

Internal Stakeholder Input Regarding Road Classification

Interviews with representatives from Transportation Planning, Operations and Maintenance, Office of Traffic Safety, Roads Design and Construction, City Wide Planning Services and Nodes + Corridors were completed to assess the impacts of establishing a new roadway classification system that may be defined as major or minor, and potentially distinguished by daily traffic volume and/or speed. Interviewees were also asked to provide suggestions on addressing traffic shortcutting, public engagement on neighbourhood traffic calming or other street design issues.

Edmonton's current roadway classification is defined through the Transportation Systems Bylaw 15101, and is characterized through the following policies, standards and guidelines:

- Speed Zones Bylaw 6894
- Roadways Design and Construction Standards
- Access Management Guidelines
- Complete Streets Guidelines.

City of Edmonton operations and maintenance activities relate to the City's roadway classification system in the following ways:

- Intersection Control Treatments: treatments are initially selected based on classification and are refined or modified over time based on the operation of the roadway (traffic volumes, speed, pedestrian movements, etc.)
- School Zone Applications: only on locals and collectors
- Asset Renewal Funding: funding is allocated based on several categories within each broader classification. The differences in categories is related to the pavement structure (there are four categories for arterials, three for collectors, three for locals and three for alleys).
- Level of Maintenance (summer and winter activities): based on a hierarchy of roadway classification; higher priority for arterials and lower priority for local roads or alleys although the classifications are further refined to guide administration. For example, collector roadways range from a categorization of one to three, where a collector three might be characterized as non-transit collector that gets snow removed before locals but after collectors that carry transit.

Some of the related operations and maintenance policies that guide the processes described above include:

- Snow and Ice Control C4091
- Roadway Cleaning C550
- Determination of Assessable Roadway-Related Local Improvements C433D

City of Edmonton's Development Planning section has reviewed new informal classifications in greenfield development such as "Non-Transit Collectors" and "Enhanced Locals" that address maintenance needs within the current roadway maintenance prioritization policy. Planners in Sustainable Development have also applied alternative informal classifications of "Main Streets", "Transit Avenues" and "Pedestrian Oriented Shopping Streets". The Zoning Bylaw and Infill Guidelines also refer to the roadway classification system by designating land uses according to the classification (i.e. higher density permitted along arterials, certain commercial business zones are not permitted along local roadways). Snow removal for bike routes is not separated from roadway classification, priority and level of snow removal are tied to the roadway classification (i.e. arterials first and locals last). The Bicycle Transportation Plan, Sidewalk Strategy and application of traffic calming measures also rely on the roadway classification system. Transit route design is dependant on classification as well. Standard service for transit runs on arterial and collector roads with some exceptions for community buses on local roads. In summary, planning staff tend to use the roadway classification system to advocate for higher levels of maintenance, long term planning strategy and multi modal design.

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Planners and engineers collaborate to deliver roadway designs. Although designers use the classifications as a basis for design as defined through Transportation Association of Canada's Geometric Design Guide for Canadian Roads, treatments are often modified to address the functionality and context of the roadway. The current classification system provides roadway designers flexibility in designing roadways through the application of Complete Streets principles to fit the land use, users of the roadway and functionality of the roadway within the broader roadway network. However, planners have indicated that for greenfield development a greater number of classifications and standards could reduce the amount of negotiation between developers and City Administration that occurs through the Complete Streets application process by providing consistency (beyond what's included in Section 8000 of the Roadway Design and Construction Standards). Additional classifications would clarify expectations for the roadway and create a shared language; not address speeding or shortcutting.

In some cases, the current classification system does restrict urban designers and planners to advocate for specific treatments along a corridor. For example, it may be more challenging to introduce pedestrian environment enhancements to Norwood Boulevard under its current arterial road classification as opposed to it being reclassified as a collector roadway due to roadway functional perceptions related to those classifications. Complete Streets is readily applicable in greenfield development but may require refinement for mature neighbourhood application. Mature neighbourhood constraints require making numerous trade-offs and negotiations between various groups; a set of cross sections or classifications for retrofit situations could reduce some of this back and forth. However, it was noted that new classifications and standards should not be so prescriptive that they cannot be customized according to the context.

Most stakeholders indicated that defining criteria for each classification would clarify expectations for typical operations on a classified roadway but would require range as a roadway context can vary significantly along a corridor. All stakeholders noted that the Transportation System Bylaw 15101 should add in collectors as they are significant within the roadway network and are often the classification that faces the biggest design challenges. The introduction of a minor/major designation for arterials or collectors would not significantly affect the operations of any of the stakeholders. It was indicated that new classifications would likely lead to further confusion, but if introduced, new classifications should have a clear definition with design expectations and would need to be rolled out with significant public education. Stakeholders were also asked what new classifications could be added to benefit the delivery of their programs. The results included the classification of a collector roadway that spans multiple neighbourhoods (perhaps a "Commuter Collector") and a Main Streets designation. The limit of 3 classifications is managing expectations of the public as the expected traffic volumes and resulting operating speed in relation to its function in the network, can range significantly.

Factors affecting the operation of a collector roadway:

- Design of the roadway
- The land use
- Location in the roadway network
- Number of neighbourhoods served
- Driver behaviour
- Level of enforcement provided on the roadway (i.e. big ticket events)
- Driver education

The differences in these factors can influence the variation in operation of the same roadway classification in different neighbourhoods. This may result in the perception of the same classification of roadway being "busier" than another. However, reclassifying a roadway without reviewing the factors affecting the operation of the roadway, such as redesigning the road or addressing the functionality within the network, is unlikely to change the characteristics of the roadway (i.e. traffic volumes,

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speeding, etc.). All stakeholders identified that the “feel” of the roadway or design is the biggest factor in addressing driver behaviour. Complete Streets provides guidance on tailoring roadways for the land use context so that drivers operate as intended along a corridor.

Results:

Based on the jurisdictional review and interviews with Administration’s technical experts, it is recommended that the City continues to use a local, collector and arterial roadway classification in concert with the Complete Streets design process to account for integration with land use and neighbourhood context.