

A Traffic Impact Study (TIS) may be required to analyze the effects of new development on the local transportation network considering the scale of land use change and the capacity of existing infrastructure to handle future traffic volumes. In order to confirm the need for a TIS, a preliminary traffic impact review, prepared by a Professional Engineer, is required. This review must include the following:

1. Brief description of the proposal including reference to matters which will influence traffic volumes (e.g., increase in density, additional vehicle parking, container storage / warehousing capacity increase, etc.);
2. Anticipated number of vehicle trips determined through the use of the most current edition of the Institute of Transportation Engineers (ITE) *Trip Generation Manual*. If no ITE rates exist for the type of development proposed, the City will consider traffic counts from similar uses, within similar contexts in the Lower Mainland;
3. Reference to the adequacy of sightlines as they relate to ingress and egress to the subject property(ies), considering the design speed of the road(s) providing access to the site and the potential for obstructions;
4. Internal site operation diagram which demonstrates vehicle flow / movement throughout the development. Note this may include a swept path analysis which clearly illustrates vehicle maneuverability within constrained portions of the site (e.g., at the terminus of laneways, driveway accesses, etc.); and
5. Confirmation that the development will not result in any vehicle queuing within the municipal boulevard.

Based on the findings of the above-described preliminary analysis, the City may require the submission of a more detailed Traffic Impact Study, including the following:

Overview of Development and Transportation Network	
<ul style="list-style-type: none"> ▪ Describe the development proposal including reference to any land use change and factors which may affect vehicle and pedestrian volumes observed within the transportation network 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Provide a context map of the subject property(ies) and the abutting road network (approx. scale 1:1500) 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Provide a broader area map illustrating roads, by classification, signalized intersections, pedestrian connections, bus stops and other related transportation network features within 1.5 km of the site, or as directed by the Engineering Department 	<input type="checkbox"/>

Site Layout and Access	
<ul style="list-style-type: none"> ▪ Provide a detailed site plan illustrating vehicle drive aisles and access to the public road network. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Ensure the site plan is compliant with applicable zoning provisions, development standards, and building code requirements. Where standards are not met, identify the relief that may be required in support of the project. 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Include a summary of required and proposed parking, as outlined in the City's Zoning Bylaw 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Illustrate sight distances entering / exiting the site considering existing obstructions and the geometric design of the abutting road network 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Demonstrate on-site circulation of vehicles and pedestrians, including a swath analysis where vehicle maneuverability may be constrained; reference to ICBC on-site parking guidelines may be advantageous 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Review parking requirements, i.e. patrons/visitors, employees, loading, etc. 	<input type="checkbox"/>

Description of Existing Transportation Network Conditions	
<ul style="list-style-type: none"> ▪ Describe the transportation network which serves the development including reference to intersection geometrics, road rights-of-way, traffic control measures at intersections, transit routes / bus stops, and related 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Provide a quantified summary of average daily traffic (ADT), AM and PM peak hour turning movements, and levels of service within the transportation network serving the development site 	<input type="checkbox"/>
<ul style="list-style-type: none"> ▪ Determine existing queue lengths at controlled intersections which may be impacted by the development 	<input type="checkbox"/>



Description of Future Transportation Network Conditions	
<ul style="list-style-type: none"> Identify other projects / proposals within the transportation network servicing the site subject and determine the volume of traffic that may be generated by each over a 5 and 10 year planning horizon; identify all assumptions made in determining base and future traffic volumes 	<input type="checkbox"/>
<ul style="list-style-type: none"> Provide a quantified summary of average daily traffic (ADT), AM and PM peak hour turning movements, and levels of service resulting from the development and other projects / proposals within the transportation network serving the development site; if relevant, show impact of traffic levels generated through development phases in addition to the cumulative impact of traffic within the overall network 	<input type="checkbox"/>
<ul style="list-style-type: none"> Determine future queue lengths at controlled intersections which may be impacted by the development 	<input type="checkbox"/>

Recommendations	
<ul style="list-style-type: none"> Identify the need for infrastructure improvements necessary to maintain an acceptable level of service at controlled intersections as well as any other improvements required to address existing deficiencies and / or to support the effective operation of the development (e.g., road widening, pedestrian connections, etc.) 	<input type="checkbox"/>
<ul style="list-style-type: none"> Distinguish between short-term improvements and long-term improvements required to support the project 	<input type="checkbox"/>
<ul style="list-style-type: none"> The report must be sealed and signed by a Professional Engineer registered in the Province of BC 	<input type="checkbox"/>

Note: In discussion with Community Planning & Development staff, the Traffic Impact Study scope may be refined based on the overall complexity of the proposal or intensity of use.

