



Josée Dumont,
M.A.Sc., RSP2IB, P.Eng.



Expert Summary

Josée is a transportation safety engineer with TNS and has over 15 years of experience specializing in the fields of traffic safety and transportation planning, including transportation policy development, traffic operational reviews, active transportation, transportation master plans, environmental assessments, and transportation demand management. Her traffic safety experience includes site safety assessments, policy review and development, review of speed limits, safety reviews, literature reviews, development of safety performance functions, network screening, neighbourhood traffic calming, review of road maintenance activities, and peer reviews. She has been involved in several one-of-a-kind projects for various clients, for which she has investigated innovative methodologies and provided recommendations to implement new practices.

Specialized Professional Competencies

- Road User and Pedestrian Safety
- Human Factors and Positive Guidance
- Winter Maintenance
- Transportation Engineering and Peer Reviews

Professional Experience

- True North Safety Group: 2020-present
- EXP: 2019-2020
- Paradigm Transportation Solutions: 2015-2019
- CIMA+: 2009-2015
- McCormick Rankin Corporation: 2009
- MMM Group: 2007-2008

Academic Background

- Master of Applied Science, Civil Engineering (Transportation), University of Toronto, 2009

- Bachelor of Engineering, Civil Engineering, École Polytechnique de Montréal 2006

Project Experience

Road Safety Audit, Laurier Avenue Cycling Modifications, City of Ottawa, Ongoing

Retained to conduct an RSA of the preliminary design for the redesign of Laurier Avenue between Elgin Street and Queen Elizabeth Driveway, including the implementation of a protected intersection at Laurier Avenue and Elgin Street, the addition of a separate cycle track on the north side of Laurier Avenue, and updates to the pedestrian and cyclist crossing configurations at the Queen Elizabeth Driveway ramps.

Road Safety Audit, Woodfield Road Extension, City of Toronto, Ongoing

Retained to conduct an RSA of the functional design for the extension of Woodfield Road, a new intersection with Lake Shore

Boulevard East, and new separated cycling facilities between Eastern Avenue and Lake Shore Boulevard East.

Assessment of LPIs through Conflict Analysis, Transport Canada, Ongoing

Retained to conduct video conflict analyses at 14 intersections in the municipalities of Durham, Guelph, and Oakville to measure the effect of implementing Leading Pedestrian Intervals (LPI).

Safety Review of Kariya Drive/Kariya Gate Corridor, City of Mississauga, Ongoing

Retained to conduct a safety review as part of a roadway improvement project for the Kariya Drive/Kariya Gate corridor to provide recommendations to improve safety while implementing new cycling facilities.

Safety Review of Separated Cycling Facilities and Conversion of Pilot Cycling Facilities Network, Region of Waterloo, Ongoing

Retained to conduct a safety review of existing conditions on four cycling corridors to identify collision patterns and risks and recommendation of countermeasures. The project also includes a safety evaluation of the proposed alternatives and a detailed safety assessment of the preferred alternative for each corridor.

Collision Analysis, Downsview Area, BA Group, 2022

Retained to conduct a high-level collision analysis, using Vision Zero publicly available collisions data, along four corridors and at the top 10 intersections with the most collisions, within the context area for the Downsview Transportation Master Plan. The analysis included the identification of safety themes to consider during the planning and design stages.

Road Safety Audit, Mackenzie Avenue Cycling Link, City of Ottawa, 2022

Retained to conduct an RSA of the tender progress print design for new separated cycling facilities along Mackenzie Street, between Rideau Street and the Rideau Canal Eastern Pathway, in the area of the intersection of Mackenzie Avenue/Colonel By Drive and Daly Avenue. The study area also included the intersections of Mackenzie Avenue and Daly Avenue, Rideau Street and Mackenzie Avenue, and Rideau Street and Colonel By Drive.

Road Safety Audit, Cycling Safety Improvements on St. Patrick Street, City of Ottawa, 2022

Retained to conduct an RSA of the 66% design for new separated cycling facilities along a 280 m segment of St. Patrick Street, including the intersection with King Edward Avenue.

In-Service Road Safety Review of the 8th Line Road and Parkway Road Intersection, City of Ottawa, Ongoing

Retained to conduct an ISRSR at the intersection, following collision history and residents' complaints. The review includes collision analysis, desktop review, field investigation, public consultation, and recommendation of countermeasures.

Safety Workshops for the Eglinton Crosstown LRT Infrastructure, 2021-2022

Retained to prepare a series of safety workshop for the Eglinton Crosstown LRT infrastructure team. The workshops included the identification of potential safety issues, frequency analysis and the identification of countermeasures.

Safety Review of McLaughlin Road Corridor, City of Mississauga, Ongoing

Retained to conduct a safety review as part of a Class EA of McLaughlin Road corridor between Bristol Road West and Britannia

Road to provide recommendations to improve safety while implementing new cycling facilities.

Road Safety Review for a New Development, 2021

Retained to conduct a road safety review for roadways and intersections in the vicinity of a proposed new development in the City of Barrie, including a review of sight lines, intersections and roadways, collision analysis and recommendation of countermeasures to improve safety for all modes.

Guide Rail Assessment and Prioritization Study, Town of Caledon, 2021

Retained to conduct a roadside safety assessment of existing conditions based on industry standards and to develop a priority list for the recommended remedial measures at over 300 locations.

Safety Review of Bridge Street and Canal Road Intersection, Town of Bradford West Gwillimbury, 2021

Retained to conduct a safety review of the intersection and provide recommendations to improve operations and safety at the intersection.

Review of Intersection Countermeasures, York Region, 2020

Retained to review countermeasures at four intersections and analyze pedestrian/cyclist safety using conflict analysis, and before and after countermeasure implementation.

Review of Safety at Plaza Access, York Region, 2020

Reviewed safety and operational concerns at a commercial access along Highway 7 in Vaughan. Provided recommendations to modify the movements allowed at the access to improve safety while minimizing impacts on traffic operations.

Traffic Study of Nelles Road South and Dorchester Drive, Town of Grimsby, 2020

Conducted a road safety review and sidewalk connectivity study along Nelles Road South and Dorchester Drive, in the Town of Grimsby. The project included the assessment of traffic calming measures, public engagement, and education.

Yonge Street Corridor Review, York Region, 2020

Reviewed two intersections along Yonge Street in Richmond Hill. The review included the assessment and recommendation of alternatives to improve traffic safety and operations.

Plaza Access Safety Review, York Region, 2020

Reviewed safety and operations at the accesses to a private plaza located near the intersection of 16th Avenue and Woodbine Avenue in Markham. Provided recommendations to modify the accesses to increase traffic safety while minimizing impacts on traffic operations.

Melville Avenue Operational Safety Review, Vaughan, 2020

Retained to complete a safety review of Melville Avenue, including needs and opportunities for active transportation, traffic operations, traffic safety and heavy vehicles traffic.

Intersection Conflict Analysis, Cobourg, County of Northumberland, 2019

Reviewed traffic conflict analysis at the Elgin Street and Ontario Street intersection and impacts on past recommendations.

Speed Limit Review, County of Norfolk, 2019

Conducted a review of posted speed limits in two locations, including a horizontal curve advisory speed, and development of a speed limit review policy.

**Elgin Street and Ontario Street
Implementation Plan, Cobourg, County of
Northumberland, 2019**

Prepared a signal timing changes plan for implementation at the intersection of Elgin Street and Ontario Street, and reviewed safety impacts.

**St. Raphael Catholic Elementary School
Traffic Study, Toronto Catholic District
School Board, City of Toronto, 2019**

Conducted a traffic safety and reviewed traffic operations around the school, and provided recommendations for improvements.

**University Avenue Pedestrian Safety
Review, McMaster University, City of
Hamilton, 2019**

Reviewed pedestrian safety and pedestrian crossover needs along University Avenue on the campus of McMaster University.

**Traffic Safety and Conflict Review,
Intersection of Bruce Road 19 and Bruce
Road 4, Walkerton, Bruce County, 2019**

Retained to review traffic conflict analysis and safety of the Bruce Road 4 and Bruce Road 19 intersection and provide recommendations for improvements.

**Muskoka Road 118 Detailed Engineering
Analysis, Port Carling, District of Muskoka,
2019**

Completed an operational and safety review of Muskoka Road 118 including pedestrian facilities, intersection traffic control, on-street angle parking and sight distances. Provided recommendations to improve interactions between through vehicles, parking maneuvers and pedestrians.

**Needs Environmental Assessment Update
for County Road 25, Bruce County, 2019**

Conducted an operational, safety and needs assessment for County Road 25, between County Road 33 and Highway 21. Provided

client with identification and assessment of opportunities and recommendations.

**Travel Time Study, Town of Halton Hills,
2019**

Data collection and analysis review of 7 corridors within the Town. Analysis included comparison with previous years.

**Lane Reconfiguration Feasibility Study,
Town of Caledon, 2019**

Retained to conduct a feasibility study of adding active transportation facilities to two existing roadways, Kennedy Road and Queensgate Boulevard, as part of the Revitalizing Caledon Streets Program.

**Pedestrian Crossing Warrant Analysis, Town
of Tillsonburg, 2018**

Retained to complete a warrant analysis for a pedestrian crossing facility at the Trans Canada Trail and Broadway crossing, including data collection, analysis and recommendations.

**Speed Limit Review, Waste Management
Centre, Region of Waterloo, 2018**

Reviewed the posted speed limit within the waste management centre, including the review of a horizontal curve advisory speed.

**St. Eugene Catholic Elementary School
Traffic Study, Toronto Catholic District
School Board, City of Toronto, 2018**

Completed a traffic safety and traffic operations review around the elementary school. Provided recommendations for improvements.

**Kennedy Road Environmental Assessment,
Town of Caledon, 2018**

Conducted an operational, safety and needs assessment of Kennedy Road, between Old School Road and Bonnieglenn Farm Boulevard. The study area included a new school. Identification and assessment of opportunities and recommendations were

provided to the client.

Pedestrian Safety Program, Town of Oakville, 2017

Participated in the review of existing policies and practices, recommendations for use of pedestrian crossovers, identification of potential locations for implementation of pedestrian crossing treatments, development of a prioritization methodology and tool to rank potential pedestrian crossing locations. Presented the findings at the 2019 CITE Conference.

Posted Speed Limit Reviews, Township of Centre Wellington, 2017

Reviewed posted speed limits on various roadways within the Township.

Leaside Traffic Calming Study, Leaside Property Owners' Association, City of Toronto, 2017

Retained to complete a neighbourhood-wide traffic study, including the identification of issues, preparation of a traffic calming plan and public consultations.

Environmental Assessment of Main Street and Queen Street, City of Brampton, 2017

Retained to complete a safety assessment as part of a Class Environmental Assessment.

Speed and Delay Study, Region of Halton, 2017

Completed data collection and analysis along 12 corridors within the Region. The analysis included comparison with previous studies.

Traffic Impact and Parking Study, Diamond Schmitt Architects, Trafalgar Park Revitalization Project, Town of Oakville, 2017

Retained to complete a traffic impact study and parking study for the Trafalgar Park Revitalization project. The revitalization included: new fire hall, indoor arena extension, community centre, and

improvements to outdoor equipment and sport fields.

Cork Drive Traffic Operational Review, Town of Whitby, 2016

Technical review of operational and safety issues along a residential roadway. Recommendations for traffic calming strategies were provided, and public information meetings were held.

Operational Safety Review of the Intersection of County Road 30 and Old Wooler Road, Brighton, County of Northumberland, 2016

Completed technical review of operational and safety issues at the rural three-leg intersection, including traffic impacts of an adjacent quarry. Recommendation of improvement strategies were provided.

Operational and Safety Review of the Intersection of Elgin Street and Ontario Street, Cobourg, County of Northumberland, 2016

Retained to conduct a technical review of operational and safety issues at the four-leg signalized intersection, including improvement strategy recommendations.

Mississauga Road Widening Class Environmental Assessment and Road Safety Analysis, Region of Peel, 2016

Completed a safety assessment as part of the Class Environmental Assessment. Study area ranged from Financial Drive to Bovaird Drive West. Identification of safety issues and provision of safety-related recommendations were provided to the client.

Intersection Safety Devices Program Evaluation, Alberta Transportation, 2012

Completed quality control of evaluation data, including volumes and collision information. Assisted in the development of safety performance functions.

Update of Safety Performance Functions and Network Screening, Region of Halton, 2010-2011

Calibrated safety performance functions using the Full-Bayes method for different types of road segments and intersections. Applied the Empirical Bayes method to assess the safety of each location, developed a potential for safety improvement at each location, and ranked the locations to complete the network screening.

Update of Safety Performance Functions and Network Screening, Region of Peel, 2011

Provided guidance to other staff for application of the Empirical Bayes method to assess the safety of each location, development of a potential for safety improvement at each location, and ranking of locations to complete the network screening.

- The Benefits of Proactive Road Safety Programs on Liability Risk, Hamilton ITE Section, September 2021
- The Role of Road Safety Audits in Vision Zero Strategies, Municipal World, June 2021
- Roadway Safety Management and Systemic Safety Approaches module, part of Fundamentals and Practical Applications of the AASHTO Highway Safety Manual, Greater Vancouver ITE Section, May 2021
- Safety Through Geometric Design, Road Safety at Intersections, and Positive Guidance, World Bank, November 2020

Professional Societies and Associations

- Member, Professional Engineers of Ontario (PEO)
- Member, Ordre des ingénieurs du Québec
- Member, Institute of Transportation Engineers (ITE)
- Road Safety Professional Level 2 with Infrastructure and Behavioural Specialties (RSP2IB), Transportation Professional Certification Board
- Member, Canadian Association of Road Safety Professionals (CARSP)

Publications/Presentations

- Big Data and Emerging Traffic Technologies – Lessons and Tools to Learn: Crowd Sourced Data, ITE Canada, November 2022.