



**Annosan Srikantha, B. Eng, EIT**  
**Transportation Analyst**  
**Nextrans Consulting Engineers**

Office: 905-503-2563 ext 205  
Mobile: 647-972-2661  
[annosan@nextrans.ca](mailto:annosan@nextrans.ca)

Annosan Srikantha, B. Eng, EIT, is nearing his fourth year of traffic engineering and transportation planning related experiences in both the public and private sector. He is an active Engineer in Training (EIT) member of the Professional Engineers of Ontario (PEO) and the Institute of Transportation Engineers (ITE) currently pursuing his P. Eng designation (May 2019).

**Education**

Bachelor of Civil Engineering, Lakehead University, 2015

**Professional Affiliations**

Institute of Transportation Engineers (ITE),  
Professional Engineers of Ontario (PEO),  
Engineering In Training Ontario Traffic Council (OTC) - Yonge Professional Committee

**Transportation**

**Traffic Impact and Parking Justification Studies**

■ **North Ajax Public School, Town of Ajax**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future conditions. Evaluated roundabout traffic operations with ARCADY software. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger, loading/emergency vehicles and school buses. Analysis included season adjustment factors, non-auto modal splits based on 2016 TTS Summary for Ward 1 (Town of Ajax) and trip distribution based on 2015 TTS Survey. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Mitigation measures included appropriate internal signage and pavement marking plans, pedestrian management and intelligent monitoring systems. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Performed Pedestrian Crossing Warrants and Crossing Guard Warrant analysis.

■ **Mausoleum - 10150 Pine Valley Drive, City of Vaughan**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future six (6) lane cross section on Major Mackenzie Drive with exclusive left-turn lanes on approach to Pine Valley Drive intersection. Performed sightline analysis (i.e. departure and stopping sight distance requirements) along with AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger and loading/emergency vehicles. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Mitigation measures included appropriate internal signage and way-finding signages, pavement marking plans, pedestrian management and intelligent monitoring systems. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. The York Region Design Standards for right-in-right-out (RIRO) and retractable bollard provisions were recommended. Undertook Vehicle and Pedestrian Clearance Time calculations in accordance to Regional/ITE guidelines.

■ **Retail & Residential - 10568 Islington Avenue, City of Vaughan**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial roadways and intersections/junctions. Evaluated problematic traffic signal operations for future conditions. Performed sightline analysis (i.e. departure and stopping sight distance requirements) along with AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger and loading/emergency vehicles. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Mitigation measures included appropriate internal

signage and pavement marking plans, pedestrian management and intelligent monitoring systems. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Performed Left-turn and Right-turn lane Warrant analysis. (Traffic Study approved by Region)

■ **Residential – 154/164 Cemetery Road, Town of Uxbridge**

Transportation Analyst responsible to undertake capacity analysis for major arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations for future conditions. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger and loading/emergency vehicles. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Performed Queue, Control Delay and Gap Study analysis to provide accurate assessment of level of service and volume to capacity ratios at unsignalized intersections. (Traffic Study approved by Region)

■ **Retail, Office & Gas Station – Salem Road and Kerrison Drive East, Town of Ajax**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future conditions. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger and loading/emergency vehicles. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Mitigation measures included appropriate internal signage and pavement marking plans, pedestrian management and intelligent monitoring systems. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Performed Signal Warrant analysis for future unsignalized intersection. Recommended the provision of a raised median extended on Salem Road to prevent left-turn movements from proposed site access.

■ **Residential – 4 & 6 Parker Avenue and 272 King Road, Town of Richmond Hill**

Transportation Analyst responsible to undertake capacity analysis for collector and arterial roadways and intersections/junctions. Evaluated problematic traffic signal operations for future conditions. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for loading/emergency vehicles. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Based on the 2014 10 Year Road Capital Construction Program, the section between Yonge Street and Bond Street along King Road has been planned for improvement. Improvements along this segment of the road included reconstruction of the existing 4-lane roadway to relieve traffic congestion and improve transit, walking, cycling facilities. As the implementation date for the foregoing improvements were preliminary, a sensitivity analysis of three scenarios were undertaken to present future total traffic analysis while identifying potential opportunities for critical movements at the King Road/Parking Avenue intersection (i.e. unsignalized 3-legged intersection, signalized 3-legged intersection and signalized 4-legged intersection).

■ **Senior Retirement Home & Church – 15186 Yonge Street, Town of Aurora**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future traffic conditions. Recommended the Region of York implement the left-turn restriction during weekday peak hour periods at Yonge Street and Wellington Street intersection. Assessed worst case scenarios at the Intersection Pedestrian Signal (IPS) located at Mosley Street and Yonge Street intersection which included applying pedestrians crossing every two (2) minutes during peak hour periods. Assessed potential queuing issues once IPS on Yonge Street is activated considering the stop bar spacing between Yonge Street and Mosely Street intersection and Yonge Street and Tyler Street intersection is approximately 22 meters apart. Confirmed the proposed parking supply is sufficient through parking rates established from proxy sites that caters to similar demographics of the proposed development. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for loading/emergency vehicles. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines

■ **Residential - Keele Street & McNaughton Road, City of Vaughan**

Transportation Analyst responsible to undertake capacity analysis for major arterial and collector roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future traffic conditions. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for loading/emergency vehicles. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Confirmed minimum ingress/egress driveway entrance radii meet City of Vaughan Site Plan and Site Servicing Engineering Criteria Guide. Performed northbound left-turn lane Storage Length and Taper calculations in accordance to Transportation Association of Canada (TAC) guidelines.

■ **Gas Station & Take Out Restaurant - 88 Main Street, Town of Grimsby**

Transportation Analyst responsible to undertake capacity analysis for arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations for future conditions. Confirmed the proposed parking supply is sufficient and meets the City's Zoning By-law requirements. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for Fuel Truck (B-Train) and loading/emergency vehicles.

■ **Retail, Gas Station & Industrial/Warehouse - Trade Valley Drive & Highway 50, City of Vaughan**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial and local roadways and intersections/junctions. Evaluated problematic traffic signal operations and recommended signal optimization designs to ease traffic flows for future conditions. Performed sightline analysis (i.e. departure and stopping sight distance requirements) along with AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger, fuel truck and loading/emergency vehicles. Mitigation measures included appropriate internal signage and pavement marking plans, pedestrian management, and intelligent monitoring systems. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. Performed Saturation Flow Rate for Right Turns (sRTOR) calculations for westbound right turning vehicles at Trade Valley and Highway 50 intersections. The York Region Design Standards for right-in-right-out (RIRO) was recommended at Highway 50 site entrance. Performed Queue analysis to determine queues at signalized intersections do not extend onto public streets or blocking driveway entrances.

■ **Manufacturing Facility (Building Expansion) - 61 Torlake Crescent, City of Toronto (Etobicoke)**

Transportation Analyst responsible to undertake parking assessment to confirm proposed parking supply is sufficient through parking rates established from proxy sites at the existing development. Performed AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger, and loading/emergency vehicles.

■ **Residential and Dance Studio - 10432 Islington Avenue, City of Vaughan**

Transportation Analyst responsible to undertake capacity analysis for major/minor arterial roadways and intersections/junctions. Evaluated problematic traffic signal operations for future conditions. Performed sightline analysis (i.e. departure and stopping sight distance requirements) along with AutoTURN analysis to confirm adequate turning radius requirements and site circulation are provided for passenger and loading/emergency vehicles. Confirmed the proposed parking supply is sufficient through parking rates established from proxy sites that caters to similar demographics of the proposed development as well as proposing available on-street parking. Transportation Demand Management (TDM) was implemented based on Region's transportation mobility guidelines. (Traffic Study approved by City)

## Transportation

### Traffic Safety Review/Audit

#### ■ Residential - 172 Old Main Street, Town of Newmarket

Transportation Analyst responsible to review traffic operations and speed in context of a future residential infill development. Reviewed existing road conditions and identified roadway improvements required to ensure road network will operate safely and efficiently upon completion of the proposed infill development. Undertook ATR/Speed Traffic counts along the subject segment section of Old Main Street and reviewed 5-year collision data history. Undertook License Plate Trace Study to quantify the level of cut through traffic during the weekday peak time periods. Recommended clearing of vegetation that is currently obstructing existing signage with overhanging impeding roadway in order to provide sufficient sight lines.

#### ■ Residential - 491 Glencairn Road, City of Toronto

Transportation Analyst responsible to undertake traffic calming measures based on studies regarding existing traffic infiltration at the southeast block of Bathurst Street and Glencairn Avenue intersection from the local streets in relation to a proposed mixed used development. Recommended peak hour turning lane restrictions from Glencairn Avenue and Bathurst Street onto Strathallan Wood Lytton Blvd and Forest Wood. Additional traffic calming measures included speed limit signs, traffic calmed neighbourhood sign, speed hump signs and speed humps.