

## **Overview**

Between 2018 and 2020, Edmontonians and the City engaged in the significant effort to plan for Edmonton's future. These plans became [ConnectEdmonton](#) and [The City Plan](#), and they contain a shared and hopeful vision for what Edmonton can become. They, and the future District plans, provide a blueprint for a significant portion of Edmonton's future growth to occur within the Anthony Henday Drive along and within nodes and corridors. They include ambitious targets for how we move about the City, and how more can be done locally.

As Edmonton charts a new course under this direction, Planning Coordination (Transportation) has reviewed its [Transportation Impact Assessment \(TIA\) Guidelines](#), which have not seen a significant update since 2016. While the TIA Guidelines remain a robust document for development in developing and greenfield areas, they lack detail in the particular complexities and sensitivities which often arise with infill development. A more targeted approach is required.

Transportation has accordingly prepared this Infill Development Supplement to provide guidance in key areas, including: public engagement and local knowledge, active modes and transit, demand management, safety, qualitative analysis, lanes (alleys), and parking. Much of this guidance has been informed by transportation studies that have been prepared in the last few years. Rather than additional analysis, the Supplement summarizes the shift to a more equitable, multi-modal perspective.

Applicants and consultants are encouraged to contact Planning Coordination (Transportation) when establishing the need for and scoping a study.

## **Public Engagement and Local Knowledge**

Infill development is predominantly a local issue. Residents, nearby business owners, community leagues and others are interested in and have firsthand knowledge of the transportation network and operations in their neighbourhood. These stakeholders, through feedback, engagement events, or other means, often reveal aspects of the local transportation network - missing links, pedestrian desire lines, time-specific operational challenges - that may have not been considered in initial drafts of transportation studies.

Transportation consultants preparing studies are therefore strongly encouraged to attend public engagement events associated with infill developments. At a minimum, transportation studies should include commentary and analysis, where appropriate, on public engagement findings. Though issues such as [traffic shortcutting and speeding](#) may not be within the scope of a particular development, it is still helpful to acknowledge these aspects in a report, and provide direction on City programs and procedures that may remedy the situation.

As supporting documents for land development applications, transportation studies should be prepared with an expectation that they will be posted on the City's [planning website](#).

Transportation studies should always include a section or summary of findings which detail the primary findings of the study in plain language.

### **Active Modes, Transit and Transportation Demand Management (TDM)**

The City Plan envisions a low-carbon city of two million, where 50% of trips are made by transit and active modes. Recent initiatives such as the [Bus Network Redesign](#) and [The Bike Plan](#) are critical steps to realizing this ambition.

Transportation studies should focus as much on pedestrian, cyclist and transit movement as that of vehicles. Neighbourhood characteristics, active transportation and transit infrastructure, travel behaviour, recent or anticipated development activity, renewal plans, corridor studies, and other initiatives which may impact a neighbourhood should be considered. A figure showing the local active modes network, including but not limited to, sidewalks, pedestrian and bicycle crossings and infrastructure, bicycle facilities, and transit stops, should be included. [Older or substandard infrastructure](#), [accessibility challenges](#), network gaps, and any other issues should be identified.

<figure example>

Where a development is forecast to increase activity on adjacent streets, the existing infrastructure may become less adequate to safely convey a mix of travel modes. For example, an anticipated increase in local roadway traffic may suggest that [a higher level of infrastructure is required for bicycle facilities](#). Though this may not be realistically implemented with a development, transportation studies should still highlight an emerging need, its feasibility, estimated timelines and avenues for implementation, and other relevant factors.

How a particular development compliments and where appropriate, bolsters the surrounding multimodal transportation network, through enhanced public realms, access closures, transit stop and accessibility improvements, new and improved bicycle crossings and links, secure and accessible bicycle parking and end-of-trip facilities, traffic calming elements, and transportation demand management measures should be clearly outlined. Several recent Direct Control rezoning applications have included regulations for subsidized transit passes for residents of multi-family developments.

Consultants are encouraged to use the City's own [Neighbourhood Renewal](#) program for guidance. The [Strathcona](#) and [Garneau](#) neighbourhoods, in particular, provide contemporary examples of rebuilding and retrofitting transportation infrastructure to better support a range of travel modes. Regulations in Direct Control zonings and/or details on which measures are required and/or in the case of standard zones, how they will be implemented at the development permit stage may be required.

### **Safe Mobility**

[Vision Zero](#) and the ongoing development of the [Safe Mobility Strategy](#) underpin the City's approach to safe systems. Consultants should work with Planning Coordination and Traffic Safety, as required, to determine whether an expanded focus on safety is required as part of a transportation study. Ongoing safety initiatives such as [School Zone Safety Reviews](#) should be noted.

The coming [reduction to the default speed limit in Edmonton to 40 KPH](#) will improve the livability and safety for most residential streets and areas with significant pedestrian activity. Transportation studies should identify whether the corridors adjacent to the development are adapted for this change. Improvements such as curb extensions, raised crossings, and signage, [among others](#), may be appropriate.

[Pedestrian crossings](#) and [bicycle crossings and facilities](#) in the vicinity of a development must be considered in accordance with the [Pedestrian Crossing Control Guide](#) (TAC, 2018) and City practices. Future pedestrian (induced) demand and strategic considerations should be considered when identifying whether an intersection may warrant enhanced control. Consultants are encouraged to work with Planning Coordination and Traffic Safety (and others as required) to understand locations and timelines for crossing upgrades. Cost sharing opportunities for crossing upgrades may be available and/or relocation of future crossing locations may be identified through this review.

### **Quantitative and Qualitative Data and Analysis**

Infill development is by definition placed into a dynamic transportation network. Local traffic patterns, pedestrian desire lines, even the presence of waste bins encroaching into an alley are typically only revealed by site visits. Even then, the time-limited nature of these visits can miss otherwise common occurrences. While traditional microsimulation analysis may show 'that it all works', it is imperative that transportation studies, through real world observations, and consultation with residents and/or community leagues, and City staff, reveal what is really occurring in the vicinity of an infill site.

Transportation studies should not be overly reliant on classical TAC standards for daily volume thresholds for local, collector, and arterial roadways. While these provide a starting point, the surrounding land-use context, area or district growth targets, modal priorities, and other factors and jurisdictions should be considered in establishing a reasonable range of daily volumes. Simply stating that a traffic volume is above or below a TAC threshold is not acceptable. Where vehicle congestion is projected at intersections, studies should identify any anticipated operational concerns, and where feasible, measures to improve them. Trade-offs and constraints relating to improvements for various travel modes should be detailed. [City Policy](#) recognizes that in many cases, physical, financial and community constraints will make it infeasible or undesirable to alleviate congestion.

Multimodal travel patterns and behaviour anticipated with a development should be grounded in local observations and data. On occasion, local trip data may be requested to supplement census and/or traditional ITE or City of Edmonton trip generation rates. Transportation studies should resist projecting overly conservative vehicle trip rates (e.g. not discounting existing trips, assuming a neighbourhood-wide transit split is appropriate where a development is in walking distance (600 m) to a major employment node or transit service) as a means of 'testing the network'. Particular attention should be made to small-scale commercial sites and residential developments with a commercial component, which may shift existing vehicle trips not associated with a development to a mix of more local trips by a variety of modes.

### **Alleys**

[Recent changes to the Zoning Bylaw](#) require essentially all residential and small-scale commercial development under standard zoning to take access to an alley where one is present. Transportation studies must include a detailed review of existing alley conditions, traffic volumes, and those projected with development. Infill development should generally expect that upgrades to the abutting (or entire block of) alley will be required as a condition of development.

Particular focus should be made when considering 5 m wide alleys (Garneau, McKernan, Queen Alexandra, Riverdale, Strathcona, among other older neighbourhoods) which may present operational challenges for higher vehicle volumes. Alleys should be walked, with a detailed understanding of existing conditions, and constraints such as encroaching or adjacent development and utility poles. Opportunities for vehicles to pass in opposite directions without significant encroachment in abutting properties should be identified. Sightlines and on-street parking characteristics at alley intersections, especially where interacting with bike lanes, should also be reviewed during site visits. Mitigation measures such as signage and pavement markings should be recommended where necessary.

<figure example>

In some cases mitigations such as additional alley width may be required. For Direct Control zonings that include a site plan, turning movements to/from loading areas, lay-bys, and waste, may also be required. For standard zones with no site plan, expectations at the rezoning stage shall be clearly laid out for the development permit stage.

### **Open Option Parking**

The City has shifted to a [market-driven approach](#) for development-required vehicle parking. Transportation studies may still be required, however to review the on-street parking realities in the vicinity of the development. Discussion and/or an exhibit detailing the existing parking management scheme (e.g. unrestricted, hourly, paid, etc.) and potential changes or enhancements for consideration as the development is implemented should be considered. Where a development is planned to provide little to no on-site parking, transportation studies should describe transportation demand management measures that will support mobility by

other modes, as described above in Active Modes, Transit and Transportation Demand Management.

Recent Zoning bylaw changes also increase secure bicycle parking requirements to a city-wide rate of 0.5 spaces per dwelling unit, as well as introducing requirements for commercial uses. Exceeding these rates is strongly encouraged where quality bicycle connectivity exists or [is planned](#).