019	2.47019
	12.16296	12.16296	SR7	6.35357	6.35357
	10.11813	10.11813	SR8	1.77687	1.77687
	14.51401	14.51401	SR9	1.96053	1.96053
	14.34384	14.34384	SR10	1.75709	1.75709
	12.97355	12.97355	SR11	1.16736	1.16736
	14.59677	14.59677	SR12	1.27537	1.27537
	12.97596	12.97596	SR13	1.21308	1.21308
	9.04302	9.04302	SR14	0.90986	0.90986
	12.6481	12.6481	SR15	1.19072	1.19072
	10.39267	10.39267	SR16	1.05195	1.05195
	10.37864	10.37864	SR17	1.01116	1.01116
	10.39717	10.39717	SR18	0.96762	0.96762
	10.16456	10.16456	SR19	0.95063	0.95063
	10.39592	10.39592	SR20	0.93237	0.93237
	13.12853	13.12853	SR21	1.18718	1.18718
	10.28153	10.28153	SR22	0.8959	0.8959
	13.39102	13.39102	SR23	1.1651	1.1651
	10.40752	10.40752	SR24	0.90791	0.90791
	13.78913	13.78913	SR25	1.19947	1.19947
	10.04272	10.04272	SR26	0.8762	0.8762
	9.16824	9.16824	SR27	0.84401	0.84401
	9.84399	9.84399	SR28	0.85841	0.85841
	12.78782	12.78782	SR29	1.11203	1.11203
	6.76286	6.76286	SR30	0.58942	0.58942
	12.93768	12.93768	SR31	1.12847	1.12847
	2.09063	2.09063	SR32	0.2261	0.2261
	1.75452	1.75452	SR33	0.18447	0.18447
	1.67729	1.67729	SR34	0.18658	0.18658
	1.37656	1.37656	SR35	0.15359	0.15359
	1.19673	1.19673	SR36	0.14086	0.14086
	2.73506	2.73506	SR37	0.51062	0.51062
	3.15379	3.15379	SR38	0.57978	0.57978
	3.08341	3.08341	SR39	0.48267	0.48267
	2.96242	2.96242	SR40	0.5212	0.5212
	2.94526	2.94526	SR41	0.53101	0.53101
	2.95863	2.95863	SR42	0.38527	0.38527
	2.95352	2.95352	SR43	0.32003	0.32003
	2.97802	2.97802	SR44	0.32859	0.32859
	2.95969	2.95969	SR45	0.31004	0.31004
	2.92304	2.92304	SR46	0.28543	0.28543
	2.91373	2.91373	SR47	0.26675	0.26675
	2.78695	2.78695	SR48	0.25546	0.25546
	2.61543	2.61543	SR49	0.25019	0.25019
	2.50145	2.50145	SR50	0.24403	0.24403
	2.37033	2.37033	SR51	0.23482	0.23482
	2.27886	2.27886	SR52	0.22771	0.22771
	2.1619	2.1619	SR53	0.2188	0.2188
	2.10217	2.10217	SR54	0.22183	0.22183
	1.97253	1.97253	SR55	0.22256	0.22256
	1.95101	1.95101	SR56	0.22506	0.22506
	1.9374	1.9374	SR57	0.22484	0.22484
	1.9338	1.9338	SR58	0.22137	0.22137
	1.94301	1.94301	SR59	0.2191	0.2191

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (1-hour)

		1000				100000			1000			Multiplier	1			1	
Formaldehyde	Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	30-MI	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID		CO (10^0)	CO	Receptor ID	NOx (10^0)	NOx
0.0457923	SR60	35.51078	0.03551078	SR60	0.043117007	0.67651	6.7651E-06	SR60	0.59504	0.00059504	SR60		1.93991	1.93991	SR60	0.2154	0.2154
0.0427506	SR61	33.21082	0.03321082	SR61	0.040324408	0.61922	6.1922E-06	SR61	0.53961	0.00053961	SR61		1.86911	1.86911	SR61	0.20392	0.20392
0.0395662	SR62	30.76109	0.03076109	SR62	0.037349958	0.56802	5.6802E-06	SR62	0.49288	0.00049288	SR62		1.79457	1.79457	SR62	0.19407	0.19407
0.0450852	SR63	36.24188	0.03624188	SR63	0.044004705	0.49796	4.9796E-06	SR63	0.44888	0.00044888	SR63		2.04452	2.04452	SR63	0.19459	0.19459
0.0293906	SR64	23.08431	0.02308431	SR64	0.028028851	0.44243	4.4243E-06	SR64	0.40834	0.00040834	SR64		1.81909	1.81909	SR64	0.17087	0.17087
0.0302845	SR65	23.7059	0.0237059	SR65	0.028783583	0.44765	4.4765E-06	SR65	0.41505	0.00041505	SR65		1.86169	1.86169	SR65	0.17901	0.17901
0.0295061	SR66	23.0061	0.0230061	SR66	0.027933889	0.44067	4.4067E-06	SR66	0.41073	0.00041073	SR66		1.93001	1.93001	SR66	0.18506	0.18506
0.0242056	SR67	18.61813	0.01861813	SR67	0.022606038	0.40827	4.0827E-06	SR67	0.39177	0.00039177	SR67		1.97787	1.97787	SR67	0.18052	0.18052
0.0248001	SR68	19.019	0.019019	SR68	0.023092773	0.41417	4.1417E-06	SR68	0.39783	0.00039783	SR68		2.00888	2.00888	SR68	0.18719	0.18719
0.025596	SR69	19.5349	0.0195349	SR69	0.023719176	0.44433	4.4433E-06	SR69	0.4177	0.0004177	SR69		2.04159	2.04159	SR69	0.19678	0.19678
0.0224406	SR70	16.80032	0.01680032	SR70	0.020398863	0.45836	4.5836E-06	SR70	0.45465	0.00045465	SR70		1.89236	1.89236	SR70	0.19127	0.19127
0.0254559	SR71	19.09575	0.01909575	SR71	0.023185962	0.51189	5.1189E-06	SR71	0.50541	0.00050541	SR71		2.2573	2.2573	SR71	0.22035	0.22035
0.0256148	SR72	19.07044	0.01907044	SR72	0.023155231	0.54555	5.4555E-06	SR72	0.54773	0.00054773	SR72		2.27545	2.27545	SR72	0.22972	0.22972
0.0253858	SR73	18.81072	0.01881072	SR73	0.02283988	0.55949	5.5949E-06	SR73	0.60162	0.00060162	SR73		2.30288	2.30288	SR73	0.23676	0.23676
0.0257083	SR74	19.02676	0.01902676	SR74	0.023102195	0.58231	5.8231E-06	SR74	0.64403	0.00064403	SR74		2.35356	2.35356	SR74	0.24488	0.24488
0.026405	SR75	19.64613	0.01964613	SR75	0.023854231	0.61894	6.1894E-06	SR75	0.68738	0.00068738	SR75		2.42835	2.42835	SR75	0.25576	0.25576
0.0271754	SR76	19.9604	0.0199604	SR76	0.024235816	0.63596	6.3596E-06	SR76	0.66359	0.00066359	SR76		2.41046	2.41046	SR76	0.25253	0.25253
0.0277652	SR77	20.23705	0.02023705	SR77	0.024571723	0.69448	6.9448E-06	SR77	0.7793	0.0007793	SR77		2.41514	2.41514	SR77	0.25166	0.25166
0.0279844	SR78	20.35181	0.02035181	SR78	0.024711064	0.77367	7.7367E-06	SR78	0.87473	0.00087473	SR78		2.43496	2.43496	SR78	0.25163	0.25163
0.0276398	SR79	20.20955	0.02020955	SR79	0.024538332	0.93196	9.3196E-06	SR79	1.0646	0.0010646	SR79		2.47429	2.47429	SR79	0.28882	0.28882
0.033127	SR80	22.86919	0.02286919	SR80	0.027767654	1.26931	1.26931E-05	SR80	1.46978	0.00146978	SR80		2.59482	2.59482	SR80	0.36473	0.36473
0.0358508	SR81	23.42215	0.02342215	SR81	0.028439055	1.72576	1.72576E-05	SR81	2.02585	0.00202585	SR81		2.47303	2.47303	SR81	0.40496	0.40496
0.0257573	SR82	18.20069	0.01820069	SR82	0.022099185	1.05623	1.05623E-05	SR82	1.20361	0.00120361	SR82		2.30219	2.30219	SR82	0.34801	0.34801
0.0252296	SR83	18.235	0.018235	SR83	0.022140844	0.97097	9.7097E-06	SR83	1.09987	0.00109987	SR83		2.32632	2.32632	SR83	0.30753	0.30753
0.026341	SR84	18.90911	0.01890911	SR84	0.022959345	0.81441	8.1441E-06	SR84	0.91135	0.00091135	SR84		2.33947	2.33947	SR84	0.29561	0.29561
0.02627	SR85	18.86085	0.01886085	SR85	0.022900748	0.70865	7.0865E-06	SR85	0.79469	0.00079469	SR85		2.32876	2.32876	SR85	0.29617	0.29617
0.0248953	SR86	18.16443	0.01816443	SR86	0.022055158	0.72172	7.2172E-06	SR86	0.79904	0.00079904	SR86		2.31742	2.31742	SR86	0.2934	0.2934
0.0239426	SR87	17.52552	0.01752552	SR87	0.021279397	0.67331	6.7331E-06	SR87	0.74066	0.00074066	SR87		2.30151	2.30151	SR87	0.28708	0.28708
0.0242529	SR88	17.6861	0.0176861	SR88	0.021474372	0.62342	6.2342E-06	SR88	0.68071	0.00068071	SR88		2.28355	2.28355	SR88	0.27931	0.27931
0.0239662	SR89	17.53147	0.01753147	SR89	0.021286621	0.57596	5.7596E-06	SR89	0.62454	0.00062454	SR89		2.25556	2.25556	SR89	0.27126	0.27126
0.022731	SR90	16.71835	0.01671835	SR90	0.020299335	0.55736	5.5736E-06	SR90	0.62755	0.00062755	SR90		2.17076	2.17076	SR90	0.27126	0.27126
0.0221839	SR91	16.65379	0.01665379	SR91	0.020220947	0.59554	5.9554E-06	SR91	0.67201	0.00067201	SR91		2.18708	2.18708	SR91	0.27533	0.27533
0.0216364	SR92	16.39136	0.01639136	SR92	0.019902305	0.72558	7.2558E-06	SR92	0.83845	0.00083845	SR92		2.16605	2.16605	SR92	0.2769	0.2769
0.0204111	SR93	15.47106	0.01547106	SR93	0.018784882	0.75152	7.5152E-06	SR93	0.87176	0.00087176	SR93		2.01278	2.01278	SR93	0.24777	0.24777
0.0200848	SR94	15.43671	0.01543671	SR94	0.018743174	0.91989	9.1989E-06	SR94	1.07205	0.00107205	SR94		2.00289	2.00289	SR94	0.24812	0.24812
0.0218204	SR95	15.3278	0.0153278	SR95	0.018610936	0.9991	0.000009991	SR95	1.14853	0.00114853	SR95		1.96292	1.96292	SR95	0.28558	0.28558
0.0236589	SR96	14.91129	0.01491129	SR96	0.018105212	1.24343	1.24343E-05	SR96	1.46323	0.00146323	SR96		1.95747	1.95747	SR96	0.40102	0.40102
0.0893078	CR1	48.18124	0.04818124	CR1	0.058501415	5.82418	5.82418E-05	CR1	6.92099	0.00692099	CR1		4.23418	4.23418	CR1	2.02078	2.02078
0.0247033	CR2	19.71465	0.01971465	CR2	0.023937427	1.18747	1.18747E-05	CR2	1.39884	0.00139884	CR2		1.61289	1.61289	CR2	0.43007	0.43007
0.0318232	CR3	25.05053	0.02505053	CR3	0.030416225	0.83724	8.3724E-06	CR3	0.97711	0.00097711	CR3		1.70624	1.70624	CR3	0.34406	0.34406
0.0272698	CR4	21.40176	0.02140176	CR4	0.025985908	1.2012	0.000012012	CR4	1.40674	0.00140674	CR4		1.75174	1.75174	CR4	0.4603	0.4603
0.0246754	CR5	14.84733	0.01484733	CR5	0.018027552	1.39927	1.39927E-05	CR5	1.65433	0.00165433	CR5		1.33175	1.33175	CR5	0.36592	0.36592
0.0401085	CR6	31.94398	0.03194398	CR6	0.038786217	0.73234	7.3234E-06	CR6	0.83631	0.00083631	CR6		2.51904	2.51904	CR6	0.30195	0.30195
0.0328458	CR7	24.37024	0.02437024	CR7	0.029590221	0.71707	7.1707E-06	CR7	0.72493	0.00072493	CR7		3.06709	3.06709	CR7	0.32872	0.32872
0.1034818	CR8	58.84281	0.05884281	CR8	0.071446639	6.03694	6.03694E-05	CR8	7.14186	0.00714186	CR8		4.98894	4.98894	CR8	1.75042	1.75042
0.0525537	CR9	36.04746	0.03604746	CR9	0.043768642	1.80521	1.80521E-05	CR9	2.06584	0.00206584	CR9		3.96528	3.96528	CR9	0.70497	0.70497
0.0455424	CR10	35.50554	0.03550554	CR10	0.043110645	0.68095	6.8095E-06	CR10	0.67136	0.00067136	CR10		4.79222	4.79222	CR10	0.42215	0.42215
0.0197364	CR11	15.40756	0.01540756	CR11	0.018707781	0.27431	2.7431E-06	CR11	0.28259	0.00028259	CR11		1.34914	1.34914	CR11	0.16157	0.16157
0.0182981	CR12	14.58511	0.01458511	CR12	0.017709166	0.29115	2.9115E-06	CR12	0.29861	0.00029861	CR12		1.18183	1.18183	CR12	0.14474	0.14474
0.0176258	CR13	13.54528	0.01354528	CR13	0.01644661	0.28634	2.8634E-06	CR13	0.26239	0.00026239	CR13		1.1168	1.1168	CR13	0.13719	0.13719
0.0210072	CR14	15.88544	0.01588544	CR14	0.01928802	0.39572	3.9572E-06	CR14	0.38273	0.00038273	CR14		1.80155	1.80155	CR14	0.16882	0.16882
0.0226759	CR15	17.01522	0.01701522	CR15	0.020659793	0.49389	4.9389E-06	CR15	0.54415	0.00054415	CR15		2.04762	2.04762	CR15	0.20749	0.20749
0.0246399	CR16	18.11663	0.01811663	CR16	0.021997119	0.57272	5.7272E-06	CR16	0.62386	0.00062386	CR16		2.15379	2.15379	CR16	0.2137	0.2137
0.0270121	CR17	21.22893	0.02122893	CR17	0.025776058	1.22243	1.22243E-05	CR17	1.43971	0.00143971	CR17		1.68753	1.68753	CR17	0.29523	0.29523
0.19	**SR21**	**148.49**	**0.15**	**SR21**		**10.17**	**1.02E-04**	**SR7**	**12.06**	**1.21E-02**	**SR7**		**15.67**	**15.67**	**SR5**	**6.35**	**6.35**
0.10	**CR8**	**58.84**	**0.06**	**CR8**		**6.04**	**6.04E-05**	**CR8**	**7.14**	**7.14E-03**	**CR8**		**4.99**	**4.99**	**CR8**	**2.02**	**2.02**
0.19	**SR21**	**148.49**	**0.15**	**SR21**	**0.180291889**	**10.17**	**1.02E-04**	**SR7**	**12.06**	**1.21E-02**	**SR7**		**15.67**	**15.67**	**SR5**	**6.35**	**6.35**

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (24-hour)

100			1			1			100			1000			100		
Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde
SR1	0.79779	0.0079779	SR1	7.17394	7.17394	SR1	1.72939	1.72939	SR1	3.80017	0.0380017	SR1	0.9798	0.0009798	SR1	5.2994	0.052994
SR2	0.21572	0.0021572	SR2	7.26838	7.26838	SR2	1.74919	1.74919	SR2	3.80962	0.0380962	SR2	0.25601	0.00025601	SR2	3.86092	0.0386092
SR3	0.41318	0.0041318	SR3	6.19626	6.19626	SR3	1.49217	1.49217	SR3	3.14221	0.0314221	SR3	0.49824	0.00049824	SR3	3.47268	0.0347268
SR4	0.19322	0.0019322	SR4	7.77003	7.77003	SR4	1.86989	1.86989	SR4	4.07373	0.0407373	SR4	0.21311	0.00021311	SR4	4.09768	0.0409768
SR5	0.24951	0.0024951	SR5	8.30265	8.30265	SR5	1.99853	1.99853	SR5	4.38824	0.0438824	SR5	0.27722	0.00027722	SR5	4.4101	0.044101
SR6	0.38881	0.0038881	SR6	9.799	9.799	SR6	2.36521	2.36521	SR6	3.13466	0.0313466	SR6	0.36293	0.00036293	SR6	3.80213	0.0380213
SR7	1.06157	0.0106157	SR7	8.53765	8.53765	SR7	2.06502	2.06502	SR7	2.66148	0.0266148	SR7	1.00511	0.00100511	SR7	5.88359	0.0588359
SR8	0.21627	0.0021627	SR8	10.44611	10.44611	SR8	2.52067	2.52067	SR8	2.83641	0.0283641	SR8	0.19006	0.00019006	SR8	3.17764	0.0317764
SR9	0.20026	0.0020026	SR9	15.09008	15.09008	SR9	3.64201	3.64201	SR9	4.05982	0.0405982	SR9	0.1656	0.0001656	SR9	4.23565	0.0423565
SR10	0.16601	0.0016601	SR10	15.12384	15.12384	SR10	3.64949	3.64949	SR10	4.01713	0.0401713	SR10	0.13307	0.00013307	SR10	4.05221	0.0405221
SR11	0.09146	0.0009146	SR11	14.0022	14.0022	SR11	3.3787	3.3787	SR11	3.63541	0.0363541	SR11	0.0669	0.0000669	SR11	3.64115	0.0364115
SR12	0.08867	0.0008867	SR12	15.80178	15.80178	SR12	3.81289	3.81289	SR12	4.09073	0.0409073	SR12	0.06115	0.00006115	SR12	4.09535	0.0409535
SR13	0.08044	0.0008044	SR13	14.01012	14.01012	SR13	3.38052	3.38052	SR13	3.63667	0.0363667	SR13	0.0527	0.0000527	SR13	3.64012	0.0364012
SR14	0.06384	0.0006384	SR14	9.64564	9.64564	SR14	2.32736	2.32736	SR14	2.53424	0.0253424	SR14	0.0437	0.0000437	SR14	2.55246	0.0255246
SR15	0.07493	0.0007493	SR15	13.52793	13.52793	SR15	3.26407	3.26407	SR15	3.54491	0.0354491	SR15	0.04708	0.00004708	SR15	3.54776	0.0354776
SR16	0.07009	0.0007009	SR16	10.55636	10.55636	SR16	2.55042	2.55042	SR16	2.88976	0.0288976	SR16	0.04619	0.00004619	SR16	2.98299	0.0298299
SR17	0.06664	0.0006664	SR17	10.59926	10.59926	SR17	2.55707	2.55707	SR17	2.90905	0.0290905	SR17	0.04355	0.00004355	SR17	2.91059	0.0291059
SR18	0.06311	0.0006311	SR18	10.58165	10.58165	SR18	2.5528	2.5528	SR18	2.91421	0.0291421	SR18	0.04093	0.00004093	SR18	2.91589	0.0291589
SR19	0.05568	0.0005568	SR19	10.19262	10.19262	SR19	2.4605	2.4605	SR19	2.83872	0.0283872	SR19	0.03354	0.00003354	SR19	2.88098	0.0288098
SR20	0.05935	0.0005935	SR20	10.55544	10.55544	SR20	2.54646	2.54646	SR20	2.91389	0.0291389	SR20	0.03775	0.00003775	SR20	2.91543	0.0291543
SR21	0.06503	0.0006503	SR21	13.36529	13.36529	SR21	3.22432	3.22432	SR21	3.67996	0.0367996	SR21	0.03603	0.00003603	SR21	3.68135	0.0368135
SR22	0.05396	0.0005396	SR22	10.43307	10.43307	SR22	2.51694	2.51694	SR22	2.88177	0.0288177	SR22	0.03357	0.00003357	SR22	2.88351	0.0288351
SR23	0.06017	0.0006017	SR23	13.6289	13.6289	SR23	3.2879	3.2879	SR23	3.7536	0.037536	SR23	0.03345	0.00003345	SR23	3.75477	0.0375477
SR24	0.04934	0.0004934	SR24	10.55961	10.55961	SR24	2.54749	2.54749	SR24	2.91693	0.0291693	SR24	0.02971	0.00002971	SR24	2.91932	0.0291932
SR25	0.06189	0.0006189	SR25	14.03432	14.03432	SR25	3.3857	3.3857	SR25	3.86524	0.0386524	SR25	0.03338	0.00003338	SR25	3.86627	0.0386627
SR26	0.04586	0.0004586	SR26	10.18834	10.18834	SR26	2.45793	2.45793	SR26	2.81467	0.0281467	SR26	0.02705	0.00002705	SR26	2.81705	0.0281705
SR27	0.04612	0.0004612	SR27	9.16644	9.16644	SR27	2.21243	2.21243	SR27	2.5626	0.025626	SR27	0.02633	0.00002633	SR27	2.59231	0.0259231
SR28	0.04434	0.0004434	SR28	9.98778	9.98778	SR28	2.40953	2.40953	SR28	2.75904	0.0275904	SR28	0.0256	0.0000256	SR28	2.76109	0.0276109
SR29	0.05876	0.0005876	SR29	13.01587	13.01587	SR29	3.14	3.14	SR29	3.58461	0.0358461	SR29	0.03136	0.00003136	SR29	3.58536	0.0358536
SR30	0.03522	0.0003522	SR30	6.8501	6.8501	SR30	1.65256	1.65256	SR30	1.89552	0.0189552	SR30	0.02166	0.00002166	SR30	1.89673	0.0189673
SR31	0.05646	0.0005646	SR31	13.16931	13.16931	SR31	3.17702	3.17702	SR31	3.62662	0.0362662	SR31	0.03023	0.00003023	SR31	3.62735	0.0362735
SR32	0.01687	0.0001687	SR32	1.95598	1.95598	SR32	0.47288	0.47288	SR32	0.57903	0.0057903	SR32	0.01239	0.00001239	SR32	0.60681	0.0060681
SR33	0.01314	0.0001314	SR33	1.65017	1.65017	SR33	0.39881	0.39881	SR33	0.48677	0.0048677	SR33	0.01	0.00001	SR33	0.50678	0.0050678
SR34	0.01452	0.0001452	SR34	1.55918	1.55918	SR34	0.37708	0.37708	SR34	0.46373	0.0046373	SR34	0.011	0.000011	SR34	0.48925	0.0048925
SR35	0.012	0.00012	SR35	1.29992	1.29992	SR35	0.31428	0.31428	SR35	0.38051	0.0038051	SR35	0.00922	0.00000922	SR35	0.40174	0.0040174
SR36	0.01197	0.0001197	SR36	1.11801	1.11801	SR36	0.27034	0.27034	SR36	0.33113	0.0033113	SR36	0.00957	0.00000957	SR36	0.3502	0.003502
SR37	0.06315	0.0006315	SR37	1.84372	1.84372	SR37	0.45109	0.45109	SR37	0.73802	0.0073802	SR37	0.05534	0.00005534	SR37	0.89424	0.0089424
SR38	0.0711	0.000711	SR38	2.71191	2.71191	SR38	0.6577	0.6577	SR38	0.83569	0.0083569	SR38	0.06214	0.00006214	SR38	1.02694	0.0102694
SR39	0.05341	0.0005341	SR39	2.84128	2.84128	SR39	0.68591	0.68591	SR39	0.83037	0.0083037	SR39	0.04513	0.00004513	SR39	0.96471	0.0096471
SR40	0.07419	0.0007419	SR40	2.79671	2.79671	SR40	0.67475	0.67475	SR40	0.81505	0.0081505	SR40	0.06761	0.00006761	SR40	0.87589	0.0087589
SR41	0.07605	0.0007605	SR41	2.75634	2.75634	SR41	0.66498	0.66498	SR41	0.81675	0.0081675	SR41	0.06941	0.00006941	SR41	0.85187	0.0085187
SR42	0.04955	0.0004955	SR42	2.76025	2.76025	SR42	0.66714	0.66714	SR42	0.82051	0.0082051	SR42	0.04393	0.00004393	SR42	0.8556	0.008556
SR43	0.03727	0.0003727	SR43	2.83819	2.83819	SR43	0.68619	0.68619	SR43	0.81791	0.0081791	SR43	0.03356	0.00003356	SR43	0.8576	0.008576
SR44	0.04175	0.0004175	SR44	2.95405	2.95405	SR44	0.71437	0.71437	SR44	0.82376	0.0082376	SR44	0.03785	0.00003785	SR44	0.86748	0.0086748
SR45	0.0343	0.000343	SR45	3.00005	3.00005	SR45	0.72508	0.72508	SR45	0.82131	0.0082131	SR45	0.03067	0.00003067	SR45	0.85441	0.0085441
SR46	0.026	0.00026	SR46	3.00971	3.00971	SR46	0.7269	0.7269	SR46	0.81443	0.0081443	SR46	0.02339	0.00002339	SR46	0.83413	0.0083413
SR47	0.03	0.0003	SR47	3.03598	3.03598	SR47	0.7328	0.7328	SR47	0.81464	0.0081464	SR47	0.02671	0.00002671	SR47	0.82317	0.0082317
SR48	0.02709	0.0002709	SR48	2.92336	2.92336	SR48	0.70546	0.70546	SR48	0.78025	0.0078025	SR48	0.02279	0.00002279	SR48	0.78424	0.0078424
SR49	0.02572	0.0002572	SR49	2.73185	2.73185	SR49	0.65925	0.65925	SR49	0.73215	0.0073215	SR49	0.02138	0.00002138	SR49	0.73622	0.0073622
SR50	0.0243	0.000243	SR50	2.60333	2.60333	SR50	0.62822	0.62822	SR50	0.70029	0.0070029	SR50	0.01994	0.00001994	SR50	0.704	0.00704
SR51	0.02234	0.0002234	SR51	2.45389	2.45389	SR51	0.59213	0.59213	SR51	0.66373	0.0066373	SR51	0.018	0.000018	SR51	0.66667	0.0066667
SR52	0.02101	0.0002101	SR52	2.34931	2.34931	SR52	0.56687	0.56687	SR52	0.63824	0.0063824	SR52	0.01704	0.00001704	SR52	0.64058	0.0064058
SR53	0.01998	0.0001998	SR53	2.21584	2.21584	SR53	0.53463	0.53463	SR53	0.60563	0.0060563	SR53	0.01693	0.00001693	SR53	0.60727	0.0060727
SR54	0.01967	0.0001967	SR54	2.14835	2.14835	SR54	0.51831	0.51831	SR54	0.58908	0.0058908	SR54	0.01654	0.00001654	SR54	0.58993	0.0058993
SR55	0.01858	0.0001858	SR55	1.98889	1.98889	SR55	0.47982	0.47982	SR55	0.5493	0.005493	SR55	0.01596	0.00001596	SR55	0.57681	0.0057681
SR56	0.01842	0.0001842	SR56	1.88176	1.88176	SR56	0.45395	0.45395	SR56	0.53813	0.0053813	SR56	0.01466	0.00001466	SR56	0.57282	0.0057282
SR57	0.01884	0.0001884	SR57	1.81759	1.81759	SR57	0.43846	0.43846	SR57	0.53892	0.0053892	SR57	0.01496	0.00001496	SR57	0.56398	0.0056398
SR58	0.01864	0.0001864	SR58	1.7719	1.7719	SR58	0.42744	0.42744	SR58	0.53782	0.0053782	SR58	0.01483	0.00001483	SR58	0.55472	0.0055472
SR59	0.01844	0.0001844	SR59	1.73998	1.73998	SR59	0.41974	0.41974	SR59	0.5403	0.005403	SR59	0.01466	0.00001466	SR59	0.5576	0.005576

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (24-hour)

100			1			1			100			1000			100		
Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^0)	PM10	Receptor ID	PM2.5 (10^0)	PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde
SR60	0.01803	0.0001803	SR60	1.70128	1.70128	SR60	0.4104	0.4104	SR60	0.53939	0.0053939	SR60	0.01431	0.00001431	SR60	0.55684	0.0055684
SR61	0.01682	0.0001682	SR61	1.66369	1.66369	SR61	0.40189	0.40189	SR61	0.51961	0.0051961	SR61	0.01328	0.00001328	SR61	0.53682	0.0053682
SR62	0.0158	0.000158	SR62	1.6135	1.6135	SR62	0.38978	0.38978	SR62	0.49883	0.0049883	SR62	0.01241	0.00001241	SR62	0.51558	0.0051558
SR63	0.01581	0.0001581	SR63	1.92854	1.92854	SR63	0.46555	0.46555	SR63	0.57056	0.0057056	SR63	0.01251	0.00001251	SR63	0.58074	0.0058074
SR64	0.01404	0.0001404	SR64	1.82953	1.82953	SR64	0.44135	0.44135	SR64	0.50988	0.0050988	SR64	0.01082	0.00001082	SR64	0.51014	0.0051014
SR65	0.01496	0.0001496	SR65	1.87343	1.87343	SR65	0.45195	0.45195	SR65	0.52182	0.0052182	SR65	0.01161	0.00001161	SR65	0.52207	0.0052207
SR66	0.0158	0.000158	SR66	1.94187	1.94187	SR66	0.46846	0.46846	SR66	0.54097	0.0054097	SR66	0.01239	0.00001239	SR66	0.54125	0.0054125
SR67	0.01626	0.0001626	SR67	1.98642	1.98642	SR67	0.4792	0.4792	SR67	0.55437	0.0055437	SR67	0.01306	0.00001306	SR67	0.55469	0.0055469
SR68	0.01709	0.0001709	SR68	2.01813	2.01813	SR68	0.48685	0.48685	SR68	0.56307	0.0056307	SR68	0.0138	0.0000138	SR68	0.56339	0.0056339
SR69	0.01837	0.0001837	SR69	2.05168	2.05168	SR69	0.49494	0.49494	SR69	0.57223	0.0057223	SR69	0.01496	0.00001496	SR69	0.57256	0.0057256
SR70	0.01929	0.0001929	SR70	1.89326	1.89326	SR70	0.45672	0.45672	SR70	0.53039	0.0053039	SR70	0.01617	0.00001617	SR70	0.5319	0.005319
SR71	0.02186	0.0002186	SR71	2.25545	2.25545	SR71	0.54419	0.54419	SR71	0.6321	0.006321	SR71	0.01822	0.00001822	SR71	0.63482	0.0063482
SR72	0.02363	0.0002363	SR72	2.27642	2.27642	SR72	0.54926	0.54926	SR72	0.63712	0.0063712	SR72	0.01994	0.00001994	SR72	0.6401	0.006401
SR73	0.02493	0.0002493	SR73	2.30624	2.30624	SR73	0.55647	0.55647	SR73	0.6447	0.006447	SR73	0.02122	0.00002122	SR73	0.64812	0.0064812
SR74	0.02611	0.0002611	SR74	2.3592	2.3592	SR74	0.56927	0.56927	SR74	0.65877	0.0065877	SR74	0.02231	0.00002231	SR74	0.66273	0.0066273
SR75	0.02767	0.0002767	SR75	2.43157	2.43157	SR75	0.58681	0.58681	SR75	0.67921	0.0067921	SR75	0.02378	0.00002378	SR75	0.68523	0.0068523
SR76	0.02729	0.0002729	SR76	2.40509	2.40509	SR76	0.58053	0.58053	SR76	0.67348	0.0067348	SR76	0.02346	0.00002346	SR76	0.68232	0.0068232
SR77	0.02714	0.0002714	SR77	2.3988	2.3988	SR77	0.57919	0.57919	SR77	0.67365	0.0067365	SR77	0.02335	0.00002335	SR77	0.68701	0.0068701
SR78	0.03087	0.0003087	SR78	2.40276	2.40276	SR78	0.58043	0.58043	SR78	0.67742	0.0067742	SR78	0.02745	0.00002745	SR78	0.69784	0.0069784
SR79	0.03923	0.0003923	SR79	2.41493	2.41493	SR79	0.58384	0.58384	SR79	0.68533	0.0068533	SR79	0.03548	0.00003548	SR79	0.71807	0.0071807
SR80	0.05267	0.0005267	SR80	2.42954	2.42954	SR80	0.5888	0.5888	SR80	0.70978	0.0070978	SR80	0.04834	0.00004834	SR80	0.7794	0.007794
SR81	0.05975	0.0005975	SR81	1.73661	1.73661	SR81	0.42314	0.42314	SR81	0.66383	0.0066383	SR81	0.05494	0.00005494	SR81	0.78011	0.0078011
SR82	0.04926	0.0004926	SR82	1.49232	1.49232	SR82	0.36158	0.36158	SR82	0.63195	0.0063195	SR82	0.04496	0.00004496	SR82	0.68497	0.0068497
SR83	0.04183	0.0004183	SR83	1.47519	1.47519	SR83	0.3575	0.3575	SR83	0.63823	0.0063823	SR83	0.0378	0.0000378	SR83	0.69316	0.0069316
SR84	0.03177	0.0003177	SR84	1.45723	1.45723	SR84	0.35326	0.35326	SR84	0.6412	0.006412	SR84	0.02812	0.00002812	SR84	0.69896	0.0069896
SR85	0.02727	0.0002727	SR85	1.42551	1.42551	SR85	0.34563	0.34563	SR85	0.63796	0.0063796	SR85	0.02373	0.00002373	SR85	0.69665	0.0069665
SR86	0.02688	0.0002688	SR86	1.39352	1.39352	SR86	0.33785	0.33785	SR86	0.63507	0.0063507	SR86	0.02146	0.00002146	SR86	0.69263	0.0069263
SR87	0.02587	0.0002587	SR87	1.36731	1.36731	SR87	0.3314	0.3314	SR87	0.63139	0.0063139	SR87	0.02052	0.00002052	SR87	0.68586	0.0068586
SR88	0.02461	0.0002461	SR88	1.34289	1.34289	SR88	0.32534	0.32534	SR88	0.62734	0.0062734	SR88	0.01969	0.00001969	SR88	0.67791	0.0067791
SR89	0.02342	0.0002342	SR89	1.31125	1.31125	SR89	0.31757	0.31757	SR89	0.62038	0.0062038	SR89	0.0201	0.0000201	SR89	0.66741	0.0066741
SR90	0.02447	0.0002447	SR90	1.24894	1.24894	SR90	0.30274	0.30274	SR90	0.59545	0.0059545	SR90	0.02736	0.00002736	SR90	0.64701	0.0064701
SR91	0.02766	0.0002766	SR91	1.24035	1.24035	SR91	0.30072	0.30072	SR91	0.59962	0.0059962	SR91	0.03257	0.00003257	SR91	0.65276	0.0065276
SR92	0.02918	0.0002918	SR92	1.21355	1.21355	SR92	0.29433	0.29433	SR92	0.59319	0.0059319	SR92	0.03464	0.00003464	SR92	0.64839	0.0064839
SR93	0.02196	0.0002196	SR93	1.13378	1.13378	SR93	0.27474	0.27474	SR93	0.55272	0.0055272	SR93	0.02469	0.00002469	SR93	0.5981	0.005981
SR94	0.02871	0.0002871	SR94	1.12185	1.12185	SR94	0.27156	0.27156	SR94	0.55179	0.0055179	SR94	0.03209	0.00003209	SR94	0.58988	0.0058988
SR95	0.03293	0.0003293	SR95	1.06883	1.06883	SR95	0.26013	0.26013	SR95	0.5321	0.005321	SR95	0.03973	0.00003973	SR95	0.60357	0.0060357
SR96	0.05185	0.0005185	SR96	1.00776	1.00776	SR96	0.24831	0.24831	SR96	0.51228	0.0051228	SR96	0.05918	0.00005918	SR96	0.65567	0.0065567
CR1	0.34783	0.0034783	CR1	2.18822	2.18822	CR1	0.52826	0.52826	CR1	1.0884	0.010884	CR1	0.43557	0.00043557	CR1	1.76	0.0176
CR2	0.06171	0.0006171	CR2	0.82508	0.82508	CR2	0.20586	0.20586	CR2	0.40637	0.0040637	CR2	0.0725	0.0000725	CR2	0.58641	0.0058641
CR3	0.04853	0.0004853	CR3	1.12086	1.12086	CR3	0.27062	0.27062	CR3	0.47425	0.0047425	CR3	0.05634	0.00005634	CR3	0.49027	0.0049027
CR4	0.06774	0.0006774	CR4	1.07733	1.07733	CR4	0.26021	0.26021	CR4	0.48605	0.0048605	CR4	0.08053	0.00008053	CR4	0.59527	0.0059527
CR5	0.06155	0.0006155	CR5	0.73513	0.73513	CR5	0.179	0.179	CR5	0.36302	0.0036302	CR5	0.07664	0.00007664	CR5	0.40704	0.0040704
CR6	0.0284	0.000284	CR6	1.48142	1.48142	CR6	0.35782	0.35782	CR6	0.7001	0.007001	CR6	0.03139	0.00003139	CR6	0.72405	0.0072405
CR7	0.03132	0.0003132	CR7	1.7741	1.7741	CR7	0.42849	0.42849	CR7	0.85084	0.0085084	CR7	0.02571	0.00002571	CR7	0.88621	0.0088621
CR8	0.29098	0.0029098	CR8	3.0895	3.0895	CR8	0.76981	0.76981	CR8	1.23797	0.0123797	CR8	0.27485	0.00027485	CR8	1.87237	0.0187237
CR9	0.0848	0.000848	CR9	3.20755	3.20755	CR9	0.7812	0.7812	CR9	1.05452	0.0105452	CR9	0.07368	0.00007368	CR9	1.27997	0.0127997
CR10	0.02992	0.0002992	CR10	4.875	4.875	CR10	1.1762	1.1762	CR10	1.34247	0.0134247	CR10	0.02204	0.00002204	CR10	1.34614	0.0134614
CR11	0.01387	0.0001387	CR11	1.29584	1.29584	CR11	0.31259	0.31259	CR11	0.37119	0.0037119	CR11	0.01121	0.00001121	CR11	0.39888	0.0039888
CR12	0.01277	0.0001277	CR12	1.09283	1.09283	CR12	0.26463	0.26463	CR12	0.32465	0.0032465	CR12	0.01038	0.00001038	CR12	0.35092	0.0035092
CR13	0.01214	0.0001214	CR13	1.05924	1.05924	CR13	0.25551	0.25551	CR13	0.30672	0.0030672	CR13	0.01003	0.00001003	CR13	0.33179	0.0033179
CR14	0.01628	0.0001628	CR14	1.80262	1.80262	CR14	0.43485	0.43485	CR14	0.50498	0.0050498	CR14	0.01344	0.00001344	CR14	0.50518	0.0050518
CR15	0.02174	0.0002174	CR15	2.04047	2.04047	CR15	0.49239	0.49239	CR15	0.57296	0.0057296	CR15	0.01851	0.00001851	CR15	0.57711	0.0057711
CR16	0.02233	0.0002233	CR16	2.13772	2.13772	CR16	0.51603	0.51603	CR16	0.60152	0.0060152	CR16	0.01904	0.00001904	CR16	0.61041	0.0061041
CR17	0.04192	0.0004192	CR17	1.00938	1.00938	CR17	0.24483	0.24483	CR17	0.46183	0.0046183	CR17	0.05129	0.00005129	CR17	0.50606	0.0050606
SR7	**1.06**	**0.01**	**SR7**	**15.80**	**15.80**	**SR12**	**3.81**	**3.81**	**SR12**	**4.39**	**4.39E-02**	**SR5**	**1.01**	**1.01E-03**	**SR7**	**5.88**	**0.06**
CR1	**0.35**	**0.00**	**CR1**	**4.88**	**4.88**	**CR10**	**1.18**	**1.18**	**CR10**	**1.34**	**1.34E-02**	**CR10**	**0.44**	**4.36E-04**	**CR1**	**1.87**	**0.02**
SR7	**1.06**	**0.01**	**SR7**	**15.80**	**15.80**	**SR12**	**3.81**	**3.81**	**SR12**	**4.39**	**4.39E-02**	**SR5**	**1.01**	**1.01E-03**	**SR7**	**5.88**	**0.06**

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (24-hour)

	1000			100000			1000		
Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID
SR1	34.48557	0.03448557	SR1	2.19814	2.19814E-05	SR1	2.49722	0.00249722	SR1
SR2	30.89551	0.03089551	SR2	0.64712	6.4712E-06	SR2	0.6659	0.0006659	SR2
SR3	25.56759	0.02556759	SR3	1.16704	1.16704E-05	SR3	1.28657	0.00128657	SR3
SR4	33.0486	0.0330486	SR4	0.60763	6.0763E-06	SR4	0.58709	0.00058709	SR4
SR5	35.64824	0.03564824	SR5	0.77833	7.7833E-06	SR5	0.75961	0.00075961	SR5
SR6	28.47087	0.02847087	SR6	1.07588	1.07588E-05	SR6	1.21888	0.00121888	SR6
SR7	36.10589	0.03610589	SR7	2.87435	2.87435E-05	SR7	3.34295	0.00334295	SR7
SR8	23.72082	0.02372082	SR8	0.66354	6.6354E-06	SR8	0.66244	0.00066244	SR8
SR9	33.04834	0.03304834	SR9	0.66533	6.6533E-06	SR9	0.60123	0.00060123	SR9
SR10	32.61121	0.03261121	SR10	0.57284	5.7284E-06	SR10	0.49332	0.00049332	SR10
SR11	29.4751	0.0294751	SR11	0.3478	0.000003478	SR11	0.26411	0.00026411	SR11
SR12	33.15826	0.03315826	SR12	0.35522	3.5522E-06	SR12	0.25173	0.00025173	SR12
SR13	29.47472	0.02947472	SR13	0.33601	3.3601E-06	SR13	0.22511	0.00022511	SR13
SR14	20.54289	0.02054289	SR14	0.25812	2.5812E-06	SR14	0.18069	0.00018069	SR14
SR15	28.72868	0.02872868	SR15	0.32279	3.2279E-06	SR15	0.20733	0.00020733	SR15
SR16	23.83867	0.02383867	SR16	0.29196	2.9196E-06	SR16	0.19633	0.00019633	SR16
SR17	23.57184	0.02357184	SR17	0.27935	2.7935E-06	SR17	0.18622	0.00018622	SR17
SR18	23.61427	0.02361427	SR18	0.26618	2.6618E-06	SR18	0.17598	0.00017598	SR18
SR19	23.1901	0.0231901	SR19	0.24756	2.4756E-06	SR19	0.15225	0.00015225	SR19
SR20	23.61107	0.02361107	SR20	0.25394	2.5394E-06	SR20	0.16465	0.00016465	SR20
SR21	29.81589	0.02981589	SR21	0.305	0.00000305	SR21	0.17403	0.00017403	SR21
SR22	23.3518	0.0233518	SR22	0.23459	2.3459E-06	SR22	0.1488	0.0001488	SR22
SR23	30.4114	0.0304114	SR23	0.28209	2.8209E-06	SR23	0.16112	0.00016112	SR23
SR24	23.6396	0.0236396	SR24	0.22042	2.2042E-06	SR24	0.13491	0.00013491	SR24
SR25	31.31508	0.03131508	SR25	0.29455	2.9455E-06	SR25	0.16459	0.00016459	SR25
SR26	22.81118	0.02281118	SR26	0.21275	2.1275E-06	SR26	0.12474	0.00012474	SR26
SR27	20.8955	0.0208955	SR27	0.21603	2.1603E-06	SR27	0.12404	0.00012404	SR27
SR28	22.35905	0.02235905	SR28	0.20832	2.0832E-06	SR28	0.11998	0.00011998	SR28
SR29	29.04056	0.02904056	SR29	0.28125	2.8125E-06	SR29	0.15588	0.00015588	SR29
SR30	15.36025	0.01536025	SR30	0.15481	1.5481E-06	SR30	0.09673	0.00009673	SR30
SR31	29.38081	0.02938081	SR31	0.27628	2.7628E-06	SR31	0.14987	0.00014987	SR31
SR32	4.81866	0.00481866	SR32	0.06589	6.589E-07	SR32	0.04827	0.00004827	SR32
SR33	4.0355	0.0040355	SR33	0.05268	5.268E-07	SR33	0.0375	0.0000375	SR33
SR34	3.87427	0.00387427	SR34	0.05542	5.542E-07	SR34	0.04187	0.00004187	SR34
SR35	3.18037	0.00318037	SR35	0.04571	4.571E-07	SR35	0.03464	0.00003464	SR35
SR36	2.76154	0.00276154	SR36	0.04359	4.359E-07	SR36	0.03501	0.00003501	SR36
SR37	6.64822	0.00664822	SR37	0.19242	1.9242E-06	SR37	0.19376	0.00019376	SR37
SR38	7.6516	0.0076516	SR38	0.21743	2.1743E-06	SR38	0.21795	0.00021795	SR38
SR39	7.34599	0.00734599	SR39	0.17096	1.7096E-06	SR39	0.16193	0.00016193	SR39
SR40	6.88293	0.00688293	SR40	0.21335	2.1335E-06	SR40	0.23067	0.00023067	SR40
SR41	6.77809	0.00677809	SR41	0.21817	2.1817E-06	SR41	0.23658	0.00023658	SR41
SR42	6.80839	0.00680839	SR42	0.1485	0.000001485	SR42	0.15262	0.00015262	SR42
SR43	6.80855	0.00680855	SR43	0.10921	1.0921E-06	SR43	0.11537	0.00011537	SR43
SR44	6.8745	0.0068745	SR44	0.1211	0.000001211	SR44	0.12957	0.00012957	SR44
SR45	6.80569	0.00680569	SR45	0.10153	1.0153E-06	SR45	0.10593	0.00010593	SR45
SR46	6.68814	0.00668814	SR46	0.08076	8.076E-07	SR46	0.08033	0.00008033	SR46
SR47	6.63836	0.00663836	SR47	0.09464	9.464E-07	SR47	0.09126	0.00009126	SR47
SR48	6.33884	0.00633884	SR48	0.08844	8.844E-07	SR48	0.08172	0.00008172	SR48
SR49	5.94956	0.00594956	SR49	0.0852	0.000000852	SR49	0.0773	0.0000773	SR49
SR50	5.68981	0.00568981	SR50	0.08173	8.173E-07	SR50	0.07272	0.00007272	SR50
SR51	5.3901	0.0053901	SR51	0.07683	7.683E-07	SR51	0.06647	0.00006647	SR51
SR52	5.18084	0.00518084	SR52	0.07337	7.337E-07	SR52	0.06224	0.00006224	SR52
SR53	4.91346	0.00491346	SR53	0.06923	6.923E-07	SR53	0.06041	0.00006041	SR53
SR54	4.77579	0.00477579	SR54	0.06703	6.703E-07	SR54	0.05933	0.00005933	SR54
SR55	4.56124	0.00456124	SR55	0.06672	6.672E-07	SR55	0.05593	0.00005593	SR55
SR56	4.51936	0.00451936	SR56	0.06843	6.843E-07	SR56	0.05357	0.00005357	SR56
SR57	4.44191	0.00444191	SR57	0.06912	6.912E-07	SR57	0.05499	0.00005499	SR57
SR58	4.43464	0.00443464	SR58	0.06822	6.822E-07	SR58	0.05446	0.00005446	SR58
SR59	4.45657	0.00445657	SR59	0.0675	0.000000675	SR59	0.05386	0.00005386	SR59

Maximum Concentration Results (Annual)

Multiplier	1			1			100			1			1	
	CO (10^1)	CO	Receptor ID	NOx (10^1)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^1)	PM10	Receptor ID	PM2.5 (10^1)	
SR1	3.70311	3.70311	SR1	0.62219	0.62219	SR1	0.07207	0.0007207	SR1	1.83852	1.83852	SR1	0.44984	
SR2	3.12755	3.12755	SR2	0.35577	0.35577	SR2	0.02853	0.0002853	SR2	1.63171	1.63171	SR2	0.3947	
SR3	2.90744	2.90744	SR3	0.39126	0.39126	SR3	0.03806	0.0003806	SR3	1.49119	1.49119	SR3	0.36225	
SR4	3.52217	3.52217	SR4	0.36311	0.36311	SR4	0.02498	0.0002498	SR4	1.85302	1.85302	SR4	0.44728	
SR5	4.18797	4.18797	SR5	0.43476	0.43476	SR5	0.03028	0.0003028	SR5	2.19883	2.19883	SR5	0.53082	
SR6	2.96653	2.96653	SR6	0.35406	0.35406	SR6	0.03029	0.0003029	SR6	2.33646	2.33646	SR6	0.56563	
SR7	2.70282	2.70282	SR7	0.67397	0.67397	SR7	0.09479	0.0009479	SR7	2.00174	2.00174	SR7	0.49358	
SR8	2.69753	2.69753	SR8	0.30466	0.30466	SR8	0.02424	0.0002424	SR8	2.53517	2.53517	SR8	0.61324	
SR9	3.95107	3.95107	SR9	0.3935	0.3935	SR9	0.02542	0.0002542	SR9	4.07093	4.07093	SR9	0.98339	
SR10	3.89146	3.89146	SR10	0.37596	0.37596	SR10	0.02282	0.0002282	SR10	4.07547	4.07547	SR10	0.98422	
SR11	3.34101	3.34101	SR11	0.30502	0.30502	SR11	0.01619	0.0001619	SR11	3.57827	3.57827	SR11	0.86373	
SR12	3.8643	3.8643	SR12	0.34773	0.34773	SR12	0.01776	0.0001776	SR12	4.1624	4.1624	SR12	1.00461	
SR13	3.73722	3.73722	SR13	0.33381	0.33381	SR13	0.0167	0.000167	SR13	4.02449	4.02449	SR13	0.97126	
SR14	2.61159	2.61159	SR14	0.23505	0.23505	SR14	0.01201	0.0001201	SR14	2.77732	2.77732	SR14	0.6703	
SR15	3.68387	3.68387	SR15	0.32754	0.32754	SR15	0.01618	0.0001618	SR15	3.93342	3.93342	SR15	0.94922	
SR16	2.38179	2.38179	SR16	0.21297	0.21297	SR16	0.01069	0.0001069	SR16	2.45979	2.45979	SR16	0.59358	
SR17	2.45147	2.45147	SR17	0.21855	0.21855	SR17	0.01088	0.0001088	SR17	2.50596	2.50596	SR17	0.60469	
SR18	2.42968	2.42968	SR18	0.21626	0.21626	SR18	0.01071	0.0001071	SR18	2.473	2.473	SR18	0.59672	
SR19	2.71323	2.71323	SR19	0.24082	0.24082	SR19	0.01183	0.0001183	SR19	2.75681	2.75681	SR19	0.66518	
SR20	2.40582	2.40582	SR20	0.21348	0.21348	SR20	0.01048	0.0001048	SR20	2.43985	2.43985	SR20	0.5887	
SR21	3.82168	3.82168	SR21	0.33644	0.33644	SR21	0.01614	0.0001614	SR21	3.8827	3.8827	SR21	0.93678	
SR22	2.35958	2.35958	SR22	0.2089	0.2089	SR22	0.01019	0.0001019	SR22	2.39037	2.39037	SR22	0.57675	
SR23	3.61703	3.61703	SR23	0.31808	0.31808	SR23	0.01521	0.0001521	SR23	3.6727	3.6727	SR23	0.8861	
SR24	2.38816	2.38816	SR24	0.21091	0.21091	SR24	0.01021	0.0001021	SR24	2.41921	2.41921	SR24	0.58369	
SR25	3.90566	3.90566	SR25	0.34265	0.34265	SR25	0.01627	0.0001627	SR25	3.96759	3.96759	SR25	0.95723	
SR26	2.2879	2.2879	SR26	0.2018	0.2018	SR26	0.00974	0.0000974	SR26	2.31748	2.31748	SR26	0.55914	
SR27	2.55938	2.55938	SR27	0.22536	0.22536	SR27	0.01082	0.0001082	SR27	2.59449	2.59449	SR27	0.62597	
SR28	2.24164	2.24164	SR28	0.19749	0.19749	SR28	0.0095	0.000095	SR28	2.27102	2.27102	SR28	0.54793	
SR29	3.71318	3.71318	SR29	0.32528	0.32528	SR29	0.01538	0.0001538	SR29	3.77257	3.77257	SR29	0.91017	
SR30	1.47062	1.47062	SR30	0.13026	0.13026	SR30	0.00636	0.0000636	SR30	1.48499	1.48499	SR30	0.3583	
SR31	3.50607	3.50607	SR31	0.3071	0.3071	SR31	0.01451	0.0001451	SR31	3.56192	3.56192	SR31	0.85934	
SR32	0.29946	0.29946	SR32	0.02797	0.02797	SR32	0.00157	0.0000157	SR32	0.29251	0.29251	SR32	0.07061	
SR33	0.25414	0.25414	SR33	0.02391	0.02391	SR33	0.00137	0.0000137	SR33	0.24694	0.24694	SR33	0.05961	
SR34	0.24265	0.24265	SR34	0.02294	0.02294	SR34	0.00133	0.0000133	SR34	0.23515	0.23515	SR34	0.05677	
SR35	0.21212	0.21212	SR35	0.0202	0.0202	SR35	0.00119	0.0000119	SR35	0.2048	0.2048	SR35	0.04944	
SR36	0.18275	0.18275	SR36	0.0176	0.0176	SR36	0.00106	0.0000106	SR36	0.17516	0.17516	SR36	0.04229	
SR37	0.46609	0.46609	SR37	0.05347	0.05347	SR37	0.00435	0.0000435	SR37	0.31471	0.31471	SR37	0.07614	
SR38	0.3906	0.3906	SR38	0.04249	0.04249	SR38	0.0032	0.000032	SR38	0.32291	0.32291	SR38	0.07807	
SR39	0.39484	0.39484	SR39	0.04238	0.04238	SR39	0.00312	0.0000312	SR39	0.33555	0.33555	SR39	0.08111	
SR40	0.38935	0.38935	SR40	0.04141	0.04141	SR40	0.00301	0.0000301	SR40	0.3361	0.3361	SR40	0.08123	
SR41	0.39043	0.39043	SR41	0.04088	0.04088	SR41	0.00289	0.0000289	SR41	0.34296	0.34296	SR41	0.08288	
SR42	0.39183	0.39183	SR42	0.04051	0.04051	SR42	0.0028	0.000028	SR42	0.34829	0.34829	SR42	0.08415	
SR43	0.38861	0.38861	SR43	0.03971	0.03971	SR43	0.00269	0.0000269	SR43	0.34943	0.34943	SR43	0.08442	
SR44	0.38967	0.38967	SR44	0.03938	0.03938	SR44	0.00262	0.0000262	SR44	0.35507	0.35507	SR44	0.08577	
SR45	0.38899	0.38899	SR45	0.03896	0.03896	SR45	0.00254	0.0000254	SR45	0.35743	0.35743	SR45	0.08633	
SR46	0.38667	0.38667	SR46	0.03841	0.03841	SR46	0.00247	0.0000247	SR46	0.35759	0.35759	SR46	0.08636	
SR47	0.38877	0.38877	SR47	0.0383	0.0383	SR47	0.00242	0.0000242	SR47	0.36191	0.36191	SR47	0.0874	
SR48	0.38831	0.38831	SR48	0.03756	0.03756	SR48	0.00228	0.0000228	SR48	0.36941	0.36941	SR48	0.0892	
SR49	0.38854	0.38854	SR49	0.03747	0.03747	SR49	0.00227	0.0000227	SR49	0.37101	0.37101	SR49	0.08958	
SR50	0.39041	0.39041	SR50	0.03757	0.03757	SR50	0.00226	0.0000226	SR50	0.37373	0.37373	SR50	0.09024	
SR51	0.39197	0.39197	SR51	0.03762	0.03762	SR51	0.00225	0.0000225	SR51	0.37626	0.37626	SR51	0.09084	
SR52	0.39029	0.39029	SR52	0.03738	0.03738	SR52	0.00223	0.0000223	SR52	0.37517	0.37517	SR52	0.09058	
SR53	0.3859	0.3859	SR53	0.03687	0.03687	SR53	0.00218	0.0000218	SR53	0.3715	0.3715	SR53	0.08969	
SR54	0.38814	0.38814	SR54	0.03699	0.03699	SR54	0.00218	0.0000218	SR54	0.37429	0.37429	SR54	0.09036	
SR55	0.37855	0.37855	SR55	0.03599	0.03599	SR55	0.00211	0.0000211	SR55	0.36549	0.36549	SR55	0.08824	
SR56	0.37284	0.37284	SR56	0.03534	0.03534	SR56	0.00206	0.0000206	SR56	0.36078	0.36078	SR56	0.0871	
SR57	0.36514	0.36514	SR57	0.03451	0.03451	SR57	0.00199	0.0000199	SR57	0.35406	0.35406	SR57	0.08547	
SR58	0.35592	0.35592	SR58	0.03361	0.03361	SR58	0.00194	0.0000194	SR58	0.34524	0.34524	SR58	0.08334	
SR59	0.34896	0.34896	SR59	0.03291	0.03291	SR59	0.00189	0.0000189	SR59	0.33867	0.33867	SR59	0.08176	

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (24-hour)

	1000			100000			1000		
Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID
SR60	4.4499	0.0044499	SR60	0.0662	0.000000662	SR60	0.05263	0.00005263	SR60
SR61	4.28853	0.00428853	SR61	0.06223	6.223E-07	SR61	0.04898	0.00004898	SR61
SR62	4.11808	0.00411808	SR62	0.05886	5.886E-07	SR62	0.04591	0.00004591	SR62
SR63	4.66881	0.00466881	SR63	0.05807	5.807E-07	SR63	0.04614	0.00004614	SR63
SR64	4.13149	0.00413149	SR64	0.05204	5.204E-07	SR64	0.04084	0.00004084	SR64
SR65	4.22818	0.00422818	SR65	0.05495	5.495E-07	SR65	0.04364	0.00004364	SR65
SR66	4.38343	0.00438343	SR66	0.05741	5.741E-07	SR66	0.04627	0.00004627	SR66
SR67	4.49217	0.00449217	SR67	0.05746	5.746E-07	SR67	0.04797	0.00004797	SR67
SR68	4.5626	0.0045626	SR68	0.05998	5.998E-07	SR68	0.05052	0.00005052	SR68
SR69	4.63689	0.00463689	SR69	0.06377	6.377E-07	SR69	0.05449	0.00005449	SR69
SR70	4.30054	0.00430054	SR70	0.06447	6.447E-07	SR70	0.0578	0.0000578	SR70
SR71	5.13286	0.00513286	SR71	0.07366	7.366E-07	SR71	0.06539	0.00006539	SR71
SR72	5.17476	0.00517476	SR72	0.07824	7.824E-07	SR72	0.07098	0.00007098	SR72
SR73	5.23817	0.00523817	SR73	0.08165	8.165E-07	SR73	0.07513	0.00007513	SR73
SR74	5.35465	0.00535465	SR74	0.08501	8.501E-07	SR74	0.07878	0.00007878	SR74
SR75	5.52972	0.00552972	SR75	0.08948	8.948E-07	SR75	0.08364	0.00008364	SR75
SR76	5.49632	0.00549632	SR76	0.0883	0.000000883	SR76	0.08248	0.00008248	SR76
SR77	5.51853	0.00551853	SR77	0.0879	0.000000879	SR77	0.08202	0.00008202	SR77
SR78	5.58164	0.00558164	SR78	0.09287	9.287E-07	SR78	0.09499	0.00009499	SR78
SR79	5.7025	0.0057025	SR79	0.11496	1.1496E-06	SR79	0.12147	0.00012147	SR79
SR80	6.07069	0.00607069	SR80	0.1506	0.000001506	SR80	0.16393	0.00016393	SR80
SR81	5.91368	0.00591368	SR81	0.16944	1.6944E-06	SR81	0.18634	0.00018634	SR81
SR82	5.36369	0.00536369	SR82	0.14197	1.4197E-06	SR82	0.15308	0.00015308	SR82
SR83	5.42338	0.00542338	SR83	0.12249	1.2249E-06	SR83	0.12952	0.00012952	SR83
SR84	5.46047	0.00546047	SR84	0.09602	9.602E-07	SR84	0.09765	0.00009765	SR84
SR85	5.43855	0.00543855	SR85	0.09531	9.531E-07	SR85	0.08265	0.00008265	SR85
SR86	5.40993	0.00540993	SR86	0.09419	9.419E-07	SR86	0.07953	0.00007953	SR86
SR87	5.36588	0.00536588	SR87	0.09141	9.141E-07	SR87	0.07636	0.00007636	SR87
SR88	5.31514	0.00531514	SR88	0.08796	8.796E-07	SR88	0.07239	0.00007239	SR88
SR89	5.24255	0.00524255	SR89	0.08459	8.459E-07	SR89	0.06866	0.00006866	SR89
SR90	5.06174	0.00506174	SR90	0.08643	8.643E-07	SR90	0.0727	0.0000727	SR90
SR91	5.103	0.005103	SR91	0.08807	8.807E-07	SR91	0.08555	0.00008555	SR91
SR92	5.06065	0.00506065	SR92	0.0893	0.000000893	SR92	0.09045	0.00009045	SR92
SR93	4.6873	0.0046873	SR93	0.07827	7.827E-07	SR93	0.06517	0.00006517	SR93
SR94	4.64613	0.00464613	SR94	0.08595	8.595E-07	SR94	0.08841	0.00008841	SR94
SR95	4.64142	0.00464142	SR95	0.098	0.00000098	SR95	0.10257	0.00010257	SR95
SR96	4.81433	0.00481433	SR96	0.15508	1.5508E-06	SR96	0.15942	0.00015942	SR96
CR1	11.59441	0.01159441	CR1	0.93228	9.3228E-06	CR1	1.09492	0.00109492	CR1
CR2	4.12617	0.00412617	CR2	0.17695	1.7695E-06	CR2	0.19157	0.00019157	CR2
CR3	3.91561	0.00391561	CR3	0.1401	0.000001401	CR3	0.15044	0.00015044	CR3
CR4	4.12911	0.00412911	CR4	0.19233	1.9233E-06	CR4	0.2107	0.0002107	CR4
CR5	3.12857	0.00312857	CR5	0.16631	1.6631E-06	CR5	0.19342	0.00019342	CR5
CR6	5.7816	0.0057816	CR6	0.09822	9.822E-07	CR6	0.08427	0.00008427	CR6
CR7	7.05537	0.00705537	CR7	0.10482	1.0482E-06	CR7	0.09384	0.00009384	CR7
CR8	12.95421	0.01295421	CR8	0.7893	0.000007893	CR8	0.91597	0.00091597	CR8
CR9	9.58196	0.00958196	CR9	0.26151	2.6151E-06	CR9	0.25944	0.00025944	CR9
CR10	10.89161	0.01089161	CR10	0.11496	1.1496E-06	CR10	0.0861	0.0000861	CR10
CR11	3.1347	0.0031347	CR11	0.05026	5.026E-07	CR11	0.04065	0.00004065	CR11
CR12	2.7511	0.0027511	CR12	0.04561	4.561E-07	CR12	0.03756	0.00003756	CR12
CR13	2.60035	0.00260035	CR13	0.0433	0.000000433	CR13	0.03573	0.00003573	CR13
CR14	4.0915	0.0040915	CR14	0.05561	5.561E-07	CR14	0.04849	0.00004849	CR14
CR15	4.66041	0.00466041	CR15	0.07137	7.137E-07	CR15	0.06548	0.00006548	CR15
CR16	4.91363	0.00491363	CR16	0.0734	0.000000734	CR16	0.06723	0.00006723	CR16
CR17	3.94583	0.00394583	CR17	0.11895	1.1895E-06	CR17	0.13116	0.00013116	CR17
SR7	**36.11**	**0.04**	**SR7**	**2.87**	**2.87E-05**	**SR7**	**3.34**	**3.34E-03**	**SR7**
CR8	**12.95**	**0.01**	**CR8**	**0.93**	**9.32E-06**	**CR1**	**1.09**	**1.09E-03**	**CR1**
SR7	**36.11**	**0.04**	**SR7**	**2.87**	**2.87E-05**	**SR7**	**3.34**	**3.34E-03**	**SR7**

Maximum Concentration Results (Annual)

Multiplier	1			1			100			1			1	
	CO (10^1)	CO	Receptor ID	NOx (10^1)	NOx	Receptor ID	SO2 (10^2)	SO2	Receptor ID	PM10 (10^1)	PM10	Receptor ID	PM2.5 (10^1)	
	0.3395	0.3395	SR60	0.032	0.032	SR60	0.00184	0.0000184	SR60	0.32955	0.32955	SR60	0.07955	
	0.31946	0.31946	SR61	0.03009	0.03009	SR61	0.00173	0.0000173	SR61	0.31009	0.31009	SR61	0.07486	
	0.29992	0.29992	SR62	0.02826	0.02826	SR62	0.00162	0.0000162	SR62	0.29088	0.29088	SR62	0.07022	
	0.41396	0.41396	SR63	0.03822	0.03822	SR63	0.00209	0.0000209	SR63	0.40786	0.40786	SR63	0.09844	
	0.37042	0.37042	SR64	0.0347	0.0347	SR64	0.00196	0.0000196	SR64	0.36209	0.36209	SR64	0.08741	
	0.38425	0.38425	SR65	0.036	0.036	SR65	0.00204	0.0000204	SR65	0.37576	0.37576	SR65	0.09071	
	0.40335	0.40335	SR66	0.0378	0.0378	SR66	0.00214	0.0000214	SR66	0.39482	0.39482	SR66	0.09531	
	0.41087	0.41087	SR67	0.0386	0.0386	SR67	0.0022	0.000022	SR67	0.40228	0.40228	SR67	0.09711	
	0.42225	0.42225	SR68	0.03972	0.03972	SR68	0.00227	0.0000227	SR68	0.41346	0.41346	SR68	0.09981	
	0.43516	0.43516	SR69	0.04104	0.04104	SR69	0.00236	0.0000236	SR69	0.426	0.426	SR69	0.10284	
	0.39979	0.39979	SR70	0.03814	0.03814	SR70	0.00225	0.0000225	SR70	0.38951	0.38951	SR70	0.09404	
	0.47024	0.47024	SR71	0.04478	0.04478	SR71	0.00263	0.0000263	SR71	0.46061	0.46061	SR71	0.11121	
	0.46965	0.46965	SR72	0.04514	0.04514	SR72	0.00271	0.0000271	SR72	0.45927	0.45927	SR72	0.11089	
	0.47188	0.47188	SR73	0.04578	0.04578	SR73	0.0028	0.000028	SR73	0.46094	0.46094	SR73	0.11131	
	0.48002	0.48002	SR74	0.04692	0.04692	SR74	0.00292	0.0000292	SR74	0.46873	0.46873	SR74	0.1132	
	0.4916	0.4916	SR75	0.04888	0.04888	SR75	0.00315	0.0000315	SR75	0.47899	0.47899	SR75	0.11569	
	0.48713	0.48713	SR76	0.04907	0.04907	SR76	0.00324	0.0000324	SR76	0.47261	0.47261	SR76	0.11417	
	0.48742	0.48742	SR77	0.04979	0.04979	SR77	0.00337	0.0000337	SR77	0.4706	0.4706	SR77	0.1137	
	0.4893	0.4893	SR78	0.05075	0.05075	SR78	0.00353	0.0000353	SR78	0.46957	0.46957	SR78	0.11347	
	0.49365	0.49365	SR79	0.05226	0.05226	SR79	0.00377	0.0000377	SR79	0.46955	0.46955	SR79	0.11349	
	0.50924	0.50924	SR80	0.05845	0.05845	SR80	0.00475	0.0000475	SR80	0.46599	0.46599	SR80	0.11274	
	0.46731	0.46731	SR81	0.06396	0.06396	SR81	0.00634	0.0000634	SR81	0.31503	0.31503	SR81	0.07648	
	0.43491	0.43491	SR82	0.04906	0.04906	SR82	0.00389	0.0000389	SR82	0.27306	0.27306	SR82	0.06604	
	0.43776	0.43776	SR83	0.04833	0.04833	SR83	0.00372	0.0000372	SR83	0.27124	0.27124	SR83	0.06558	
	0.43835	0.43835	SR84	0.04777	0.04777	SR84	0.0036	0.000036	SR84	0.26882	0.26882	SR84	0.06497	
	0.43413	0.43413	SR85	0.04682	0.04682	SR85	0.00348	0.0000348	SR85	0.26344	0.26344	SR85	0.06366	
	0.43054	0.43054	SR86	0.04611	0.04611	SR86	0.00339	0.0000339	SR86	0.25825	0.25825	SR86	0.0624	
	0.42697	0.42697	SR87	0.0456	0.0456	SR87	0.00333	0.0000333	SR87	0.25389	0.25389	SR87	0.06134	
	0.42326	0.42326	SR88	0.04518	0.04518	SR88	0.0033	0.000033	SR88	0.24974	0.24974	SR88	0.06034	
	0.41731	0.41731	SR89	0.04467	0.04467	SR89	0.00328	0.0000328	SR89	0.24415	0.24415	SR89	0.05899	
	0.3958	0.3958	SR90	0.04277	0.04277	SR90	0.00318	0.0000318	SR90	0.23058	0.23058	SR90	0.05572	
	0.3978	0.3978	SR91	0.04339	0.04339	SR91	0.00328	0.0000328	SR91	0.22965	0.22965	SR91	0.0555	
	0.39122	0.39122	SR92	0.04356	0.04356	SR92	0.00339	0.0000339	SR92	0.22405	0.22405	SR92	0.05417	
	0.36153	0.36153	SR93	0.04149	0.04149	SR93	0.00337	0.0000337	SR93	0.20689	0.20689	SR93	0.05005	
	0.36287	0.36287	SR94	0.04359	0.04359	SR94	0.00375	0.0000375	SR94	0.20539	0.20539	SR94	0.04974	
	0.34682	0.34682	SR95	0.04466	0.04466	SR95	0.00416	0.0000416	SR95	0.19467	0.19467	SR95	0.04722	
	0.32952	0.32952	SR96	0.04642	0.04642	SR96	0.00471	0.0000471	SR96	0.18313	0.18313	SR96	0.04453	
	0.65324	0.65324	CR1	0.16487	0.16487	CR1	0.02321	0.0002321	CR1	0.31183	0.31183	CR1	0.07774	
	0.17773	0.17773	CR2	0.03285	0.03285	CR2	0.00403	0.0000403	CR2	0.09817	0.09817	CR2	0.02407	
	0.16894	0.16894	CR3	0.02478	0.02478	CR3	0.0026	0.000026	CR3	0.0982	0.0982	CR3	0.0239	
	0.21382	0.21382	CR4	0.03434	0.03434	CR4	0.00386	0.0000386	CR4	0.11956	0.11956	CR4	0.02918	
	0.22958	0.22958	CR5	0.0423	0.0423	CR5	0.00518	0.0000518	CR5	0.12535	0.12535	CR5	0.03073	
	0.34276	0.34276	CR6	0.03631	0.03631	CR6	0.00262	0.0000262	CR6	0.19881	0.19881	CR6	0.04802	
	0.55482	0.55482	CR7	0.05713	0.05713	CR7	0.00393	0.0000393	CR7	0.32436	0.32436	CR7	0.07831	
	0.99929	0.99929	CR8	0.23746	0.23746	CR8	0.03281	0.0003281	CR8	0.61495	0.61495	CR8	0.15191	
	0.54414	0.54414	CR9	0.06145	0.06145	CR9	0.00489	0.0000489	CR9	0.43767	0.43767	CR9	0.10587	
	1.04939	1.04939	CR10	0.09673	0.09673	CR10	0.00526	0.0000526	CR10	1.05687	1.05687	CR10	0.2551	
	0.25055	0.25055	CR11	0.02366	0.02366	CR11	0.00136	0.0000136	CR11	0.24258	0.24258	CR11	0.05856	
	0.1818	0.1818	CR12	0.01743	0.01743	CR12	0.00104	0.0000104	CR12	0.17395	0.17395	CR12	0.042	
	0.20616	0.20616	CR13	0.0197	0.0197	CR13	0.00117	0.0000117	CR13	0.19765	0.19765	CR13	0.04772	
	0.36611	0.36611	CR14	0.03465	0.03465	CR14	0.00201	0.0000201	CR14	0.35692	0.35692	CR14	0.08617	
	0.41812	0.41812	CR15	0.04096	0.04096	CR15	0.00256	0.0000256	CR15	0.40536	0.40536	CR15	0.09789	
	0.43395	0.43395	CR16	0.04349	0.04349	CR16	0.00284	0.0000284	CR16	0.41889	0.41889	CR16	0.10119	
	0.18897	0.18897	CR17	0.03143	0.03143	CR17	0.00362	0.0000362	CR17	0.10603	0.10603	CR17	0.0259	
	4.19	**4.19**	**SR5**	**0.67**	**0.67**	**SR7**	**0.09**	**0.00**	**SR7**	**4.16**	**4.16**	**SR12**	**1.00**	
	1.05	**1.05**	**CR10**	**0.24**	**0.24**	**CR8**	**0.03**	**0.00**	**CR8**	**1.06**	**1.06**	**CR10**	**0.26**	
	4.19	**4.19**	**SR5**	**0.67**	**0.67**	**SR7**	**0.09**	**0.00**	**SR7**	**4.16**	**4.16**	**SR12**	**1.00**	

Air Quality Impact Assessment
Appendix F
Future Build Condition

Maximum Concentration Results (Annual)																				Maximum Concentration Results (8-hour)		
	100		1000			100			1000			100000			1000			1		
PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID	CO (10^1)	CO	Receptor ID
0.44984	SR1	0.99066	0.0099066	SR1	0.07956	0.00007956	SR1	1.17717	0.0117717	SR1	8.88948	0.00888948	SR1	0.22603	2.2603E-06	SR1	0.21914	0.00021914	SR1	22.27241	22.27241	SR1
0.3947	SR2	0.86347	0.0086347	SR2	0.02574	0.00002574	SR2	0.91567	0.0091567	SR2	7.2365	0.0072365	SR2	0.10716	1.0716E-06	SR2	0.0826	0.0000826	SR2	18.54582	18.54582	SR2
0.36225	SR3	0.79315	0.0079315	SR3	0.03869	0.00003869	SR3	0.87924	0.0087924	SR3	6.82396	0.00682396	SR3	0.12948	1.2948E-06	SR3	0.11333	0.00011333	SR3	20.45844	20.45844	SR3
0.44728	SR4	0.97835	0.0097835	SR4	0.01983	0.00001983	SR4	1.01382	0.0101382	SR4	8.08952	0.00808952	SR4	0.10215	1.0215E-06	SR4	0.07035	0.00007035	SR4	19.93102	19.93102	SR4
0.53082	SR5	1.16281	0.0116281	SR5	0.02433	0.00002433	SR5	1.20686	0.0120686	SR5	9.62352	0.00962352	SR5	0.12295	1.2295E-06	SR5	0.08546	0.00008546	SR5	23.23424	23.23424	SR5
0.56563	SR6	0.81635	0.0081635	SR6	0.02302	0.00002302	SR6	0.87661	0.0087661	SR6	6.89079	0.00689079	SR6	0.10993	1.0993E-06	SR6	0.08874	0.00008874	SR6	18.94602	18.94602	SR6
0.49358	SR7	0.68816	0.0068816	SR7	0.0862	0.0000862	SR7	0.9628	0.009628	SR7	6.84117	0.00684117	SR7	0.27389	2.7389E-06	SR7	0.29441	0.00029441	SR7	22.03216	22.03216	SR7
0.61324	SR8	0.74507	0.0074507	SR8	0.01773	0.00001773	SR8	0.78904	0.0078904	SR8	6.23824	0.00623824	SR8	0.09141	9.141E-07	SR8	0.07018	0.00007018	SR8	17.83576	17.83576	SR8
0.98339	SR9	1.09964	0.0109964	SR9	0.01615	0.00001615	SR9	1.13108	0.0113108	SR9	9.05267	0.00905267	SR9	0.10782	1.0782E-06	SR9	0.07075	0.00007075	SR9	24.78966	24.78966	SR9
0.98422	SR10	1.08489	0.0108489	SR10	0.01375	0.00001375	SR10	1.1086	0.011086	SR10	8.89751	0.00889751	SR10	0.10046	1.0046E-06	SR10	0.06263	0.00006263	SR10	24.28984	24.28984	SR10
0.86373	SR11	0.93424	0.0093424	SR11	0.0085	0.0000085	SR11	0.94349	0.0094349	SR11	7.61049	0.00761049	SR11	0.07747	7.747E-07	SR11	0.04298	0.00004298	SR11	18.41199	18.41199	SR11
1.00461	SR12	1.08137	0.0108137	SR12	0.00888	0.00000888	SR12	1.0889	0.010889	SR12	8.79438	0.00879438	SR12	0.0871	0.000000871	SR12	0.04663	0.00004663	SR12	20.61598	20.61598	SR12
0.97126	SR13	1.0462	0.010462	SR13	0.00813	0.00000813	SR13	1.05193	0.0105193	SR13	8.50119	0.00850119	SR13	0.083	0.00000083	SR13	0.04359	0.00004359	SR13	20.30953	20.30953	SR13
0.6703	SR14	0.73081	0.0073081	SR14	0.00602	0.00000602	SR14	0.73592	0.0073592	SR14	5.94352	0.00594352	SR14	0.05888	5.888E-07	SR14	0.03154	0.00003154	SR14	15.97941	15.97941	SR14
0.94922	SR15	1.0315	0.010315	SR15	0.00773	0.00000773	SR15	1.03621	0.0103621	SR15	8.37742	0.00837742	SR15	0.08107	8.107E-07	SR15	0.04205	0.00004205	SR15	21.19115	21.19115	SR15
0.59358	SR16	0.66672	0.0066672	SR16	0.00523	0.00000523	SR16	0.67052	0.0067052	SR16	5.41832	0.00541832	SR16	0.05301	5.301E-07	SR16	0.02792	0.00002792	SR16	21.44795	21.44795	SR16
0.60469	SR17	0.68633	0.0068633	SR17	0.00526	0.00000526	SR17	0.68983	0.0068983	SR17	5.57578	0.00557578	SR17	0.05424	5.424E-07	SR17	0.02834	0.00002834	SR17	20.26733	20.26733	SR17
0.59672	SR18	0.68029	0.0068029	SR18	0.00515	0.00000515	SR18	0.68354	0.0068354	SR18	5.52566	0.00552566	SR18	0.05359	5.359E-07	SR18	0.02788	0.00002788	SR18	19.18466	19.18466	SR18
0.66518	SR19	0.75979	0.0075979	SR19	0.00562	0.00000562	SR19	0.76299	0.0076299	SR19	6.16943	0.00616943	SR19	0.05951	5.951E-07	SR19	0.03072	0.00003072	SR19	19.23727	19.23727	SR19
0.5887	SR20	0.67371	0.0067371	SR20	0.00498	0.00000498	SR20	0.67652	0.0067652	SR20	5.47035	0.00547035	SR20	0.05274	5.274E-07	SR20	0.02721	0.00002721	SR20	18.49556	18.49556	SR20
0.93678	SR21	1.07062	0.0107062	SR21	0.00739	0.00000739	SR21	1.07341	0.0107341	SR21	8.68544	0.00868544	SR21	0.08245	8.245E-07	SR21	0.04159	0.00004159	SR21	22.48305	22.48305	SR21
0.57675	SR22	0.66084	0.0066084	SR22	0.00479	0.00000479	SR22	0.66329	0.0066329	SR22	5.36445	0.00536445	SR22	0.05149	5.149E-07	SR22	0.02639	0.00002639	SR22	17.02047	17.02047	SR22
0.8861	SR23	1.01335	0.0101335	SR23	0.00693	0.00000693	SR23	1.01577	0.0101577	SR23	8.21979	0.00821979	SR23	0.07786	7.786E-07	SR23	0.03915	0.00003915	SR23	19.86313	19.86313	SR23
0.58369	SR24	0.66892	0.0066892	SR24	0.00475	0.00000475	SR24	0.67108	0.0067108	SR24	5.42859	0.00542859	SR24	0.05185	5.185E-07	SR24	0.02639	0.00002639	SR24	15.8458	15.8458	SR24
0.95723	SR25	1.09434	0.0109434	SR25	0.00732	0.00000732	SR25	1.09645	0.0109645	SR25	8.87442	0.00887442	SR25	0.08368	8.368E-07	SR25	0.04178	0.00004178	SR25	21.89178	21.89178	SR25
0.55914	SR26	0.64088	0.0064088	SR26	0.0045	0.0000045	SR26	0.64279	0.0064279	SR26	5.20026	0.00520026	SR26	0.04955	4.955E-07	SR26	0.02513	0.00002513	SR26	15.10367	15.10367	SR26
0.62597	SR27	0.71699	0.0071699	SR27	0.00496	0.00000496	SR27	0.71888	0.0071888	SR27	5.8167	0.0058167	SR27	0.05524	5.524E-07	SR27	0.02788	0.00002788	SR27	16.82141	16.82141	SR27
0.54793	SR28	0.62796	0.0062796	SR28	0.00437	0.00000437	SR28	0.62968	0.0062968	SR28	5.09475	0.00509475	SR28	0.04843	4.843E-07	SR28	0.02448	0.00002448	SR28	15.14153	15.14153	SR28
0.91017	SR29	1.04048	0.0104048	SR29	0.00687	0.00000687	SR29	1.04219	0.0104219	SR29	8.43628	0.00843628	SR29	0.07932	7.932E-07	SR29	0.03943	0.00003943	SR29	21.40737	21.40737	SR29
0.3583	SR30	0.41186	0.0041186	SR30	0.003	0.000003	SR30	0.41343	0.0041343	SR30	3.34351	0.00334351	SR30	0.03212	3.212E-07	SR30	0.01649	0.00001649	SR30	11.34599	11.34599	SR30
0.85934	SR31	0.98245	0.0098245	SR31	0.00648	0.00000648	SR31	0.98404	0.0098404	SR31	7.96566	0.00796566	SR31	0.07487	7.487E-07	SR31	0.03721	0.00003721	SR31	18.90876	18.90876	SR31
0.07061	SR32	0.08364	0.0008364	SR32	0.0009	0.0000009	SR32	0.08486	0.0008486	SR32	0.68315	0.00068315	SR32	0.00726	7.26E-08	SR32	0.00423	0.00000423	SR32	4.60678	4.60678	SR32
0.05961	SR33	0.07095	0.0007095	SR33	0.0008	0.0000008	SR33	0.0721	0.000721	SR33	0.58004	0.00058004	SR33	0.00624	6.24E-08	SR33	0.0037	0.0000037	SR33	3.86575	3.86575	SR33
0.05677	SR34	0.06773	0.0006773	SR34	0.00078	0.00000078	SR34	0.06889	0.0006889	SR34	0.55398	0.00055398	SR34	0.00601	6.01E-08	SR34	0.0036	0.0000036	SR34	3.68488	3.68488	SR34
0.04944	SR35	0.05918	0.0005918	SR35	0.00071	0.00000071	SR35	0.06029	0.0006029	SR35	0.48452	0.00048452	SR35	0.00533	5.33E-08	SR35	0.00323	0.00000323	SR35	2.96622	2.96622	SR35
0.04229	SR36	0.05096	0.0005096	SR36	0.00065	0.00000065	SR36	0.05203	0.0005203	SR36	0.41775	0.00041775	SR36	0.00469	4.69E-08	SR36	0.0029	0.0000029	SR36	2.57394	2.57394	SR36
0.07614	SR37	0.1286	0.001286	SR37	0.00329	0.00000329	SR37	0.13671	0.0013671	SR37	1.07918	0.00107918	SR37	0.0162	0.000000162	SR37	0.01262	0.00001262	SR37	3.92275	3.92275	SR37
0.07807	SR38	0.10814	0.0010814	SR38	0.00232	0.00000232	SR38	0.11349	0.0011349	SR38	0.90069	0.00090069	SR38	0.01243	1.243E-07	SR38	0.00917	0.00000917	SR38	4.39822	4.39822	SR38
0.08111	SR39	0.10941	0.0010941	SR39	0.00224	0.00000224	SR39	0.11446	0.0011446	SR39	0.90955	0.00090955	SR39	0.01229	1.229E-07	SR39	0.00893	0.00000893	SR39	4.60763	4.60763	SR39
0.08123	SR40	0.10795	0.0010795	SR40	0.00213	0.00000213	SR40	0.11269	0.0011269	SR40	0.8963	0.0008963	SR40	0.01193	1.193E-07	SR40	0.00857	0.00000857	SR40	4.69384	4.69384	SR40
0.08288	SR41	0.10835	0.0010835	SR41	0.00202	0.00000202	SR41	0.1127	0.001127	SR41	0.89774	0.00089774	SR41	0.01164	1.164E-07	SR41	0.0082	0.0000082	SR41	4.74021	4.74021	SR41
0.08415	SR42	0.10882	0.0010882	SR42	0.00193	0.00000193	SR42	0.11286	0.0011286	SR42	0.90014	0.00090014	SR42	0.01143	1.143E-07	SR42	0.00792	0.00000792	SR42	4.5475	4.5475	SR42
0.08442	SR43	0.108	0.00108	SR43	0.00182	0.00000182	SR43	0.11172	0.0011172	SR43	0.89201	0.00089201	SR43	0.0111	0.000000111	SR43	0.00757	0.00000757	SR43	4.57067	4.57067	SR43
0.08577	SR44	0.10836	0.0010836	SR44	0.00174	0.00000174	SR44	0.11181	0.0011181	SR44	0.89372	0.00089372	SR44	0.01091	1.091E-07	SR44	0.00732	0.00000732	SR44	4.58232	4.58232	SR44
0.08633	SR45	0.10823	0.0010823	SR45	0.00167	0.00000167	SR45	0.11146	0.0011146	SR45	0.89161	0.00089161	SR45	0.01072	1.072E-07	SR45	0.0071	0.0000071	SR45	4.48501	4.48501	SR45
0.08636	SR46	0.10763	0.0010763	SR46	0.0016	0.0000016	SR46	0.11064	0.0011064	SR46	0.88578	0.00088578	SR46	0.0105	0.000000105	SR46	0.00686	0.00000686	SR46	4.36538	4.36538	SR46
0.0874	SR47	0.10827	0.0010827	SR47	0.00155	0.00000155	SR47	0.11109	0.0011109	SR47	0.89007	0.00089007	SR47	0.0104	0.000000104	SR47	0.0067	0.0000067	SR47	4.30905	4.30905	SR47
0.0892	SR48	0.10825	0.0010825	SR48	0.00141	0.00000141	SR48	0.11064	0.0011064	SR48	0.88791	0.00088791	SR48	0.01004	1.004E-07	SR48	0.00627	0.00000627	SR48	4.15083	4.15083	SR48
0.08958	SR49	0.10833	0.0010833	SR49	0.00139	0.00000139	SR49	0.11065	0.0011065	SR49	0.88825	0.00088825	SR49	0.01	0.0000001	SR49	0.00621	0.00000621	SR49	4.22186	4.22186	SR49
0.09024	SR50	0.10886	0.0010886	SR50	0.00138	0.00000138	SR50	0.11115	0.0011115	SR50	0.8924	0.0008924	SR50	0.01001	1.001E-07	SR50	0.00619	0.00000619	SR50	4.28804	4.28804	SR50
0.09084	SR51	0.10932	0.0010932	SR51	0.00137	0.00000137	SR51	0.11155	0.0011155	SR51	0.89581	0.00089581	SR51	0.00999	9.99E-08	SR51	0.00615	0.00000615	SR51	4.36652	4.36652	SR51
0.09058	SR52	0.10886	0.0010886	SR52	0.00135	0.00000135	SR52	0.11103	0.0011103	SR52	0.89185	0.00089185	SR52	0.00991	9.91E-08	SR52	0.00608	0.00000608	SR52	4.39401	4.39401	SR52
0.08969	SR53	0.10765	0.0010765	SR53	0.00132	0.00000132	SR53	0.10974	0.0010974	SR53	0.88167	0.00088167	SR53	0.00976	9.76E-08	SR53	0.00596	0.00000596	SR53	4.40445	4.40445	SR53
0.09036	SR54	0.10829	0.0010829	SR54	0.0013	0.0000013	SR54	0.11033	0.0011033	SR54	0.88663	0.00088663	SR54	0.00977	9.77E-08	SR54	0.00594	0.00000594	SR54	4.58508	4.58508	SR54
0.08824	SR55	0.10563	0.0010563	SR55	0.00125	0.00000125	SR55	0.10757	0.0010757	SR55	0.86458	0.00086458	SR55	0.00948	9.48E-08	SR55	0.00574	0.00000574	SR55	4.5413	4.5413	SR55
0.0871	SR56	0.10405	0.0010405	SR56	0.00122	0.00000122	SR56	0.1059	0.001059	SR56	0.85138	0.00085138	SR56	0.00929	9.29E-08	SR56	0.00559	0.00000559	SR56	4.51416	4.51416	SR56
0.08547	SR57	0.10192	0.0010192	SR57	0.00117	0.00000117	SR57	0.10366	0.0010366	SR57	0.83362	0.00083362	SR57	0.00905	9.05E-08	SR57	0.00541	0.00000541	SR57	4.39974	4.39974	SR57
0.08334	SR58	0.09935	0.0009935	SR58	0.00114	0.00000114	SR58	0.10103	0.0010103	SR58	0.81254	0.00081254	SR58	0.0088	0.000000088	SR58	0.00525	0.00000525	SR58	4.26836	4.26836	SR58
0.08176	SR59	0.09741	0.0009741	SR59	0.00111	0.00000111	SR59	0.09904	0.0009904	SR59	0.7966	0.0007966	SR59	0.00861	8.61E-08	SR59	0.00513	0.00000513	SR59	4.12786	4.12786	SR59

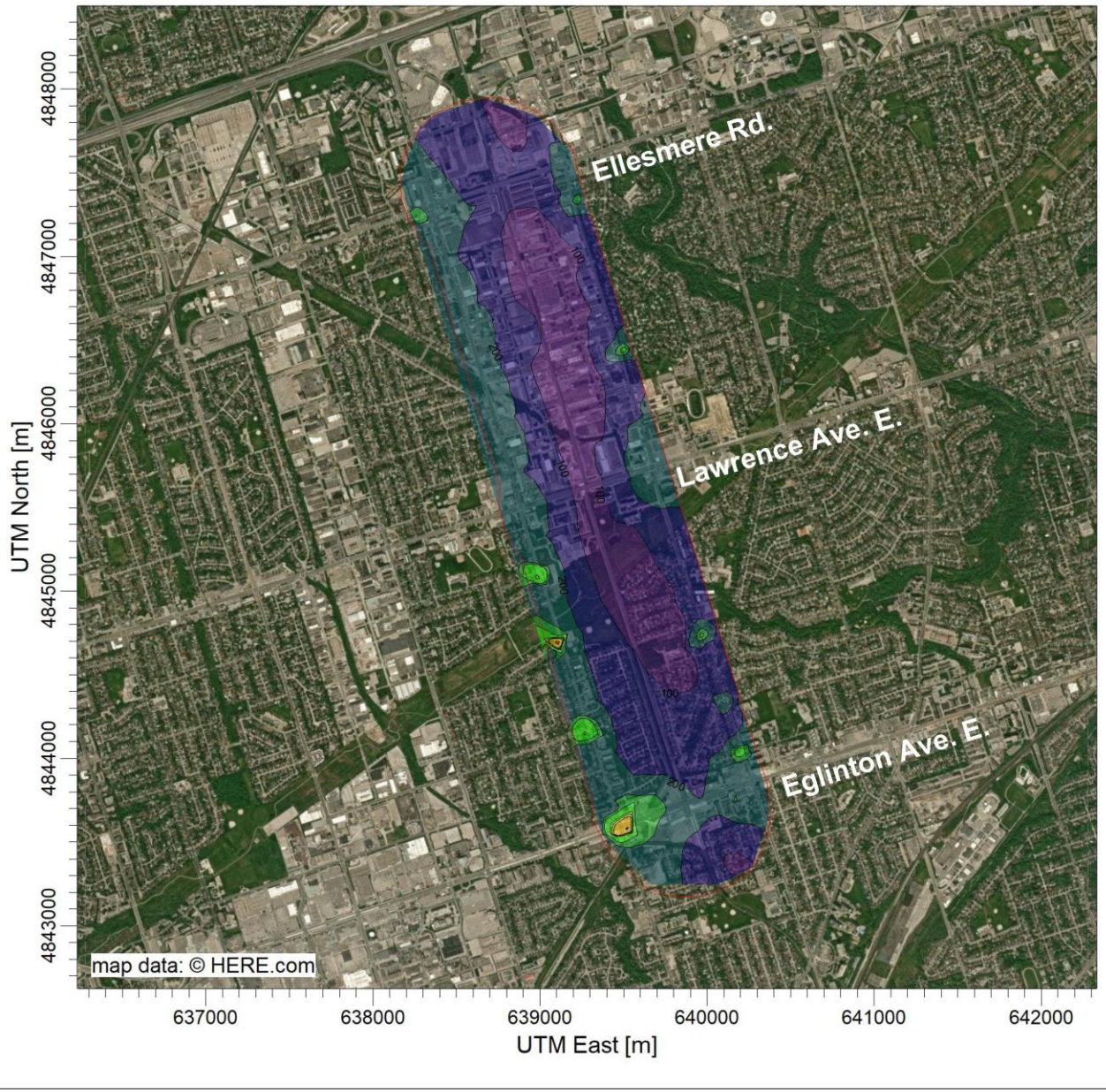
Air Quality Impact Assessment
Appendix F
Future Build Condition

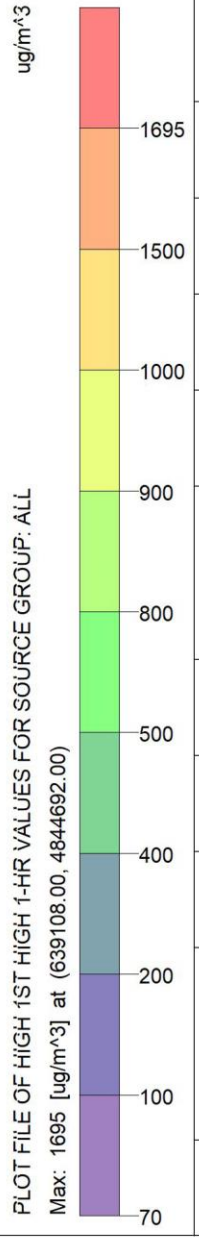
Maximum Concentration Results (Annual)																				Maximum Concentration Results (8-hour)		
		100		1000			100			1000			100000			1000			1		
PM2.5	Receptor ID	Benzene (10^2)	Benzene	Receptor ID	1,3-Butadiene (10^3)	1,3-Butadiene	Receptor ID	Formaldehyde (10^2)	Formaldehyde	Receptor ID	Acetaldehyde (10^3)	Acetaldehyde	Receptor ID	Benzo(a)pyrene (10^5)	Benzo(a)pyrene	Receptor ID	Acrolein (10^3)	Acrolein	Receptor ID	CO (10^1)	CO	Receptor ID
0.07955	SR60	0.09478	0.0009478	SR60	0.00107	0.00000107	SR60	0.09634	0.0009634	SR60	0.77496	0.00077496	SR60	0.00837	8.37E-08	SR60	0.00498	0.00000498	SR60	3.94236	3.94236	SR60
0.07486	SR61	0.08918	0.0008918	SR61	0.00101	0.00000101	SR61	0.09064	0.0009064	SR61	0.72917	0.00072917	SR61	0.00786	7.86E-08	SR61	0.00467	0.00000467	SR61	3.66085	3.66085	SR61
0.07022	SR62	0.08373	0.0008373	SR62	0.00095	0.00000095	SR62	0.08511	0.0008511	SR62	0.68459	0.00068459	SR62	0.00739	7.39E-08	SR62	0.00439	0.00000439	SR62	3.52634	3.52634	SR62
0.09844	SR63	0.11569	0.0011569	SR63	0.00115	0.00000115	SR63	0.1171	0.001171	SR63	0.94365	0.00094365	SR63	0.00981	9.81E-08	SR63	0.00558	0.00000558	SR63	4.17943	4.17943	SR63
0.08741	SR64	0.10344	0.0010344	SR64	0.00113	0.00000113	SR64	0.10501	0.0010501	SR64	0.84518	0.00084518	SR64	0.00902	9.02E-08	SR64	0.0053	0.0000053	SR64	2.87446	2.87446	SR64
0.09071	SR65	0.1073	0.001073	SR65	0.00117	0.00000117	SR65	0.10894	0.0010894	SR65	0.87676	0.00087676	SR65	0.00936	9.36E-08	SR65	0.0055	0.0000055	SR65	2.93443	2.93443	SR65
0.09531	SR66	0.11263	0.0011263	SR66	0.00123	0.00000123	SR66	0.11436	0.0011436	SR66	0.92036	0.00092036	SR66	0.00984	9.84E-08	SR66	0.00578	0.00000578	SR66	2.89998	2.89998	SR66
0.09711	SR67	0.11472	0.0011472	SR67	0.00127	0.00000127	SR67	0.11653	0.0011653	SR67	0.93765	0.00093765	SR67	0.01006	1.006E-07	SR67	0.00594	0.00000594	SR67	2.98937	2.98937	SR67
0.09981	SR68	0.11789	0.0011789	SR68	0.00132	0.00000132	SR68	0.11979	0.0011979	SR68	0.96372	0.00096372	SR68	0.01037	1.037E-07	SR68	0.00614	0.00000614	SR68	3.08877	3.08877	SR68
0.10284	SR69	0.12147	0.0012147	SR69	0.00138	0.00000138	SR69	0.1235	0.001235	SR69	0.99335	0.00099335	SR69	0.01074	1.074E-07	SR69	0.0064	0.0000064	SR69	3.20708	3.20708	SR69
0.09404	SR70	0.11154	0.0011154	SR70	0.00135	0.00000135	SR70	0.11366	0.0011366	SR70	0.91331	0.00091331	SR70	0.01008	1.008E-07	SR70	0.00614	0.00000614	SR70	3.00585	3.00585	SR70
0.11121	SR71	0.1312	0.001312	SR71	0.00157	0.00000157	SR71	0.13366	0.0013366	SR71	1.07413	0.00107413	SR71	0.01182	1.182E-07	SR71	0.00717	0.00000717	SR71	3.52263	3.52263	SR71
0.11089	SR72	0.13097	0.0013097	SR72	0.00165	0.00000165	SR72	0.13368	0.0013368	SR72	1.07345	0.00107345	SR72	0.01201	1.201E-07	SR72	0.00742	0.00000742	SR72	3.53134	3.53134	SR72
0.11131	SR73	0.13152	0.0013152	SR73	0.00173	0.00000173	SR73	0.13451	0.0013451	SR73	1.0792	0.0010792	SR73	0.01227	1.227E-07	SR73	0.00771	0.00000771	SR73	3.55683	3.55683	SR73
0.1132	SR74	0.13374	0.0013374	SR74	0.00183	0.00000183	SR74	0.137	0.00137	SR74	1.09839	0.00109839	SR74	0.01266	1.266E-07	SR74	0.00805	0.00000805	SR74	3.61747	3.61747	SR74
0.11569	SR75	0.13683	0.0013683	SR75	0.00203	0.00000203	SR75	0.14069	0.0014069	SR75	1.12623	0.00112623	SR75	0.01338	1.338E-07	SR75	0.00875	0.00000875	SR75	3.70423	3.70423	SR75
0.11417	SR76	0.13549	0.0013549	SR76	0.00213	0.00000213	SR76	0.13971	0.0013971	SR76	1.11699	0.00111699	SR76	0.01357	1.357E-07	SR76	0.00906	0.00000906	SR76	3.67147	3.67147	SR76
0.1137	SR77	0.13546	0.0013546	SR77	0.00226	0.00000226	SR77	0.14012	0.0014012	SR77	1.11878	0.00111878	SR77	0.01392	1.392E-07	SR77	0.00948	0.00000948	SR77	3.67467	3.67467	SR77
0.11347	SR78	0.13586	0.0013586	SR78	0.00241	0.00000241	SR78	0.14101	0.0014101	SR78	1.12431	0.00112431	SR78	0.01435	1.435E-07	SR78	0.00999	0.00000999	SR78	3.70759	3.70759	SR78
0.11349	SR79	0.1369	0.001369	SR79	0.00263	0.00000263	SR79	0.14276	0.0014276	SR79	1.13601	0.00113601	SR79	0.015	0.00000015	SR79	0.01072	0.00001072	SR79	3.77846	3.77846	SR79
0.11274	SR80	0.1405	0.001405	SR80	0.00356	0.00000356	SR80	0.14939	0.0014939	SR80	1.17914	0.00117914	SR80	0.01772	1.772E-07	SR80	0.01381	0.00001381	SR80	4.00066	4.00066	SR80
0.07648	SR81	0.1273	0.001273	SR81	0.00523	0.00000523	SR81	0.14191	0.0014191	SR81	1.09861	0.00109861	SR81	0.02136	2.136E-07	SR81	0.01895	0.00001895	SR81	3.73451	3.73451	SR81
0.06604	SR82	0.12013	0.0012013	SR82	0.00296	0.00000296	SR82	0.12718	0.0012718	SR82	1.00565	0.00100565	SR82	0.01471	1.471E-07	SR82	0.01127	0.00001127	SR82	3.49157	3.49157	SR82
0.06558	SR83	0.12109	0.0012109	SR83	0.00279	0.00000279	SR83	0.12752	0.0012752	SR83	1.01058	0.00101058	SR83	0.01428	1.428E-07	SR83	0.01071	0.00001071	SR83	3.51677	3.51677	SR83
0.06497	SR84	0.12135	0.0012135	SR84	0.00269	0.00000269	SR84	0.1274	0.001274	SR84	1.01092	0.00101092	SR84	0.01399	1.399E-07	SR84	0.01034	0.00001034	SR84	3.51597	3.51597	SR84
0.06366	SR85	0.12026	0.0012026	SR85	0.00259	0.00000259	SR85	0.12594	0.0012594	SR85	1.0004	0.0010004	SR85	0.01362	1.362E-07	SR85	0.00994	0.00000994	SR85	3.46762	3.46762	SR85
0.0624	SR86	0.11932	0.0011932	SR86	0.00252	0.00000252	SR86	0.12475	0.0012475	SR86	0.99161	0.00099161	SR86	0.01334	1.334E-07	SR86	0.00966	0.00000966	SR86	3.41057	3.41057	SR86
0.06134	SR87	0.11835	0.0011835	SR87	0.0025	0.0000025	SR87	0.12365	0.0012365	SR87	0.98318	0.00098318	SR87	0.01317	1.317E-07	SR87	0.0095	0.0000095	SR87	3.36445	3.36445	SR87
0.06034	SR88	0.11732	0.0011732	SR88	0.0025	0.0000025	SR88	0.12257	0.0012257	SR88	0.97461	0.00097461	SR88	0.01304	1.304E-07	SR88	0.00941	0.00000941	SR88	3.32817	3.32817	SR88
0.05899	SR89	0.11565	0.0011565	SR89	0.00251	0.00000251	SR89	0.1209	0.001209	SR89	0.9611	0.0009611	SR89	0.01292	1.292E-07	SR89	0.00934	0.00000934	SR89	3.28838	3.28838	SR89
0.05572	SR90	0.10963	0.0010963	SR90	0.0025	0.0000025	SR90	0.11485	0.0011485	SR90	0.91221	0.00091221	SR90	0.01246	1.246E-07	SR90	0.00911	0.00000911	SR90	3.18021	3.18021	SR90
0.0555	SR91	0.11012	0.0011012	SR91	0.00263	0.00000263	SR91	0.11562	0.0011562	SR91	0.91747	0.00091747	SR91	0.01272	1.272E-07	SR91	0.0094	0.0000094	SR91	3.21887	3.21887	SR91
0.05417	SR92	0.10816	0.0010816	SR92	0.00282	0.00000282	SR92	0.11411	0.0011411	SR92	0.9037	0.0009037	SR92	0.01294	1.294E-07	SR92	0.00977	0.00000977	SR92	3.19338	3.19338	SR92
0.05005	SR93	0.09975	0.0009975	SR93	0.00291	0.00000291	SR93	0.10603	0.0010603	SR93	0.83711	0.00083711	SR93	0.01257	1.257E-07	SR93	0.00978	0.00000978	SR93	2.92433	2.92433	SR93
0.04974	SR94	0.09982	0.0009982	SR94	0.00342	0.00000342	SR94	0.10732	0.0010732	SR94	0.84332	0.00084332	SR94	0.01358	1.358E-07	SR94	0.01099	0.00001099	SR94	2.87034	2.87034	SR94
0.04722	SR95	0.09493	0.0009493	SR95	0.004	0.000004	SR95	0.10396	0.0010396	SR95	0.8108	0.0008108	SR95	0.01446	1.446E-07	SR95	0.01231	0.00001231	SR95	2.82653	2.82653	SR95
0.04453	SR96	0.08956	0.0008956	SR96	0.00478	0.00000478	SR96	0.10062	0.0010062	SR96	0.77673	0.00077673	SR96	0.0157	0.000000157	SR96	0.01411	0.00001411	SR96	2.9031	2.9031	SR96
0.07774	CR1	0.16606	0.0016606	CR1	0.0274	0.0000274	CR1	0.23317	0.0023317	CR1	1.65624	0.00165624	CR1	0.06707	6.707E-07	CR1	0.07194	0.00007194	CR1	6.61465	6.61465	CR1
0.02407	CR2	0.04708	0.0004708	CR2	0.00447	0.00000447	CR2	0.05789	0.0005789	CR2	0.43144	0.00043144	CR2	0.01232	1.232E-07	CR2	0.01233	0.00001233	CR2	2.67689	2.67689	CR2
0.0239	CR3	0.04576	0.0004576	CR3	0.00267	0.00000267	CR3	0.05204	0.0005204	CR3	0.39978	0.00039978	CR3	0.00853	8.53E-08	CR3	0.00782	0.00000782	CR3	3.29382	3.29382	CR3
0.02918	CR4	0.05745	0.0005745	CR4	0.00412	0.00000412	CR4	0.06724	0.0006724	CR4	0.51075	0.00051075	CR4	0.01227	1.227E-07	CR4	0.0117	0.0000117	CR4	3.19075	3.19075	CR4
0.03073	CR5	0.06083	0.0006083	CR5	0.00575	0.00000575	CR5	0.07471	0.0007471	CR5	0.55707	0.00055707	CR5	0.01585	1.585E-07	CR5	0.01584	0.00001584	CR5	2.15353	2.15353	CR5
0.04802	CR6	0.09505	0.0009505	CR6	0.00202	0.00000202	CR6	0.09912	0.0009912	CR6	0.7888	0.0007888	CR6	0.01042	1.042E-07	CR6	0.00744	0.00000744	CR6	4.08654	4.08654	CR6
0.07831	CR7	0.15412	0.0015412	CR7	0.00277	0.00000277	CR7	0.15969	0.0015969	CR7	1.27418	0.00127418	CR7	0.01606	1.606E-07	CR7	0.01106	0.00001106	CR7	4.27493	4.27493	CR7
0.15191	CR8	0.25629	0.0025629	CR8	0.02976	0.00002976	CR8	0.35049	0.0035049	CR8	2.51055	0.00251055	CR8	0.09547	9.547E-07	CR8	0.10172	0.00010172	CR8	7.81261	7.81261	CR8
0.10587	CR9	0.15029	0.0015029	CR9	0.00363	0.00000363	CR9	0.15916	0.0015916	CR9	1.25837	0.00125837	CR9	0.01844	1.844E-07	CR9	0.01415	0.00001415	CR9	5.65045	5.65045	CR9
0.2551	CR10	0.29329	0.0029329	CR10	0.00287	0.00000287	CR10	0.29678	0.0029678	CR10	2.39189	0.00239189	CR10	0.02479	2.479E-07	CR10	0.01406	0.00001406	CR10	7.00877	7.00877	CR10
0.05856	CR11	0.06994	0.0006994	CR11	0.0008	0.0000008	CR11	0.07112	0.0007112	CR11	0.57199	0.00057199	CR11	0.0062	0.000000062	CR11	0.0037	0.0000037	CR11	2.59261	2.59261	CR11
0.042	CR12	0.05071	0.0005071	CR12	0.00064	0.00000064	CR12	0.05173	0.0005173	CR12	0.41547	0.00041547	CR12	0.00463	4.63E-08	CR12	0.00285	0.00000285	CR12	2.40254	2.40254	CR12
0.04772	CR13	0.05751	0.0005751	CR13	0.00071	0.00000071	CR13	0.05863	0.0005863	CR13	0.47102	0.00047102	CR13	0.00521	5.21E-08	CR13	0.00318	0.00000318	CR13	2.12201	2.12201	CR13
0.08617	CR14	0.10218	0.0010218	CR14	0.00118	0.00000118	CR14	0.10396	0.0010396	CR14	0.83591	0.00083591	CR14	0.00909	9.09E-08	CR14	0.00545	0.00000545	CR14	2.70245	2.70245	CR14
0.09789	CR15	0.11648	0.0011648	CR15	0.00161	0.00000161	CR15	0.11937	0.0011937	CR15	0.95689	0.00095689	CR15	0.01107	1.107E-07	CR15	0.00707	0.00000707	CR15	3.19563	3.19563	CR15
0.10119	CR16	0.12073	0.0012073	CR16	0.00186	0.00000186	CR16	0.12435	0.0012435	CR16	0.99469	0.00099469	CR16	0.01198	1.198E-07	CR16	0.00794	0.00000794	CR16	3.3265	3.3265	CR16
0.0259	CR17	0.0506	0.000506	CR17	0.0039	0.0000039	CR17	0.05993	0.0005993	CR17	0.45312	0.00045312	CR17	0.01138	1.138E-07	CR17	0.01099	0.00001099	CR17	3.13491	3.13491	CR17
1.00	**SR12**	**1.16**	**1.16E-02**	**SR5**	**0.09**	**8.62E-05**	**SR7**	**1.21**	**0.01**	**SR5**	**9.62**	**0.01**	**SR5**	**0.27**	**2.74E-06**	**SR7**	**0.29**	**2.94E-04**	**SR7**	**24.79**	**2.48E+01**	**SR9**
0.26	**CR10**	**0.29**	**2.93E-03**	**CR10**	**0.03**	**2.98E-05**	**CR8**	**0.35**	**0.00**	**CR8**	**2.51**	**0.00**	**CR8**	**0.10**	**9.55E-07**	**CR8**	**0.10**	**1.02E-04**	**CR8**	**7.81**	**7.81E+00**	**CR8**
1.00	**SR12**	**1.16**	**1.16E-02**	**SR5**	**0.09**	**8.62E-05**	**SR7**	**1.21**	**0.01**	**SR5**	**9.62**	**0.01**	**SR5**	**0.27**	**2.74E-06**	**SR7**	**0.29**	**2.94E-04**	**SR7**	**24.79**	**2.48E+01**	**SR9**

Appendix K

Isopleth Figures

Future No-Build Condition - Carbon Monoxide (CO)





72

509

Concentration

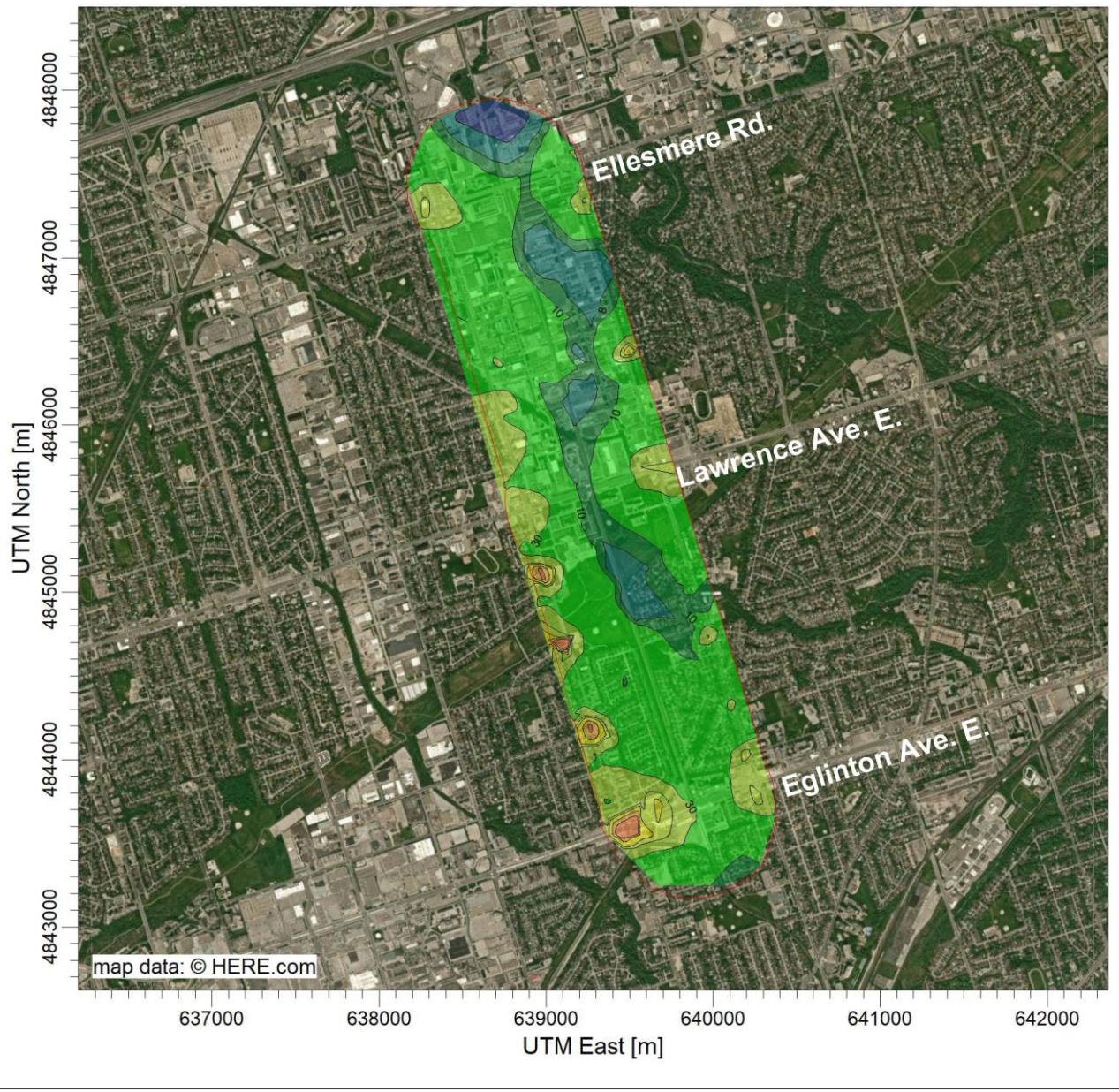
1695 ug/m^3

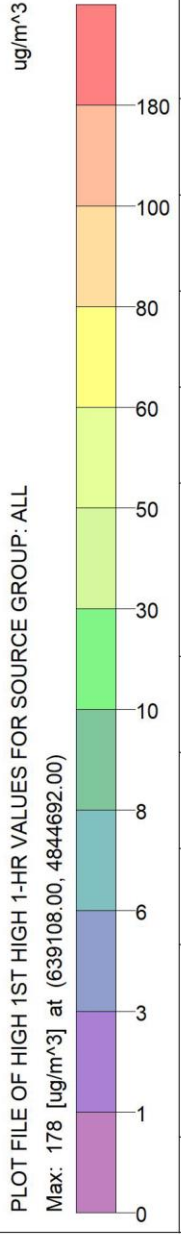
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Nitrogen Oxides (NOX)





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 178 [ug/m^3] at (639108.00, 4844692.00)

72

509

Concentration

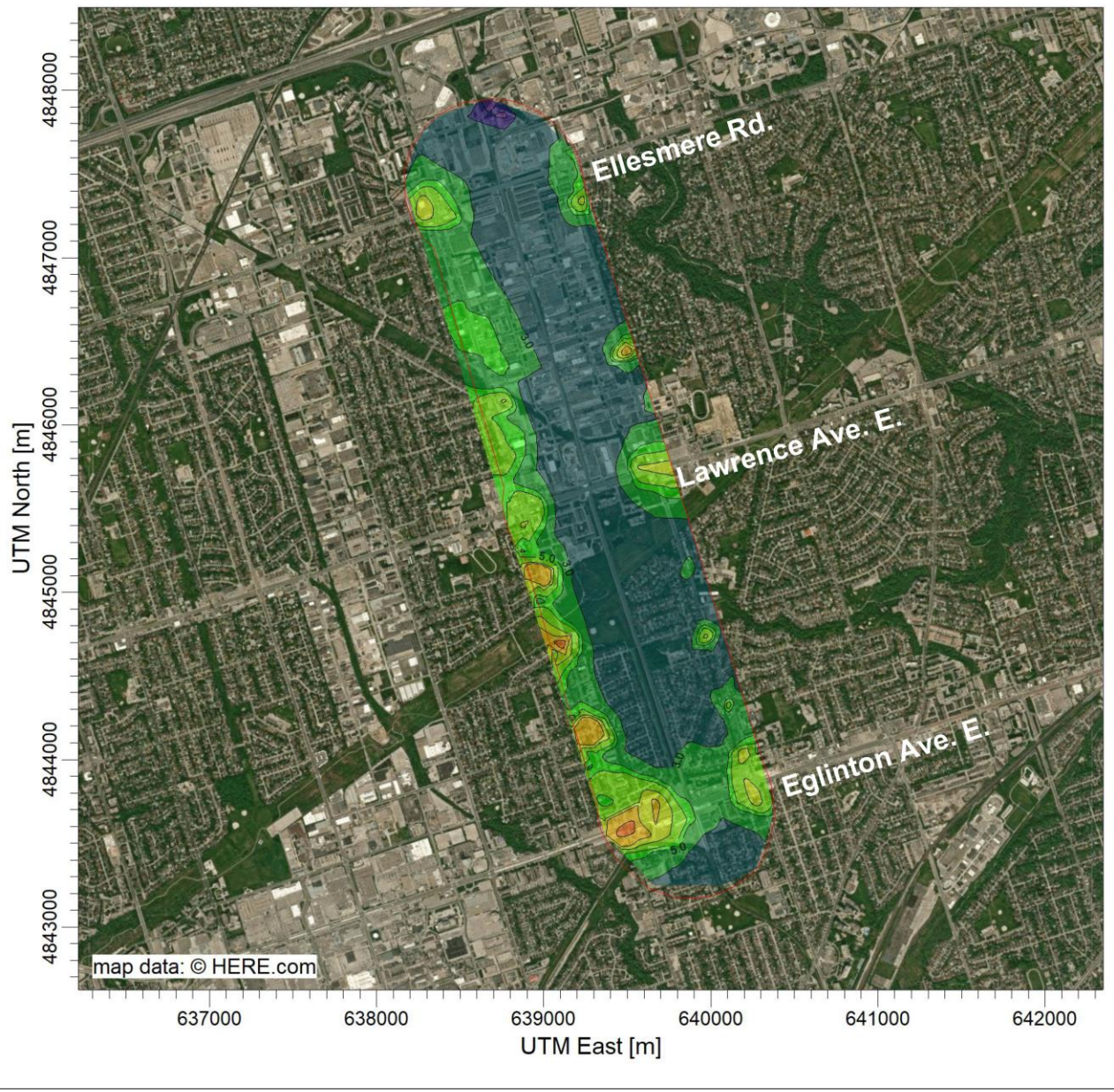
178 ug/m^3

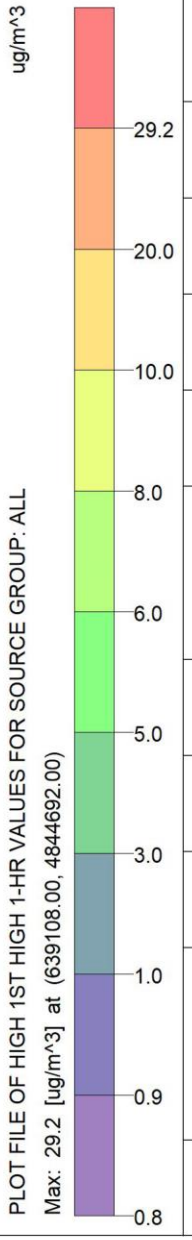
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Sulfur Dioxide (SO2)





72

509

Concentration

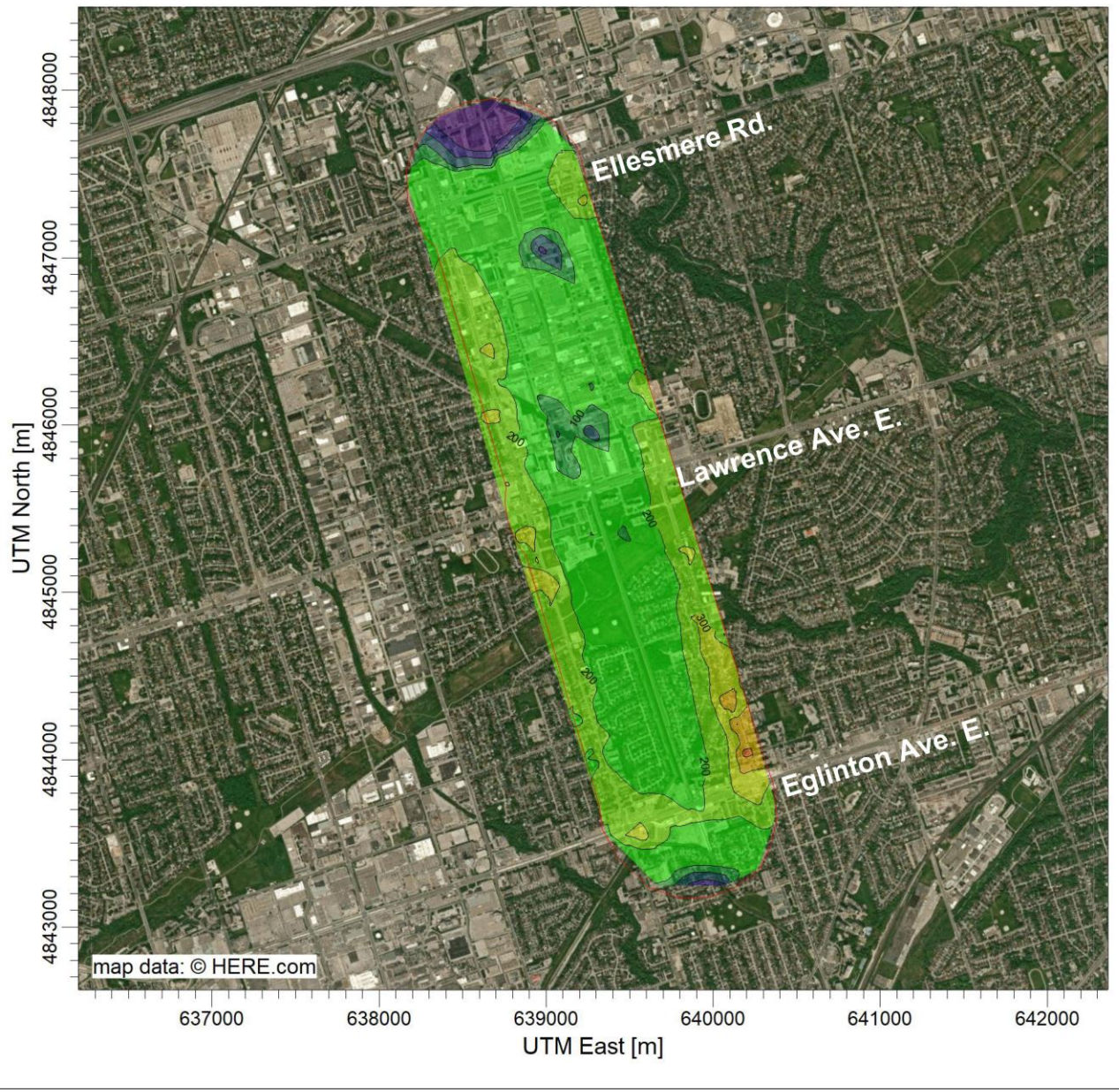
29.2 ug/m^3

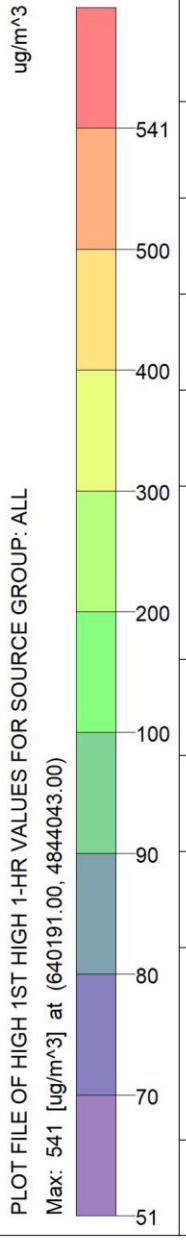
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - PM10





72

509

Concentration

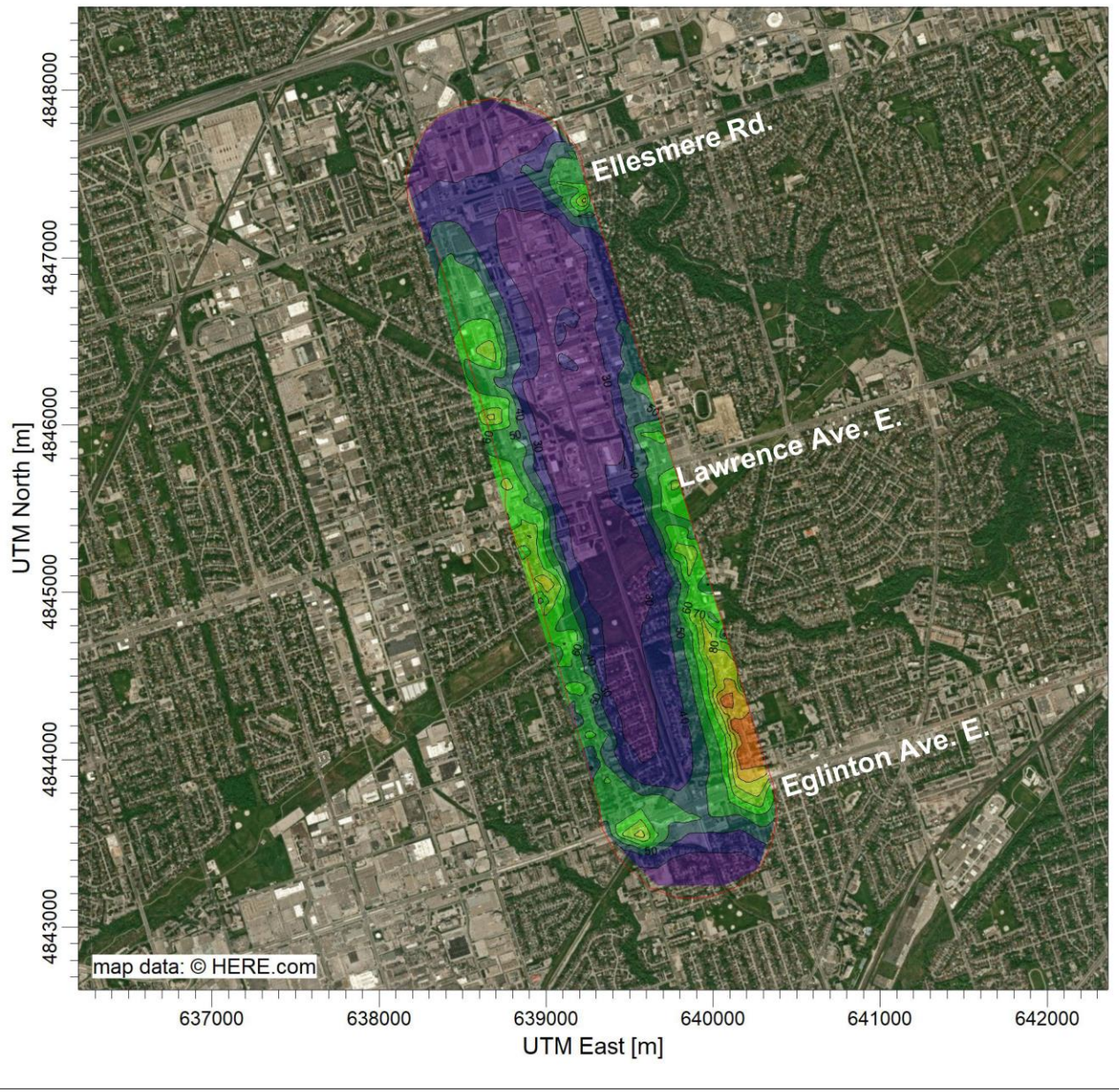
541 ug/m^3

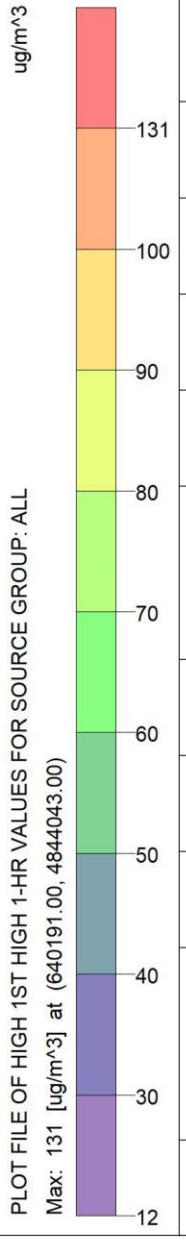
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - PM2.5





72

509

Concentration

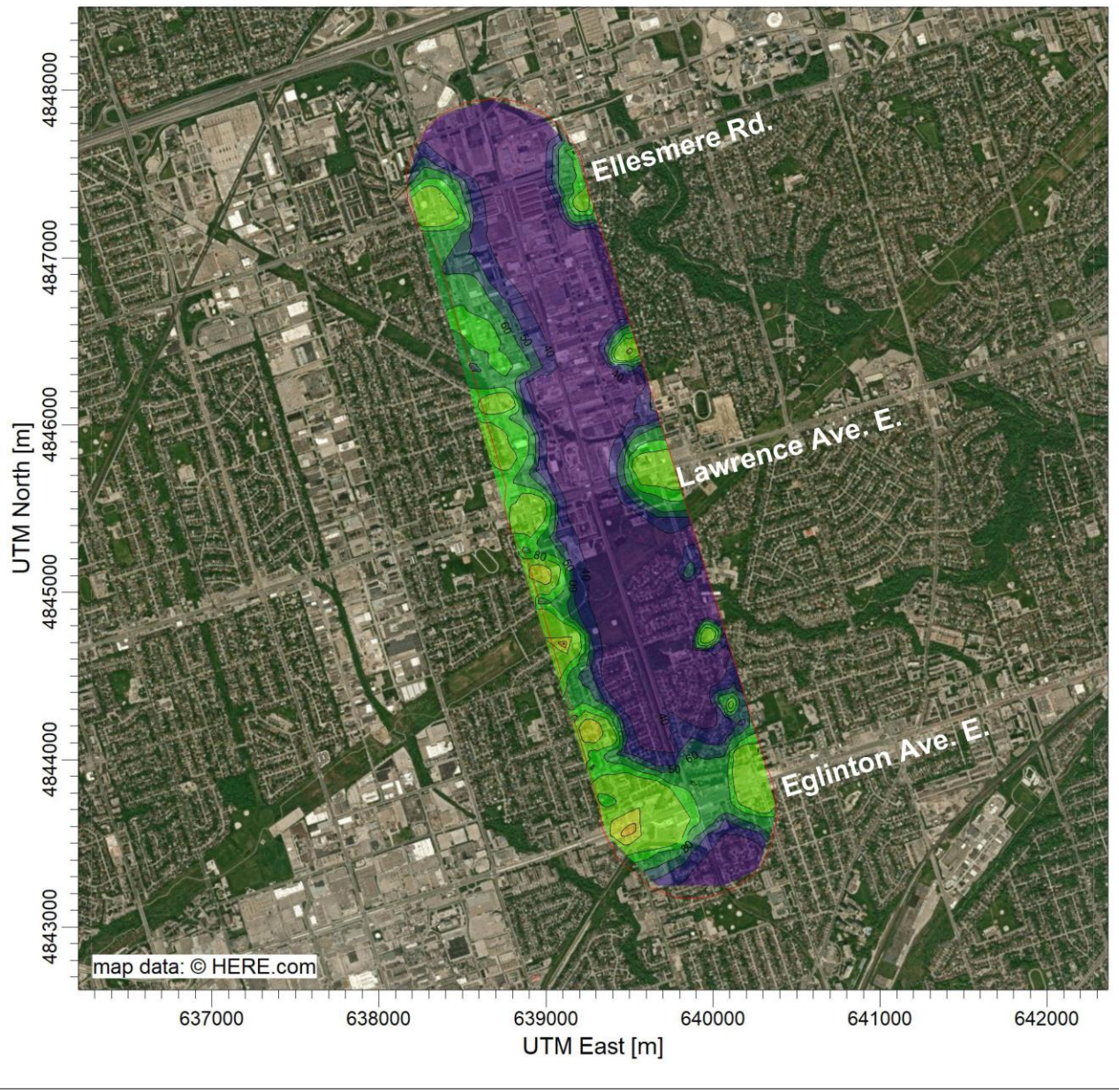
131 ug/m^3

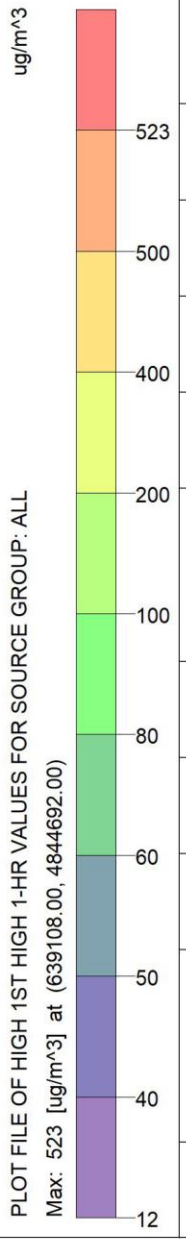
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Formaldehyde





72

509

Concentration

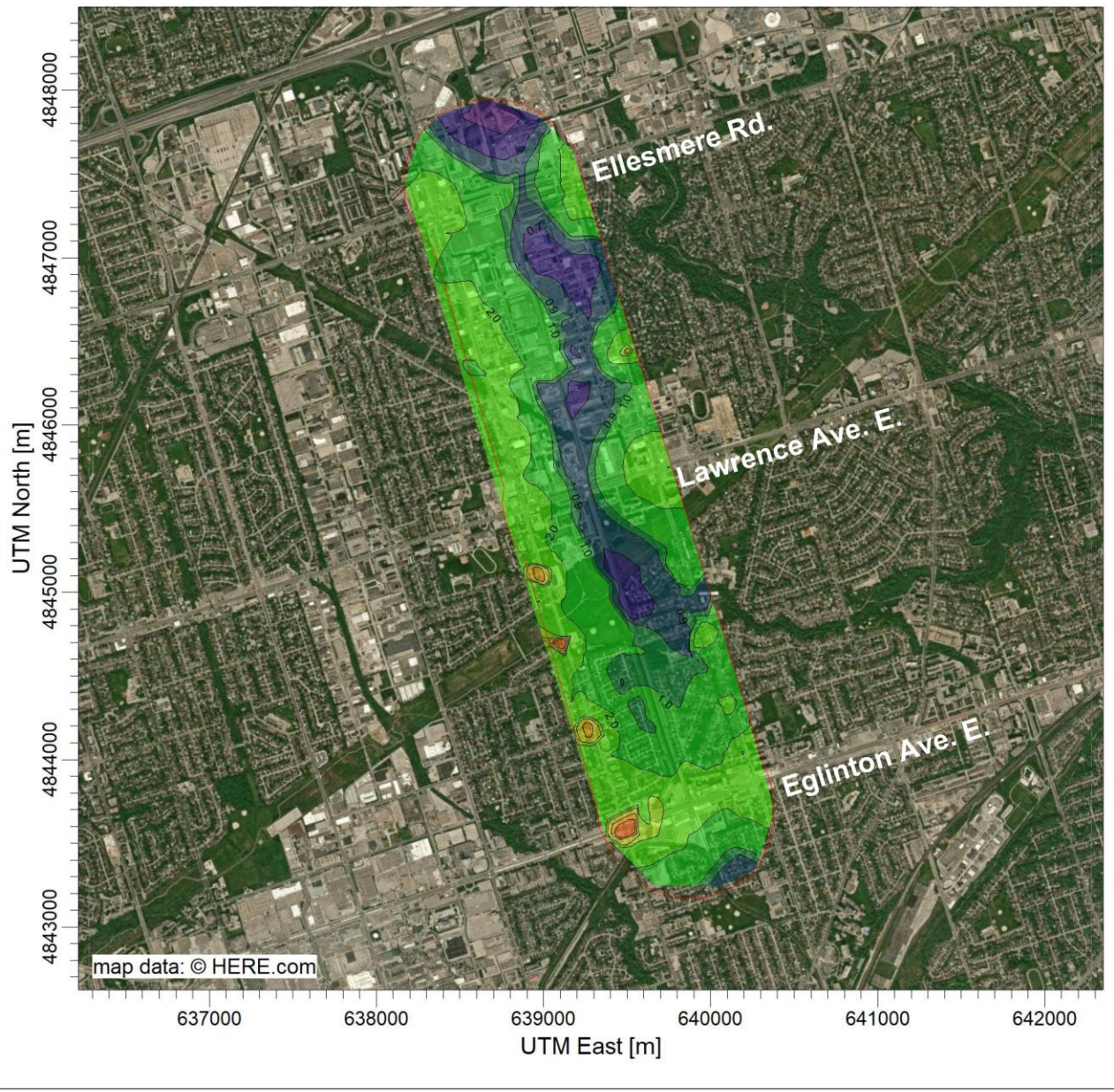
523 ug/m^3

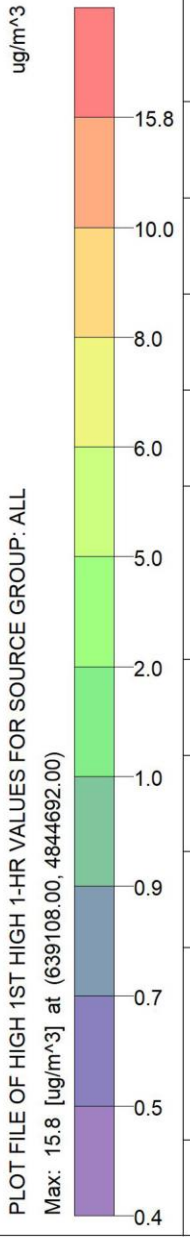
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Acrolein





72

509

Concentration

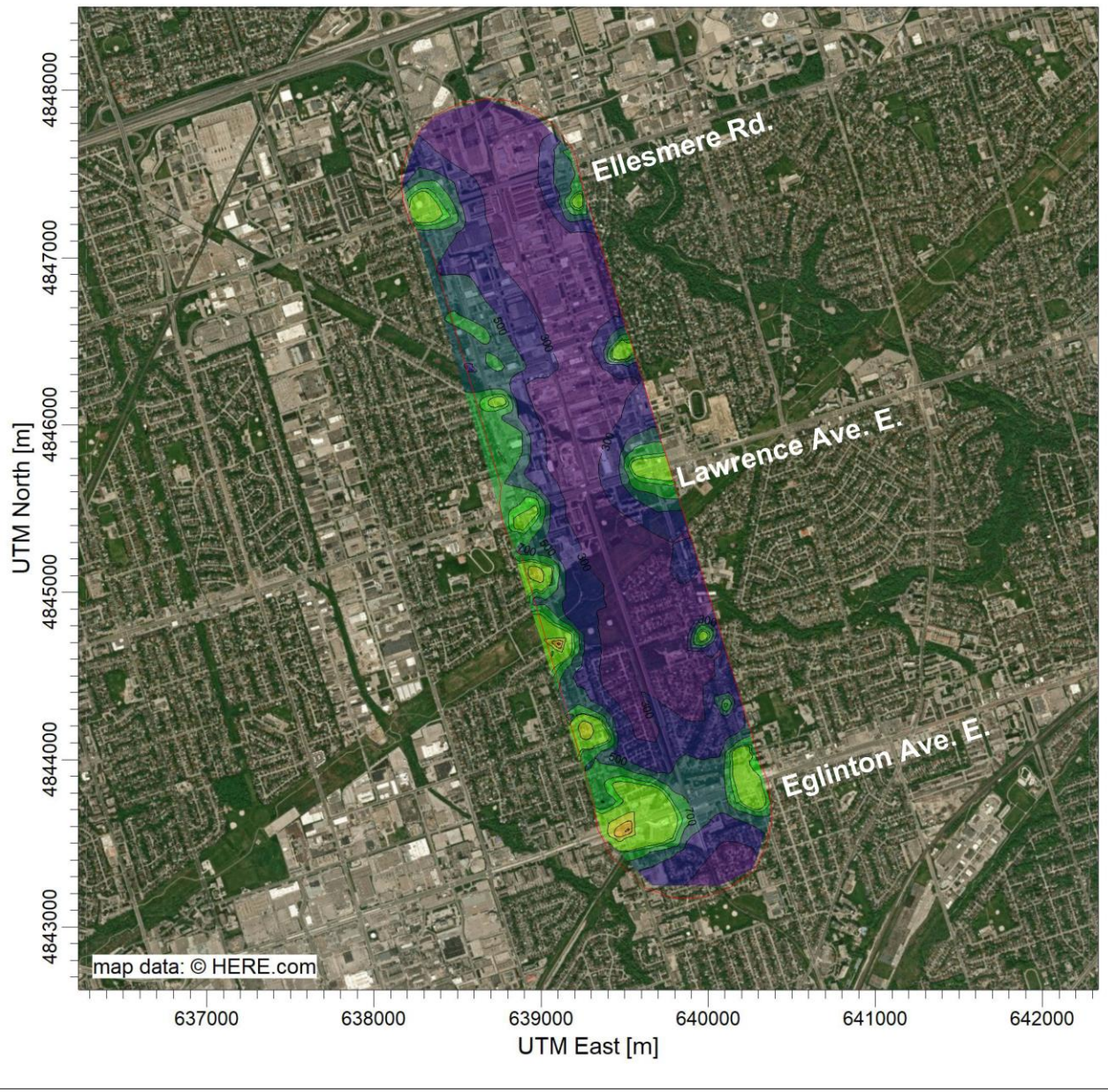
15.8 ug/m^3

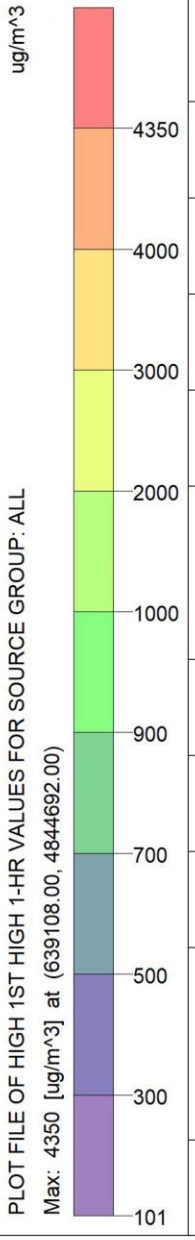
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Acetaldehyde





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 4350 [ug/m^3] at (639108.00, 4844692.00)

72

509

Concentration

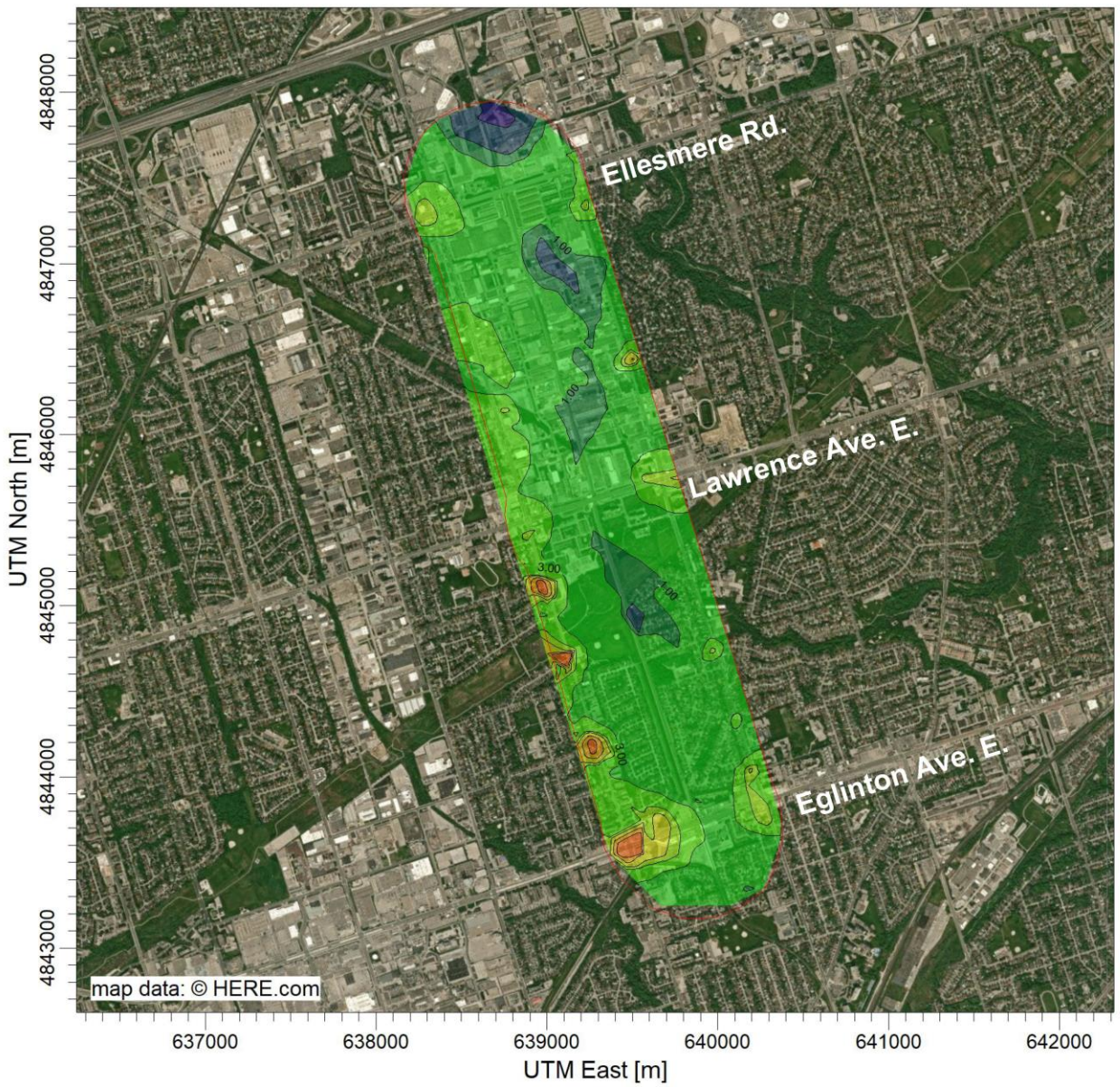
4350 ug/m^3

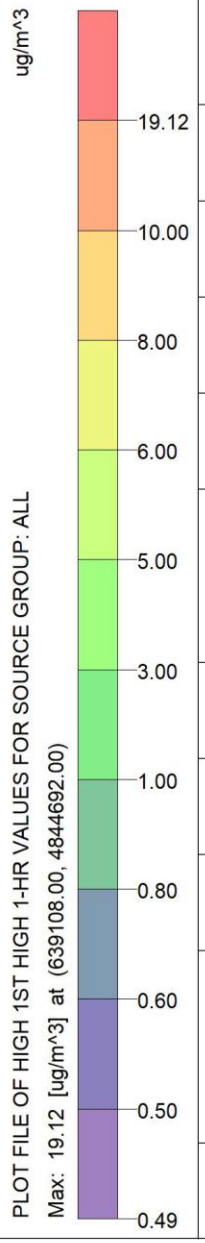
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Benzene





72

509

Concentration

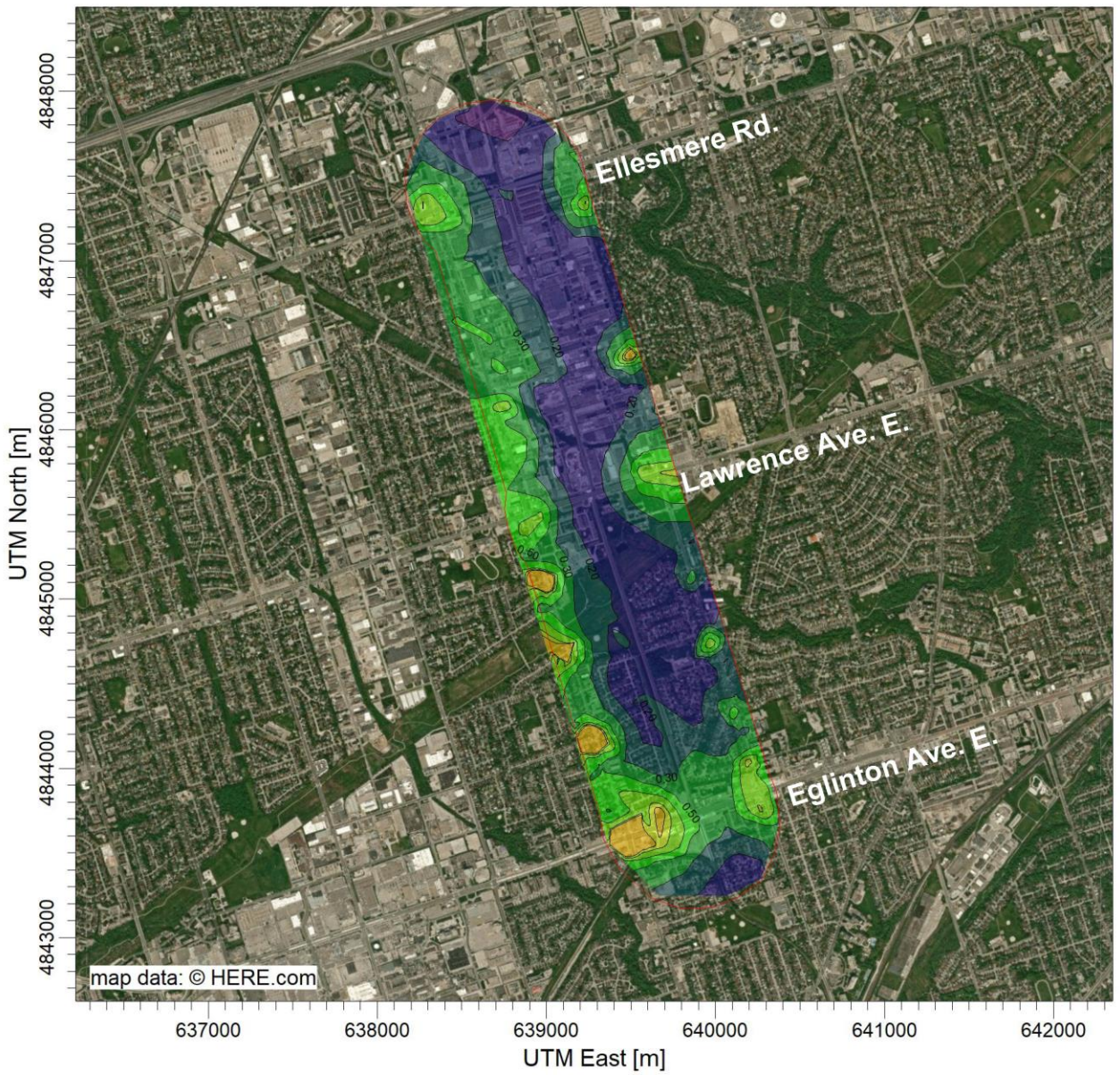
19.12 ug/m^3

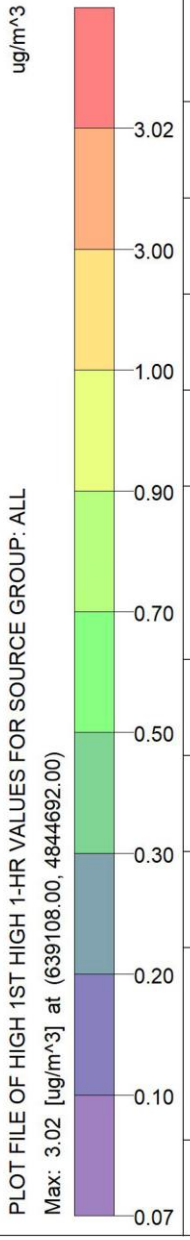
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - 1,3-Butadiene





72

509

Concentration

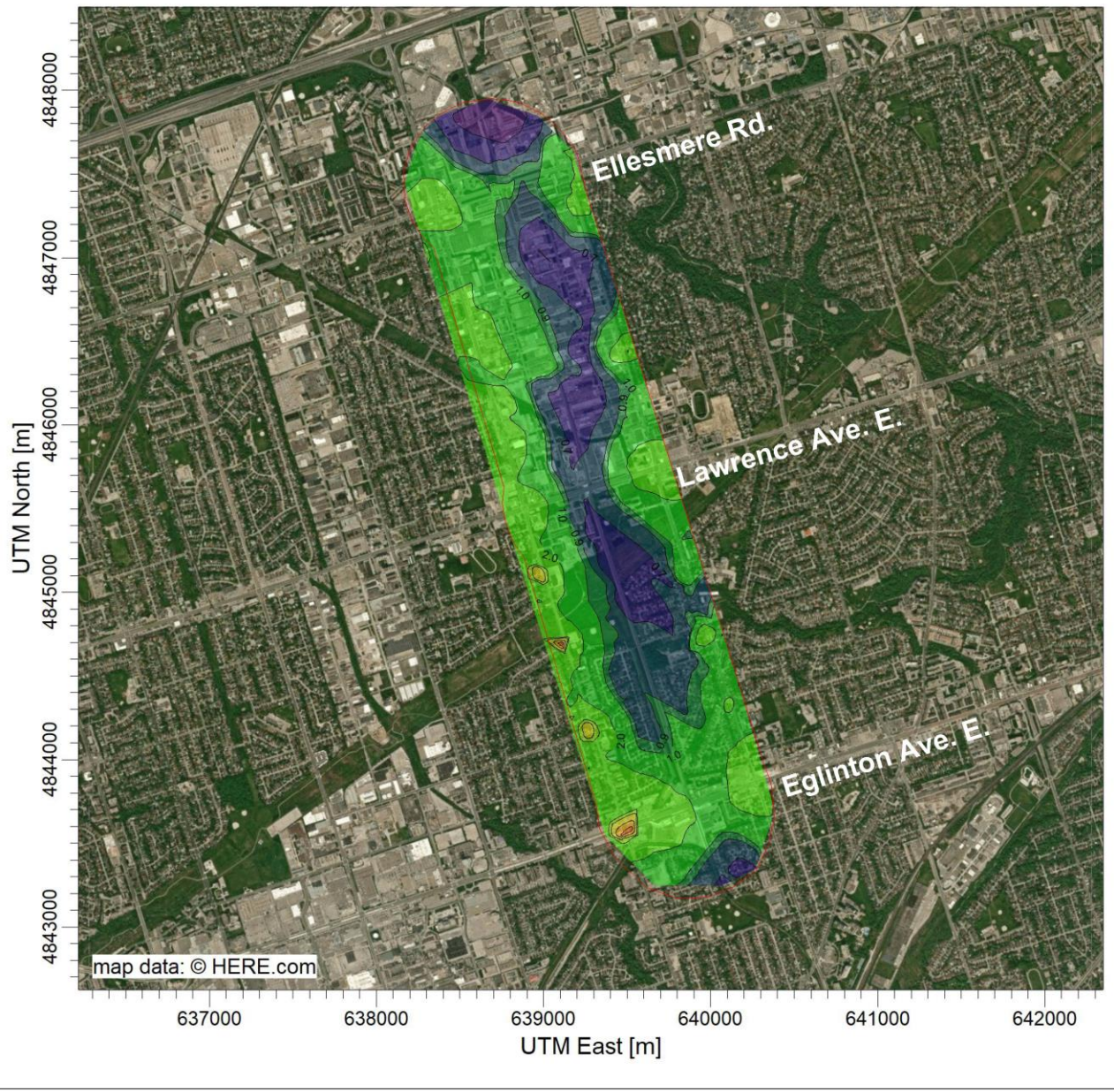
3.02 ug/m^3

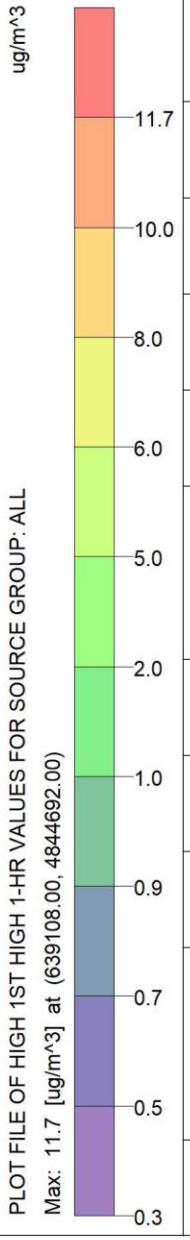
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future No-Build Condition - Benzo(a)pyrene





72

509

Concentration

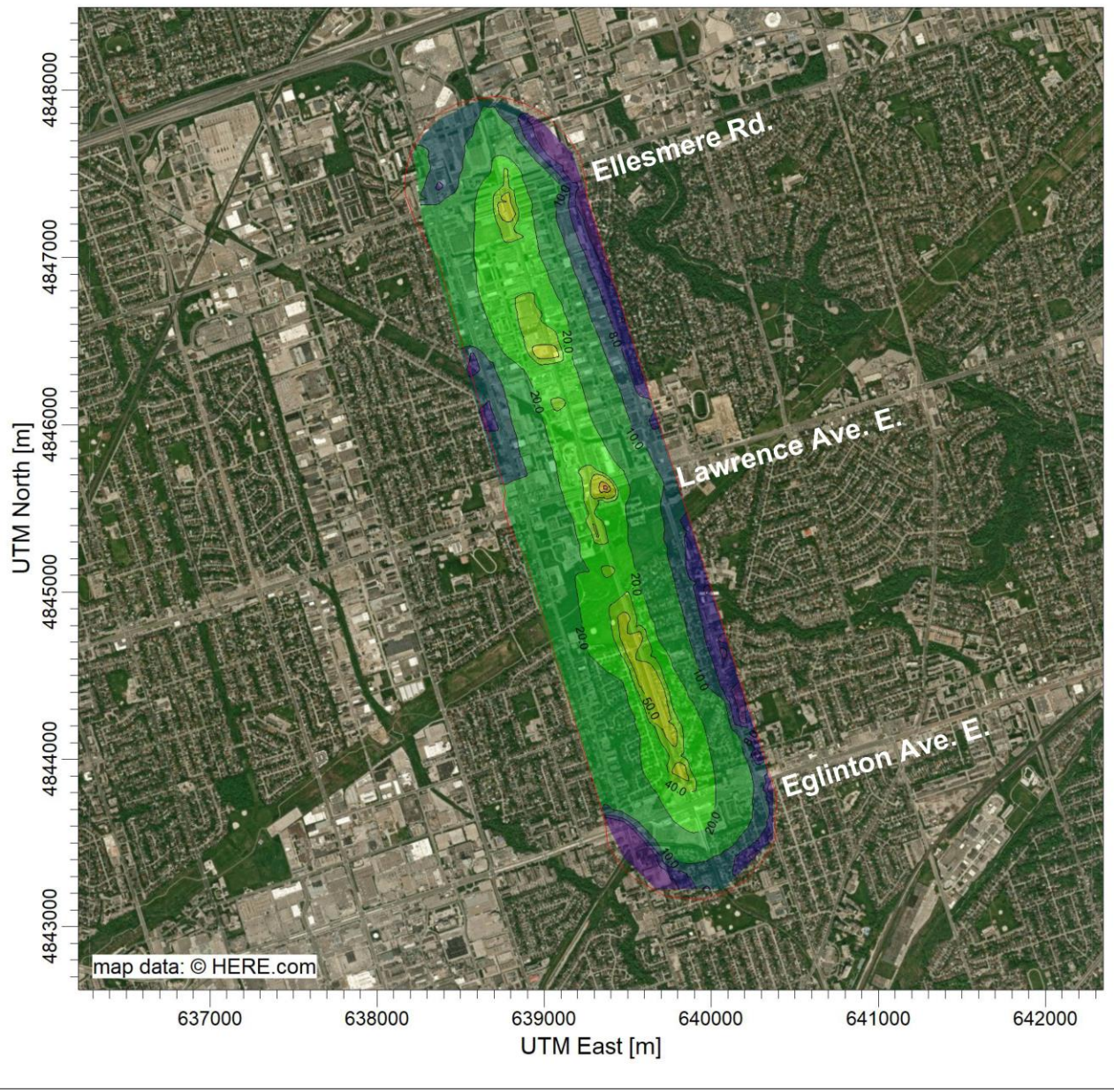
11.7 ug/m^3

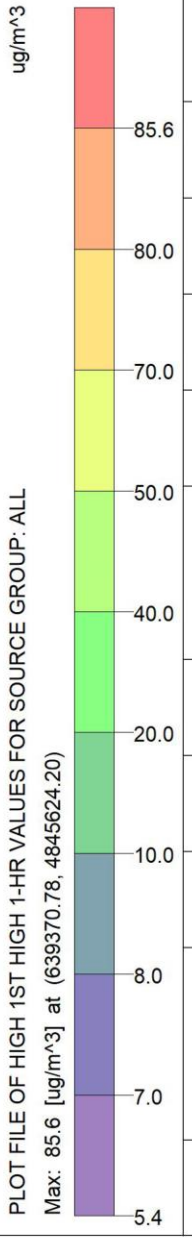
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - Carbon Monoxide (CO)





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 85.6 [ug/m^3] at (639370.78, 4845624.20)

5

566

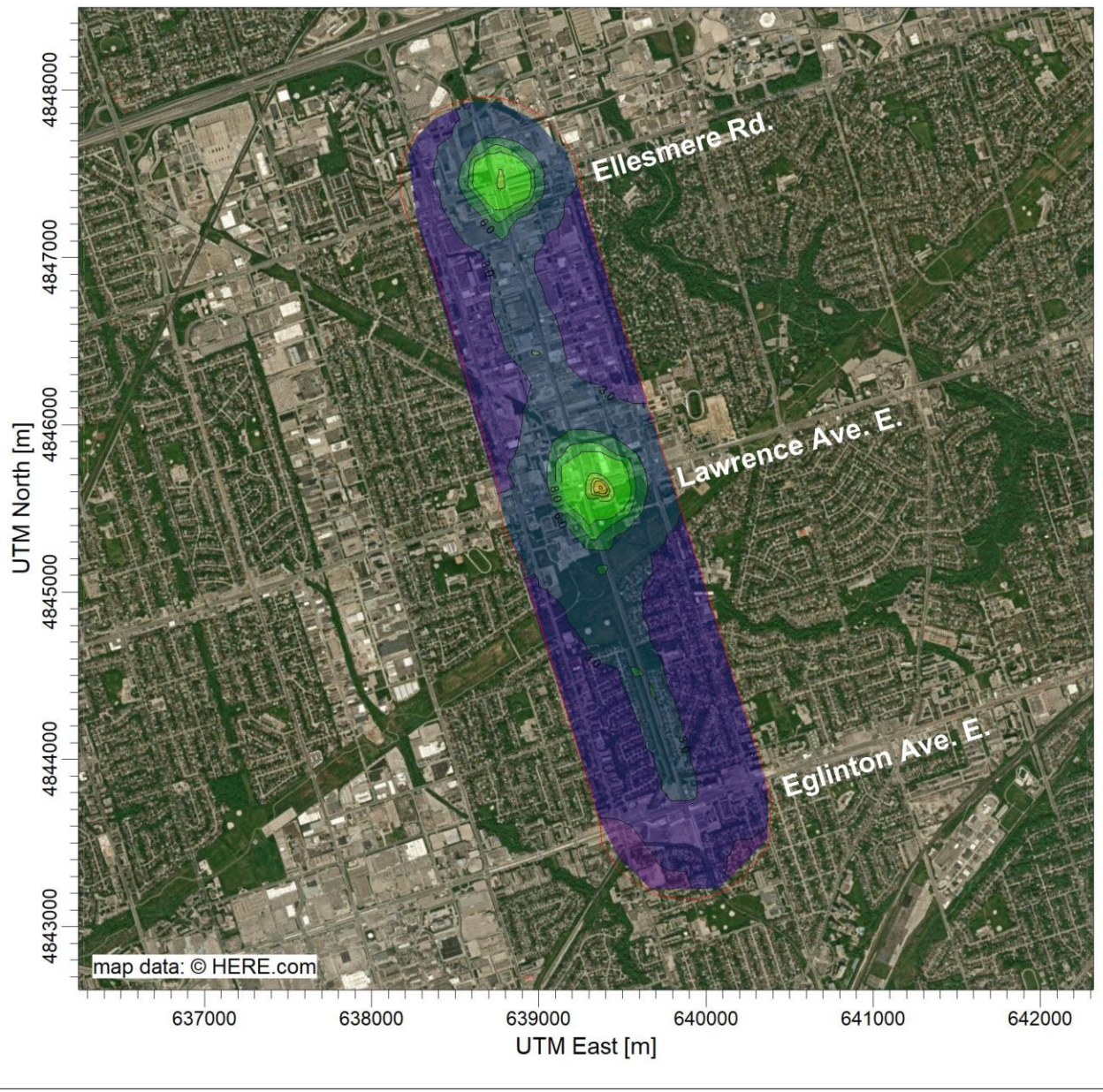
Concentration

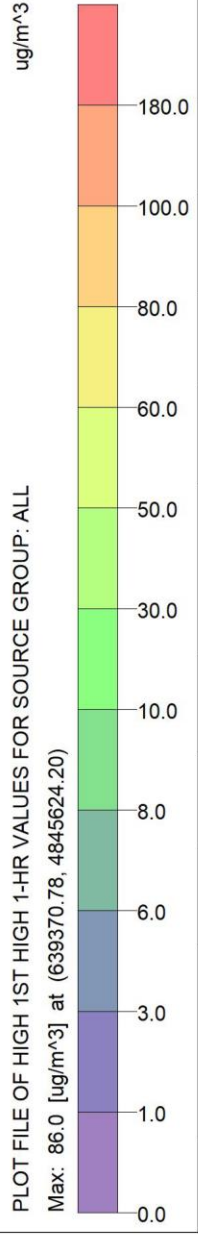
85.6 ug/m^3

SCALE: 1:40,000

0 1 km

Future Build Condition - Nitrogen Oxides (NOX)





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 86.0 [ug/m^3] at (639370.78, 4845624.20)

5

566

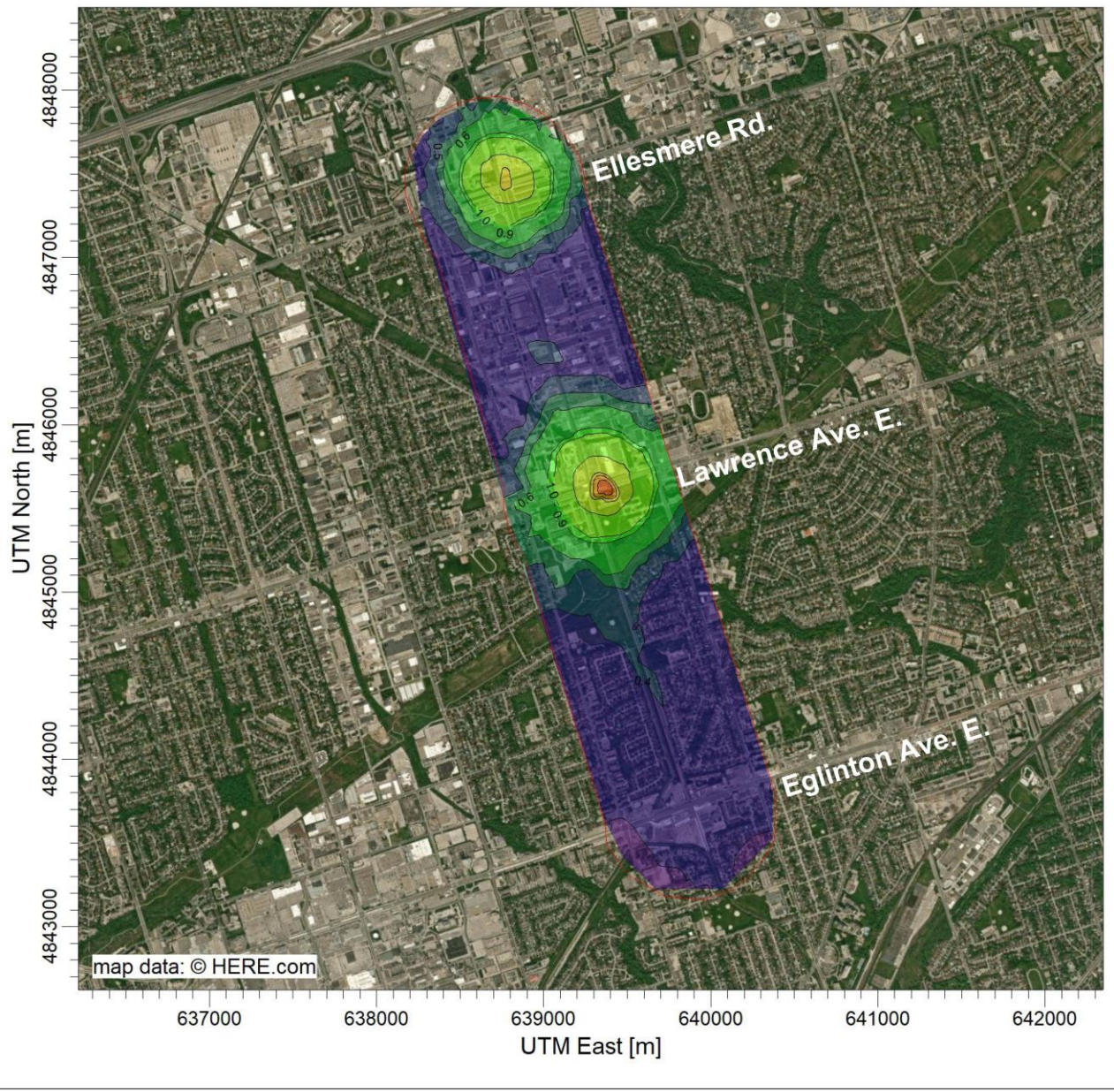
Concentration

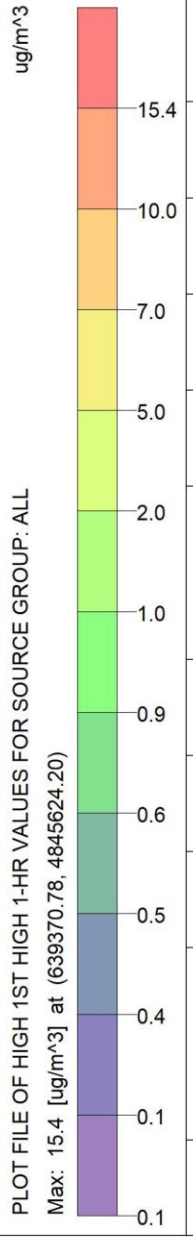
86.0 ug/m^3

SCALE: 1:40,000

0 1 km

Future Build Condition - Sulfur Dioxide (SO2)





5

566

Concentration

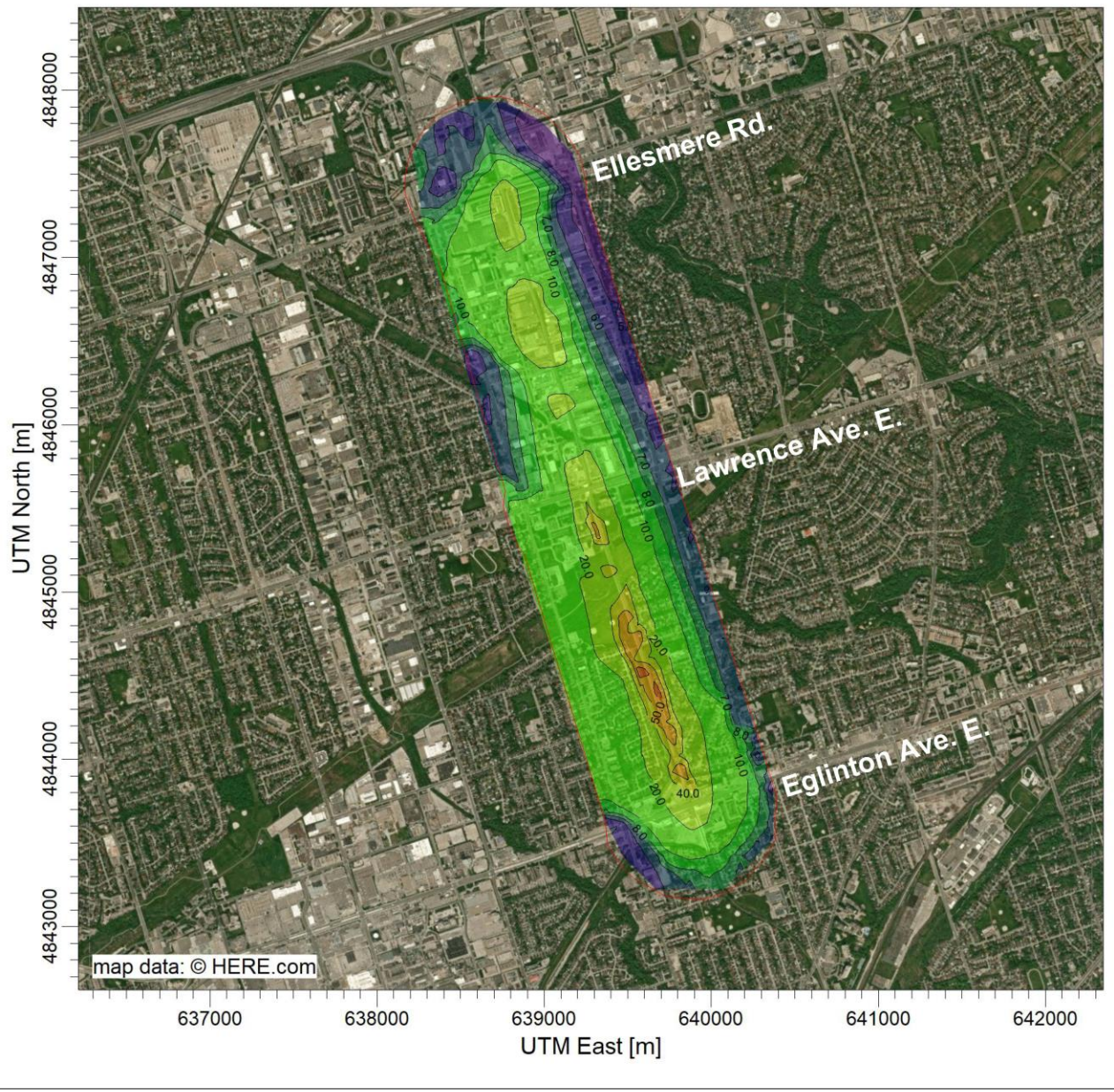
15.4 ug/m^3

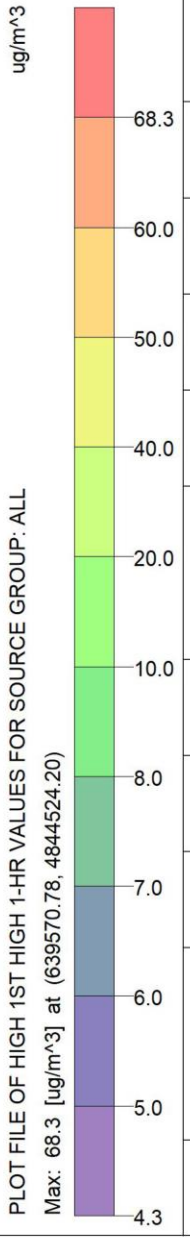
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - PM10

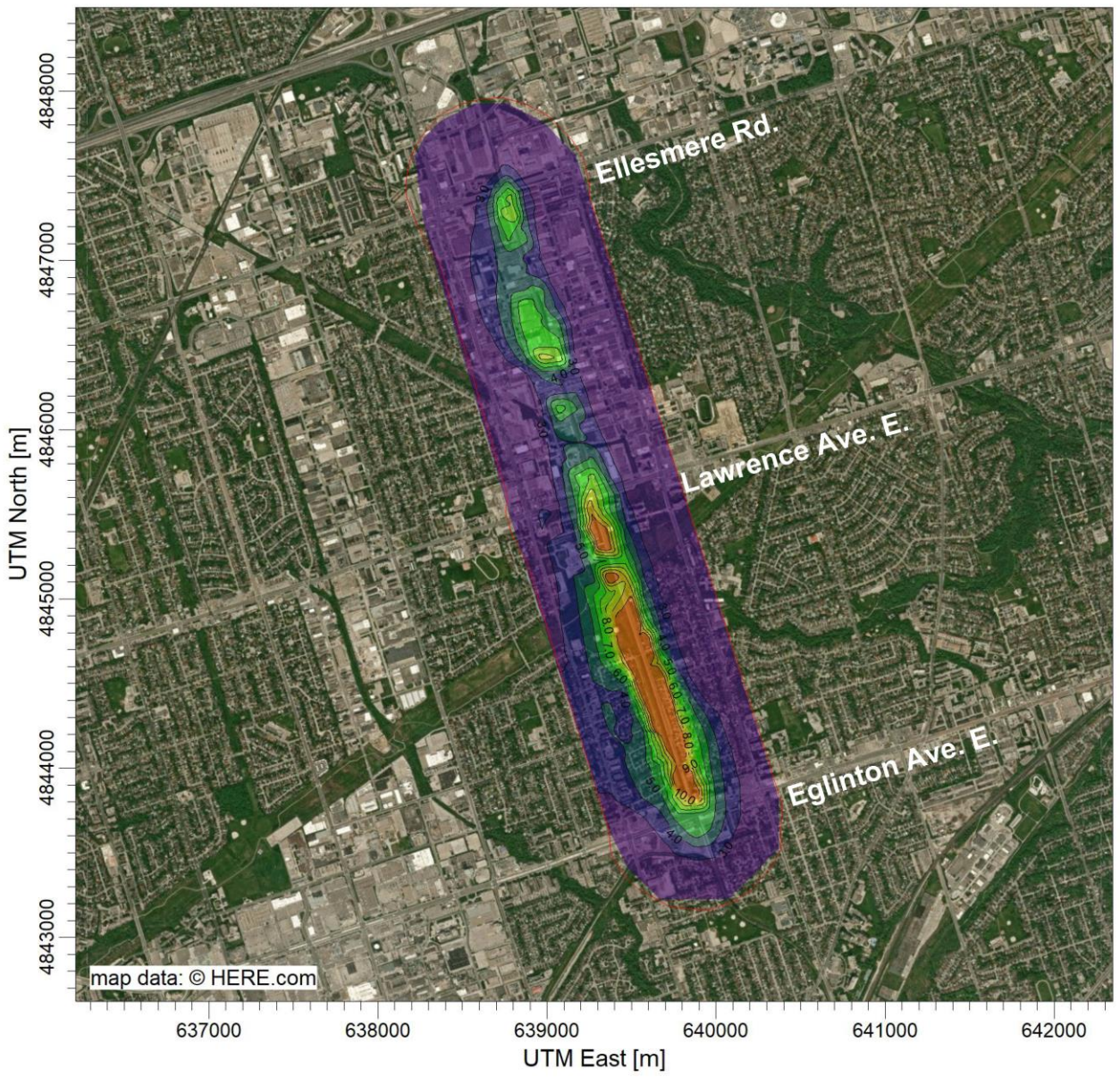


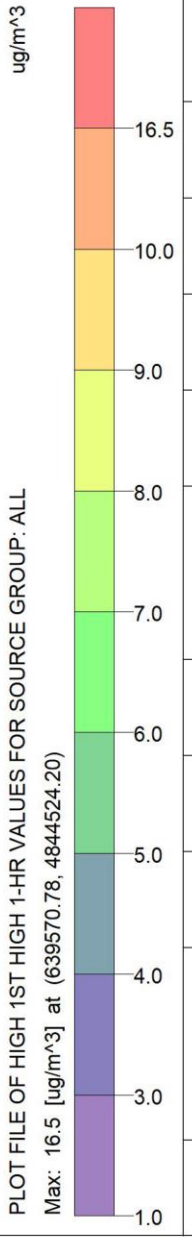


PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 68.3 [ug/m^3] at (639570.78, 4844524.20)

5	
566	
Concentration	
68.3 ug/m^3	
SCALE:	1:40,000
0	1 km

Future Build Condition - PM2.5





5

566

Concentration

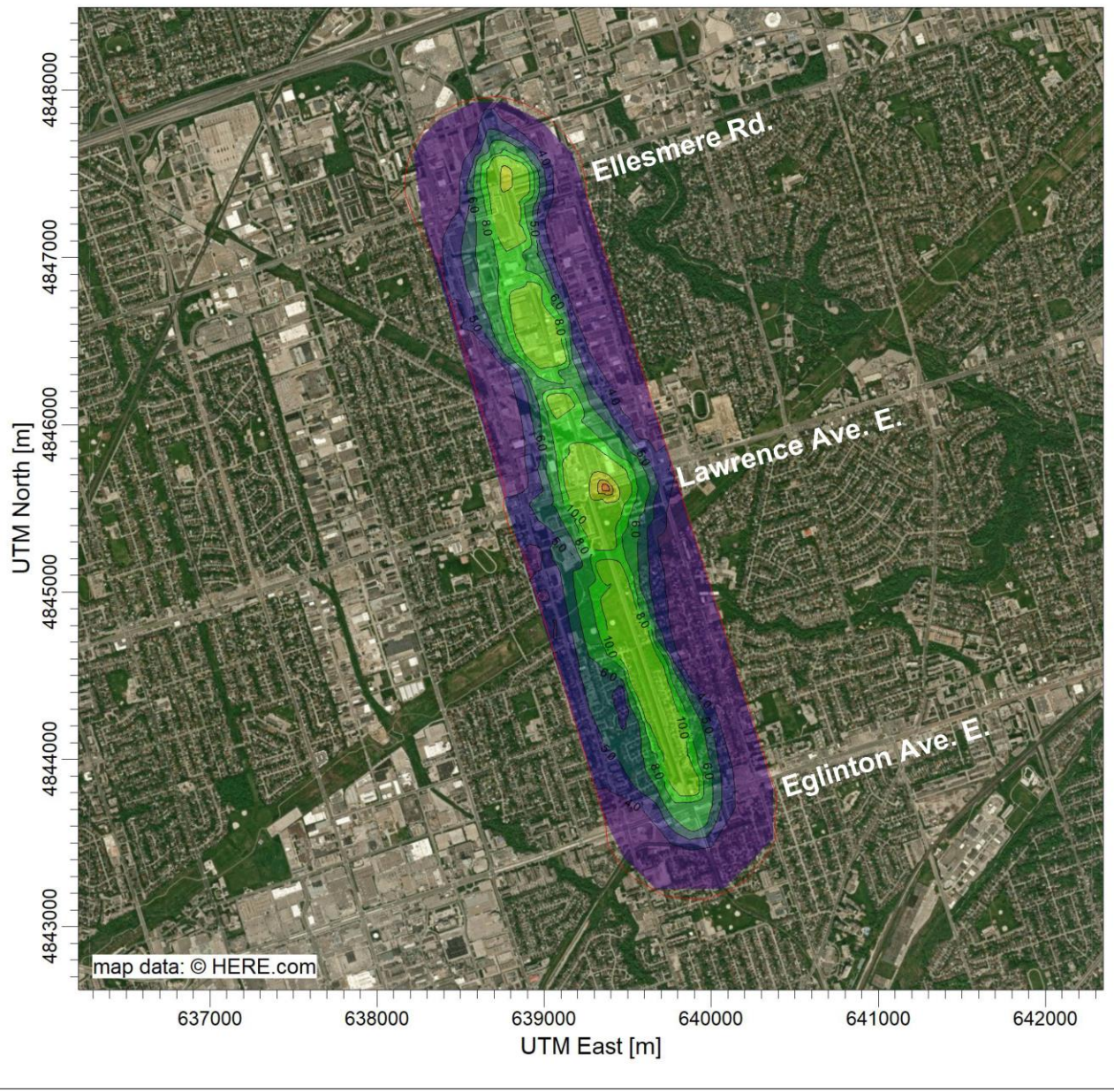
16.5 ug/m^3

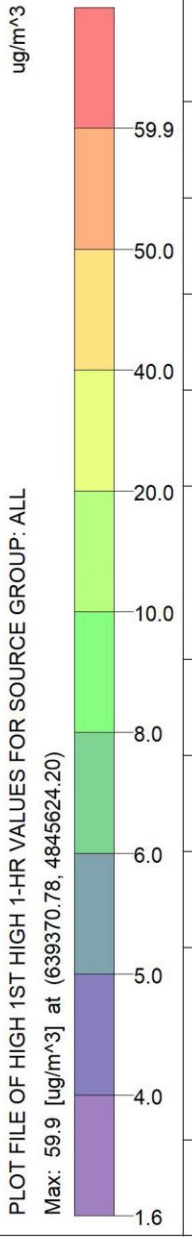
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - Formaldehyde





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 59.9 [ug/m^3] at (639370.78, 4845624.20)

5

566

Concentration

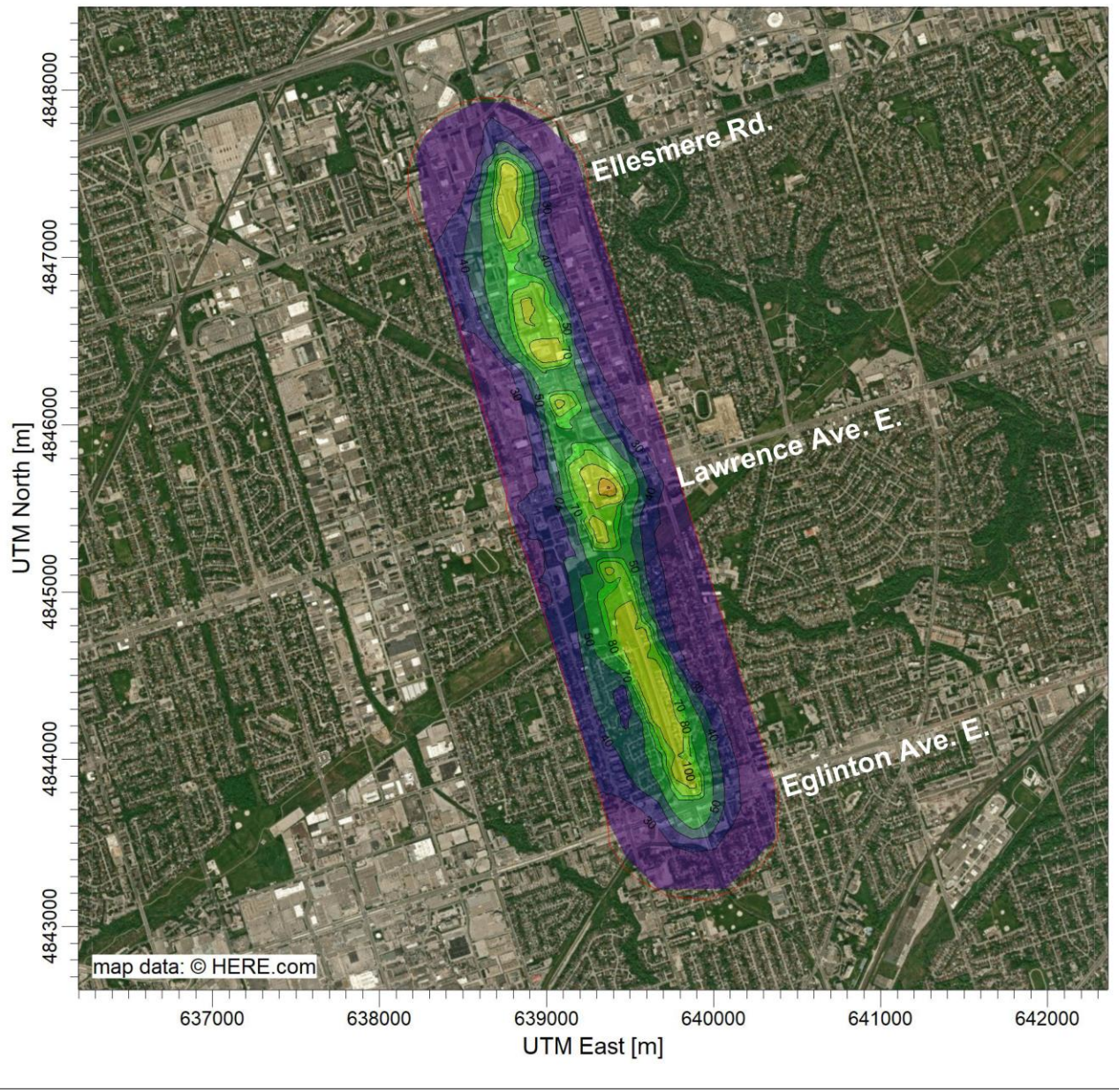
59.9 ug/m^3

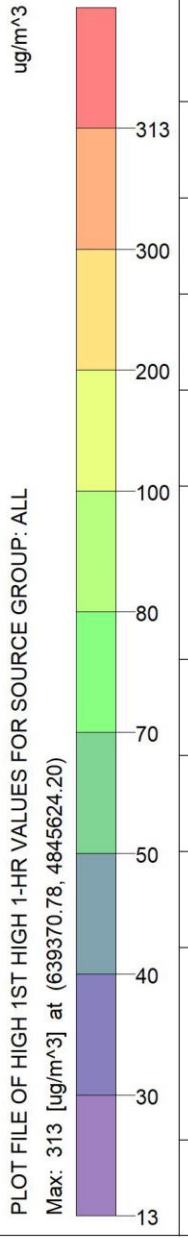
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - Acetaldehyde





5

566

Concentration

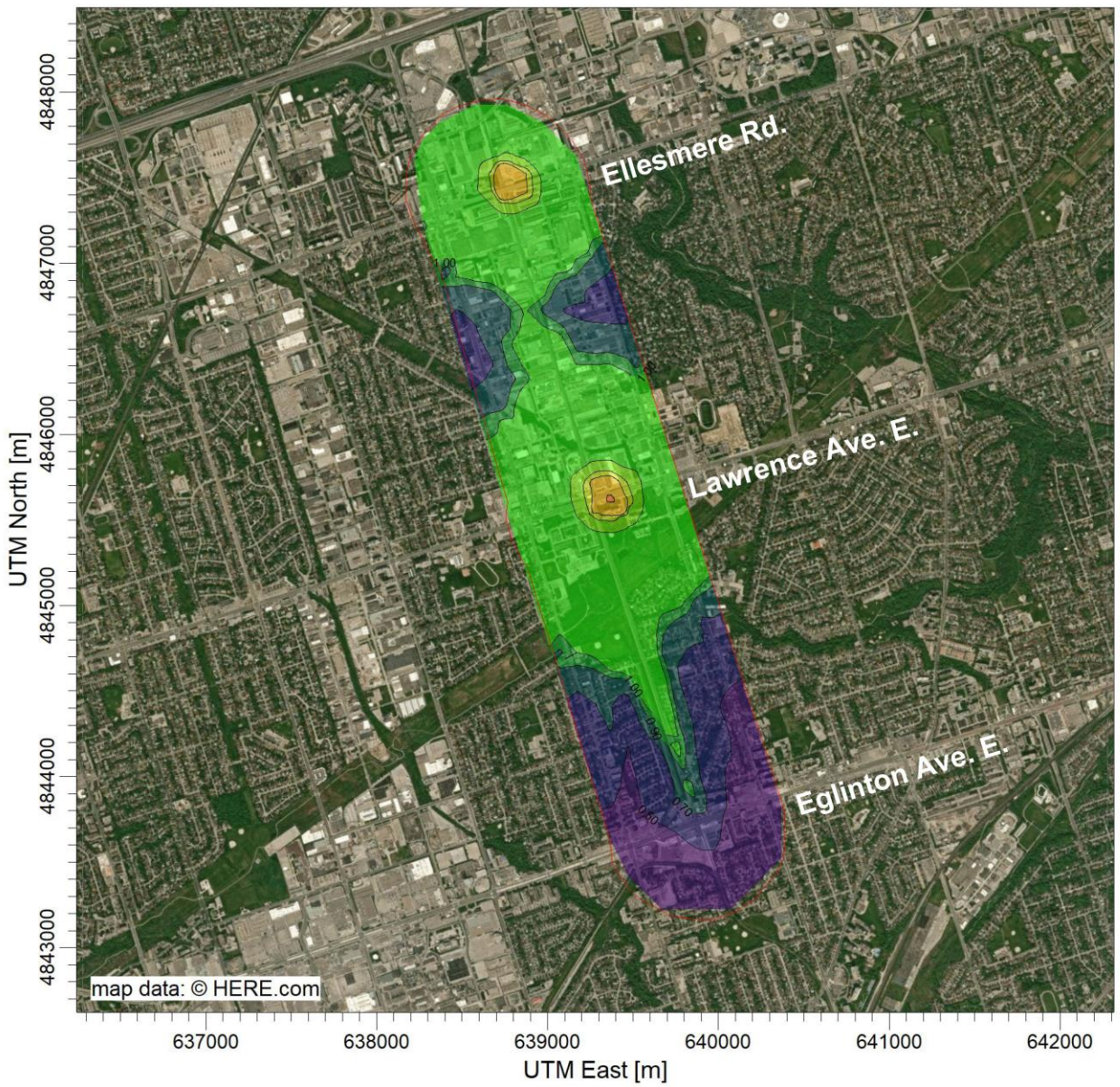
313 ug/m^3

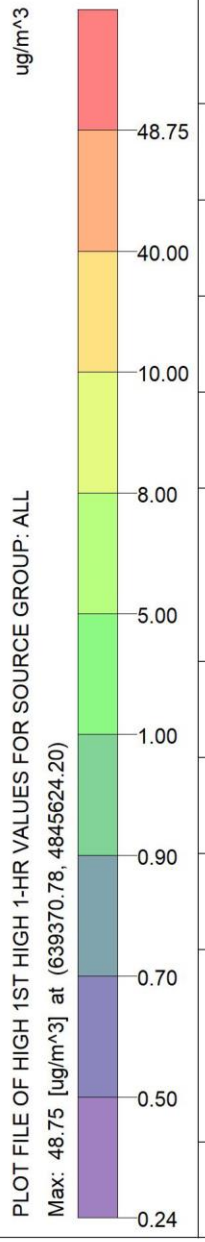
SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - Acrolein





5

566

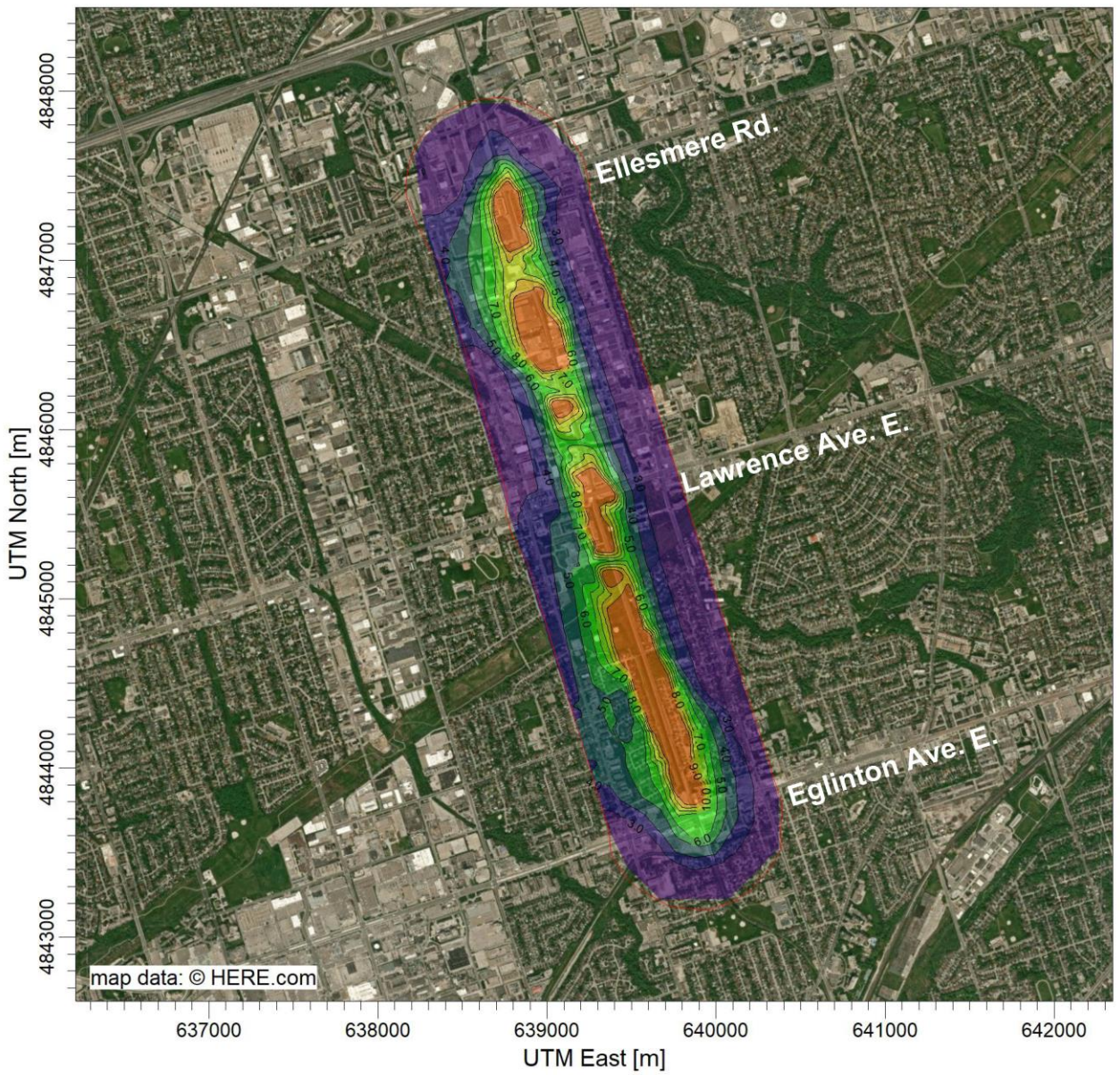
Concentration

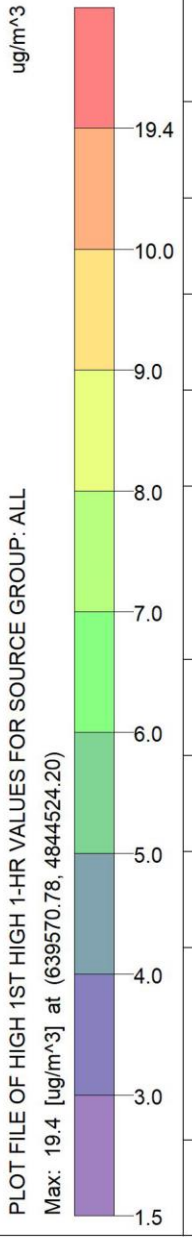
48.75 ug/m^3

SCALE: 1:40,000

0 1 km

Future Build Condition - Benzene





PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 19.4 [ug/m^3] at (639570.78, 4844524.20)

5

566

Concentration

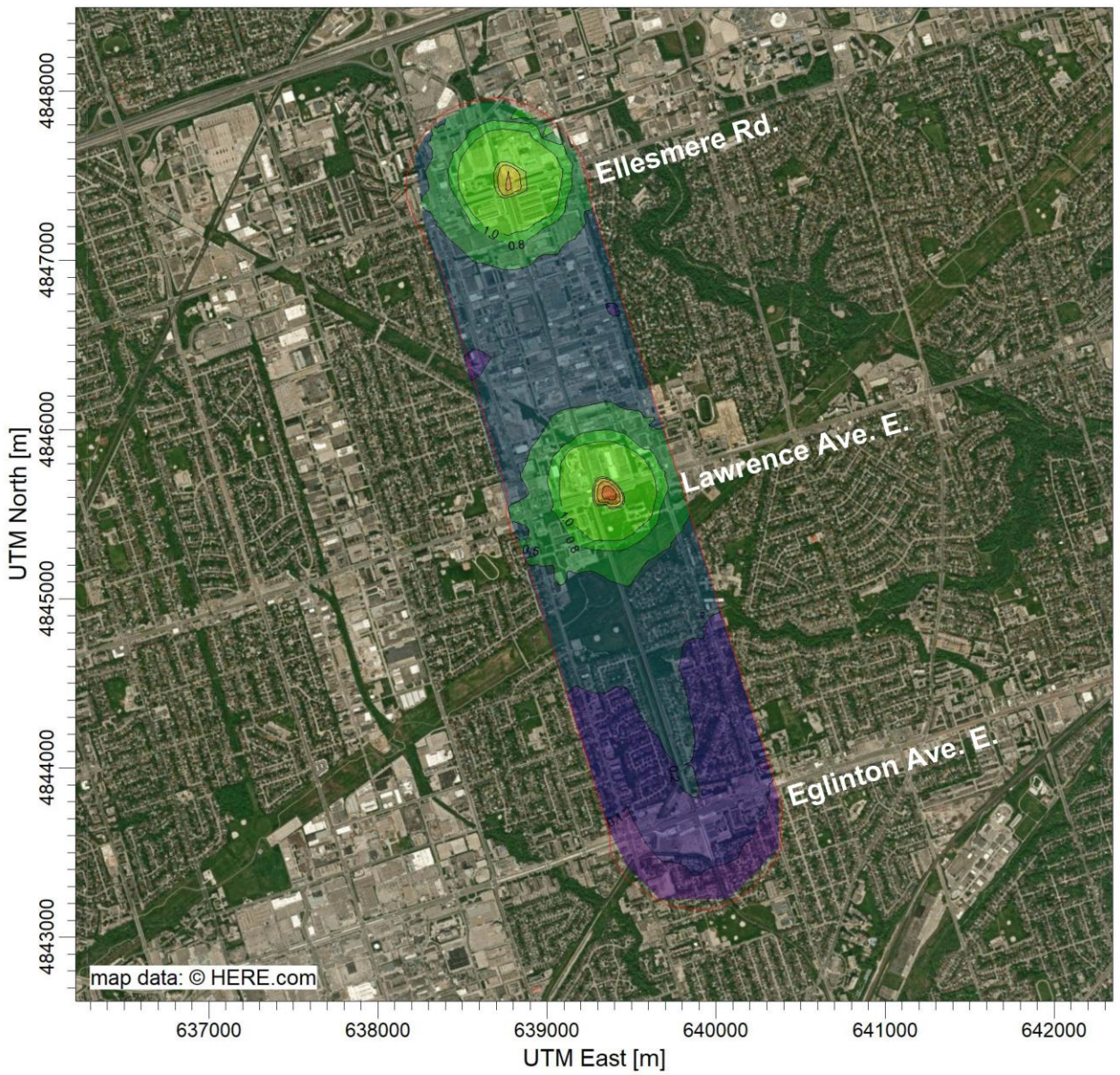
19.4 ug/m^3

SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - 1,3-Butadiene



ug/m^3

14.8
10.0
7.0
5.0
4.0
1.0
0.8
0.5
0.2
0.1
0.1

PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 14.8 [ug/m^3] at (639370.78, 4845624.20)

5

566

Concentration

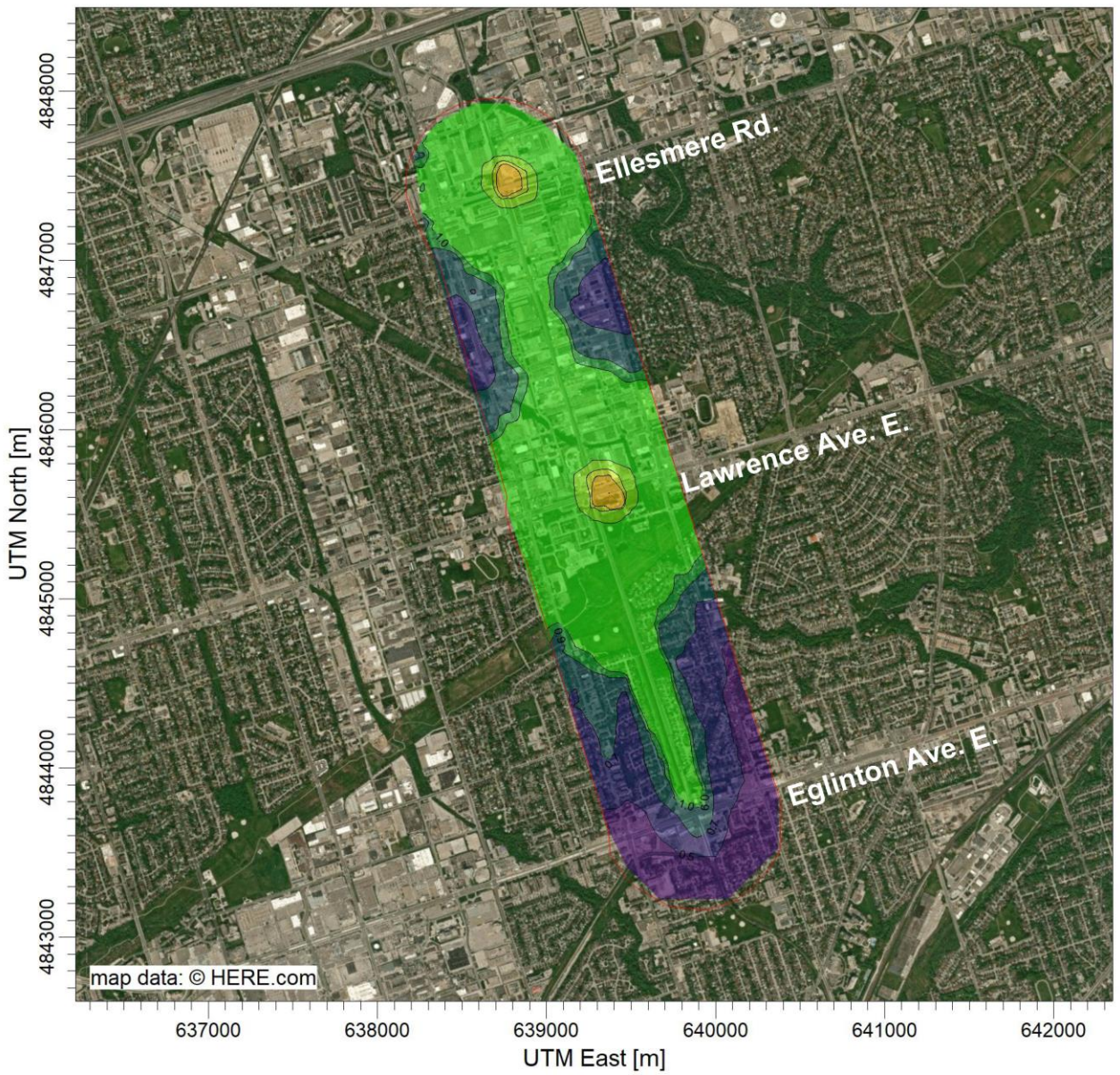
14.8 ug/m^3

SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software

Future Build Condition - Benzo(a)pyrene



ug/m^3

40.7
40.0
10.0
8.0
5.0
1.0
0.9
0.7
0.5
0.2

PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL
Max: 40.7 [ug/m^3] at (639370.78, 4845624.20)

5

566

Concentration

40.7 ug/m^3

SCALE: 1:40,000

0 1 km

AERMOD View - Lakes Environmental Software