

# **Introductory Transportation Impact Study (TIS) Workshop**

*Virtual Workshop*

*May 6-7, 2021*

Register online at:  
[www.otc.org/events](http://www.otc.org/events)

**Ontario Traffic Council**  
[www.otc.org](http://www.otc.org)





## WORKSHOP OVERVIEW

The OTC is offering a two-half day interactive (introductory to intermediate level) Transportation Impact Study (TIS) training, led by industry experienced expert instructors. This course is an opportunity to exchange knowledge and ideas with your transportation colleagues from across Ontario in solving interactive TIS scenarios.

The TIS workshop is designed to be of benefit to people with some experience preparing or reviewing TIS studies. The course is designed for municipal staffs reviewing TIS materials, and consultants who conduct and prepare TIS studies and make recommendations.

### Course Components

- TIS Overview
- Content of a TIS Report
- Study Area Considerations
- Study Scope
- Analysis Methods and Calibration
- Intersection and Roadway Analysis
- Travel Forecast Modeling
- Development Related Demands
- Trip Generation
- Modal Split (Multi Modal LOS)
- Trip Distribution
- Trip Assignment
- Future Analysis Scenarios
- Assessing the Impact
- Study Recommendations and Implications

This workshop will help to identify the additional traffic contribution of a particular site development and provide a basis for estimating roadway improvements attributed to a proposed development to maintain a satisfactory level of service, while ensuring that the recommendations are compatible with the local jurisdiction's road policy.

### Course Presenters:

- **Sabbir Saiyed**, Ph.D., P.Eng., Manager, Transportation System Planning, Region of Peel
- **Mehemed Delibasic**, M.Sc., P.Eng., Assistant Vice President-Transportation Planning and Traffic Engineering, McIntosh Perry Consulting Engineers Ltd.

### Guest Presenters:

- Day 1 Case Study: **Pirooz Davoodnia**, M.A.Sc., Transportation Engineering Lead, Development Engineering, City of Vaughan
- Day 2 Case Study: **Aaron D. Blata**, M.Eng., P.Eng., PTOE, Associate / Professional Traffic Operations Engineer, RC SPENCER ASSOCIATES INC.



**SABBIR SAIYED, PH.D., P.ENG.**

***Manager, Transportation System Planning  
Region of Peel***

Dr. Sabbir Saiyed is currently a Manager of Transportation System Planning at the Regional Municipality of Peel, OTC Transportation Planning Committee member and Chair of Urban Transportation Council, Transportation Association of Canada. Dr. Sabbir Saiyed has over 25 years of experience in progressively responsible positions in civil engineering, transportation and management. Apart from the Regional Municipality of Peel, Dr. Sabbir Saiyed has enjoyed productive careers at the City of Markham, Regional Municipality of York, Royal Military College of Canada, Kingston and the Regional Municipality of Ottawa-Carleton. Dr. Sabbir Saiyed has a Master's degree in Civil Engineering specializing in Transportation from Carleton University, Ottawa and a Ph.D. from Royal Military College of Canada, Kingston, Ontario. He is also a Registered Professional Engineer in the Province of Ontario.



**MEHEMED DELIBASIC, M.SC., P.ENG.**

***Assistant Vice President-Transportation Planning and Traffic  
Engineering  
McIntosh Perry Consulting Engineers Ltd.***

Mehemed is a Professional Engineer with 23 years of comprehensive experience in the fields of transportation planning, traffic engineering, and project/program management in the public and private sectors. As an Assistant Vice President of Transportation Planning and Traffic Engineering, currently Mehemed is employed with McIntosh Perry Consulting Engineers in Markham, Ontario.

Mehemed has worked on projects encompassing a broad range of transportation fields including transportation master plans, transportation impact and safety studies, municipal and provincial class environmental assessments, transportation demand and traffic management, transportation planning and development application approvals, parking studies, transit projects, and preliminary and detailed highway / road design projects. Mehemed is currently Chair of the OTC Transportation Planning Committee, Vice-Chair of TAC Transportation Planning Committee, Vice Chair of the Simcoe Chapter of Association of Consulting Engineering Companies Ontario (ACEC-Ontario), and Past Chair of the CITE Training Committee.



**PIROOZ DAVOODNIA, M.A.SC.**

*Transportation Engineering Lead, Development Engineering  
City of Vaughan*

Pirooz Davoodnia is a Transportation Engineering Lead with the City of Vaughan, Development Engineering Department. Pirooz joined the City in March 2020 and prior to that, he was a project manager and lead transportation modeler at transportation engineering consultant firms for over 14 years.

His current job description includes leading and reviewing various transportation studies and drawings. This includes but not limited to Transportation Impact Studies, Parking Studies, TDM Plans, Functional and Detail design, Transportation Master Plans, Environmental Assessments, and other studies related to developments.

Throughout Mr. Davoodnia's professional experience and education background, he has contributed to traffic and parking impact studies, signal optimization and TSP analyses, transportation master plans, secondary plans, bicycle routes design, rail rapid transit and BRT studies. He has prepared and managed over 100 transportation studies in support of development applications in Ontario. In addition, he has reviewed about the same number of studies as a transportation engineering lead at the City of Vaughan.

Mr. Davoodnia is proficient in various traffic modelling and technical software packages such as TransCAD(GIS), VISUM, Emme, VISSIM, AIMSUN, and Synchro/SimTraffic.



**AARON D. BLATA, M.ENG., P.ENG., PTOE**

*Associate / Professional Traffic Operations Engineer  
RC Spencer Associates Inc.*

Aaron Blata joined RC Spencer Associates Inc. in 2013 and became an Associate in 2020. To date, he has been responsible for the design and management of major engineering projects; he also acts as the Leamington Office operations coordinator. He has been responsible for major infrastructure improvement projects since 2014, but currently, he is principally relied upon for his technical traffic engineering skillset; he ensures that all traffic impact assessments and traffic infrastructure design is completed in accordance with industry best practices.



## **WORKSHOP AGENDA**

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### **Day 1: Thursday, May 6, 2021**

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| <b>9:00 AM</b>  | Introductions  |
| <b>9:10 AM</b>  | Introduction to Transportation Impact Studies, Initiating a TIS, Context and Framework, Study Area / Scope |
| <b>9:25 AM</b>  | Existing Conditions, Transportation Issue Scoping  |
| <b>10:00 AM</b> | Morning Break  |
| <b>10:15 AM</b> | Future Background Condition - Traffic Forecasting  |
| <b>10:45 AM</b> | Case Study (Pirooz Davoodnia, City of Vaughan)   |
| <b>11:30 AM</b> | Development Related Demands-1 (Trip Generation and Trip Adjustments)                                       |
| <b>12:00 PM</b> | Closing Discussion   |
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### **Day 2: Friday, May 7, 2021**

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| <b>9:00 AM</b>  | Development Related Demands-1 (Trip generation and Adjustments)                             |
|                 | Development Related Demands-2 (Trip Distribution and Trip Assignment), Future Total Traffic |
| <b>9:40 AM</b>  | Analysis Tools, Analysis, Assessing the Impacts   |
| <b>10:15 AM</b> | Afternoon Break   |
| <b>10:30 AM</b> | Case Study (Aaron Blata, RC Spencer Associates)   |
| <b>11:00 AM</b> | Mitigating Impacts, Improvement Options, Study Recommendations, and Report                  |
| <b>12:00 AM</b> | Closing Discussion  |
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