

MOBILITY NETWORK ASSESSMENT UPDATE

Recommendation

That the March 23, 2026, Urban Planning and Economy report UPE03117, be received for information.

Requested Action	Information only
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals
CONNECTED This unifies our work to achieve our strategic goals.	Urban Places
City Plan Values	ACCESS
Corporate Business Plan	Serving Edmontonians
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • Policy C569 - Optimization of the Transportation System Network • Bylaw 14380 - Arterial Roads for Development • Policy C507 - Arterial Roads for Development • Policy C577 - Goods Movement
Related Council Discussions	<ul style="list-style-type: none"> • March 23, 2026, City Operations report CO02980, Advancing Bus Rapid Transit and Transit Priority Measures • Sep 10, 2025, Financial and Corporate Services report FCS02994, Edmonton Financial Sustainability Framework • Jun 18, 2025, Urban Planning and Economy report UPE02544, Industrial Investment Action Plan 2025 Update • Mar 5, 2025, Financial Corporate Services report FCS02746, Fiscal Gap Strategies Work Plan • December 5, 2023, Urban Planning and Economy report UPE01825, Arterial Road Assessment • August 29, 2023, Urban Planning and Economy report UPE01154, Growth Management Framework Update - Substantial Completion Standard - Additional Information • February 15, 2022, Urban Planning and Economy report UPE00491, Mobility Network Assessment

MOBILITY NETWORK ASSESSMENT UPDATE

Previous Council/Committee Action

At the June 10/11, 2025 City Council meeting, the following motion was passed:

That Administration provide an update on prioritization of mobility infrastructure including arterial roads, as a follow-up to the February 15, 2022, Urban Planning and Economy report UPE00491 - Mobility Network Assessment and the October 31, 2023, Urban Planning and Economy report UPE01825 - Arterial Road Assessment and include the conditions that have changed since 2022/2023 including but not limited to growth, cost escalation, tariff implications etc. for the top priorities.

At the February 3, 2026 City Council Public Hearing meeting, the following motion was passed:

That Administration, as part of the Urban Planning and Economy report UPE03117 coming to March 23, 2026, Urban Planning Committee meeting, include a list of all arterial roads yet to be fully constructed including current construction costs for buildout, as available.

Executive Summary

- Administration completed an update to the mobility network assessment, which provides a prioritization of city-wide transportation infrastructure investment opportunities in alignment with the objectives of The City Plan.
- The updated assessment builds on previous analyses completed through the February 15, 2022, Urban Planning and Economy report UPE00491, Mobility Network Assessment and the December 5, 2023, Urban Planning and Economy report UPE01825, Arterial Road Assessment. It involved a refined process that included additional criteria related to rapid population growth, roadway conditions, alignment with priority growth areas and industrial development needs.
- The prioritization process resulted in three top mobility network assessment locations (127 Street, 124 Street and Jasper Avenue) for growth investment consideration.
- The remaining locations were grouped in composite bundles by similar type of improvement.
- Top arterial roadway capacity improvement areas include 215 Street, 41 Avenue and Parsons Road.
- City Council will have the opportunity to consider potential mobility network funding opportunities holistically with other funding priorities through the 2027-2030 capital budget process.

REPORT

The City Plan envisions an integrated and diverse mobility system that creates connections and provides opportunities for people and goods to move through and around the city in a safe and accessible way. The mobility system with its integrated networks serves several modes of transportation and helps create the liveable city envisioned in The City Plan. Continued investment in growing the mobility system is critical to ensuring that people move efficiently and

MOBILITY NETWORK ASSESSMENT UPDATE

supporting short-term and long-term economic development as Edmonton continues to grow to two million people.

Due to the complex nature of Edmonton's mobility system and the financial constraints currently facing the City, there is a need to strategically prioritize future investments to ensure they align with The City Plan objectives. Additionally, recent population growth pressures have increased the number of locations that could benefit from investment in the mobility system to accommodate Edmonton's growth needs. As such, Administration has updated the mobility network assessment. The priorities identified through the mobility network assessment will inform the 2027-2030 budget deliberations.

Mobility Network Assessment

The mobility network assessment is a technically-focused exercise that strategically identifies and prioritizes capital investments that result in safety and operational improvements for general vehicle traffic, transit or active modes. Factors considered to prioritize these investments include: alignment with key networks such as nodes and corridors, goods movement routes, active mode needs, mass transit plans and safety considerations from the high injury network. Other inputs into the process include information on expected population- and employment-growth patterns and alignment with upcoming renewal plans.

A mobility network assessment was first completed in 2021 with the results presented to City Council on February 15, 2022, through Urban Planning and Economy report UPE00491 - Mobility Network Assessment. The results of this assessment were used to inform 2023-2026 budget deliberations.

A second analysis to focus on prioritizing arterial roadway improvements in developing areas was completed in 2023 with results presented to City Council on October 31, 2023 through Urban Planning and Economy report UPE01825 - Arterial Road Assessment. Funding for the planning and design of the priorities identified through this analysis was considered but not funded as part of the 2025 Fall Supplemental Capital Budget Adjustments.

Mobility Network Assessment Update

The updated mobility network assessment builds on and simplifies the two previous analyses and incorporates additional lenses such as alignment with Priority Growth Areas (as defined in District Plans), the updated Industrial Investment Action Plan¹ target sector areas, recent population growth pressures and areas with high maintenance demands. A high level overview of how the updated mobility network assessment was undertaken is included in Attachment 1.

The results of the updated mobility network assessment identify and prioritize top mobility system improvement locations in alignment with The City Plan for consideration for future funding opportunities. Given the number of locations identified for investment and current city growth pressures, the remaining projects are grouped by like-infrastructure to identify composite bundles, which provide an opportunity to consider funding for multiple mode-specific improvements throughout the city in addition to the top locations.

¹ <https://www.edmonton.ca/sites/default/files/public-files/Industrial-Investment-Action-Plan.pdf?cb=1754117161>. City of Edmonton. Cited February 19, 2026.

MOBILITY NETWORK ASSESSMENT UPDATE

Mobility Network Assessment Update - Top Locations

The updated mobility assessment prioritization process ranked locations for mobility investment that are in highest alignment with objectives identified in The City Plan. The top locations are as follows:

- 124 Street (Jasper Avenue to 107 Avenue): The improvements include intersection modifications to improve traffic safety and operations, improvements to the pedestrian environment and transit priority measures.
- 127 Street (Yellowhead Trail to 137 Avenue): The improvements will address traffic operational concerns, traffic safety concerns, transit priority measures and active mode improvements.
- Jasper Avenue (109 Street to 102 Street): Improvements on this corridor will consider traffic operations, transit operations, traffic safety and pedestrian environment through streetscape improvements.

Ideally, these projects would be constructed in alignment with the renewal of the roadway. Timelines for alignment with renewal are subject to available funding and prioritization with other corporate priorities. Due to limited funding available for renewal of assets such as arterial roads, renewal funding is not anticipated to be in place for the 2027-30 budget cycle for 124 Street (Jasper Avenue to 107 Avenue), 127 Street (Yellowhead Trail to 137 Avenue) or Jasper Avenue (109 Street to 102 Street). When funding is in place enabling advancement of these projects for planning, design, and/or delivery, the scale of renewal must also be considered in combination with the potential for other enhancements. Planning and design would be accompanied by reviews and analysis (such as traffic analysis and modelling) that help to define the scope and scale of renewal and enhancements and would inform budget requirements for delivery.

Additional locations, including Whyte Avenue, were identified as top locations by the updated mobility network assessment. These locations coincide with segments of the B1 and B2 bus rapid routes identified as part of the mass transit network. Concept planning is currently in progress for route B1 as well as for route B2. As described in the March 23, 2026, City Operations report, CO02980 - Advancing Bus Rapid Transit and Transit Priority Measures, the concept-planning process will further evaluate priorities along these BRT corridors, with segments of these corridors potentially being recommended for further design funding within the next budget cycle.

Mobility Network Assessment - Composite Bundles

Grouping projects into composite bundles focuses system improvements on growing roadway capacity, addressing intersection problem areas and specific improvements for transit and active transportation. The purpose of these composite bundles is to provide the opportunity for growth investment in several locations around the city that can improve the overall performance of the mobility system. A summary of the mobility network assessment top locations and potential composite-bundle locations is provided in Attachment 2.

Roadway Capacity Composite Bundle

This composite bundle includes roadway improvements that primarily address vehicle congestion during peak periods. The top locations recommended for roadway capacity improvement include:

MOBILITY NETWORK ASSESSMENT UPDATE

- **215 Street** (Stony Plain Road/Highway 16A to Whitemud Drive): Widening to 4 lanes and key intersection improvements.
- **41 Avenue South-West** (West of Allard Road to James Mowatt Trail): Widening to 4 lanes and key intersection improvements.
- **Parsons Road** (19 Avenue to 91 Street): Widening to 5 lanes and key intersection improvements.

A list of the arterial roadways under City responsibilities considered for capacity improvement are included in Attachment 3.

Intersection/Multi-Modal Improvements Composite Bundles

Roadway locations not identified for roadway capacity improvements were prioritized under the intersection and multi-modal improvements composite bundles. These locations address intersection improvements or improvements that can address several multi-modal issues along a corridor. These roadways are scattered throughout the city, and the assessment focused on locations that can help to mitigate recent growth pressures and safety concerns. Additional concept and design work would be required to finalize the location and type of improvements that could fall under this composite program.

Transit Priority Measures Composite Bundle

Funding for transit improvements would include measures that improve operational efficiency, such as transit signal priority or queue jumps at key intersections. The projects implemented through this bundle would require further technical work to identify and prioritize locations, as discussed in the March 23, 2026, City Operations report, CO02980 - Advancing Bus Rapid Transit and Transit Priority Measures and through work completed to date on identifying district route needs of the mass transit network.

Active Transportation Infrastructure Composite Bundle

The Active Transportation Implementation Guide is currently being updated and will provide additional detail on priorities to improve safety, accessibility and all-seasons network connectivity for Edmontonians walking, cycling or using micromobility. This bundle would build on previous investment provided for active modes in the 2023-2026 budget cycle and include priority missing sidewalk links, curb ramps, active transportation connections (i.e. shared pathways, protected bike lanes or local street bikeways) and other improvements such as accessibility and enhanced wayfinding.

Cost Escalations and Tariffs

Tariffs between Canada and the United States create potential direct and indirect impacts on the City's capital program. Direct impacts include increased costs for materials like steel, lumber, cement, glass and fuel. Indirect impacts involve market uncertainty, supply-chain disruptions, reduced competition and potential effects on investor confidence. For enhancements outlined in the Mobility Network Assessment and the materials they utilize, the effect of tariffs is negligible.

MOBILITY NETWORK ASSESSMENT UPDATE

The City continues to closely monitor for tariff impacts and potential risks to the capital program. The City uses a gated approach to planning, design and construction that aids in gaining better understanding of costs as projects progress.

Project locations evaluated for the mobility network assessment are at various stages of design, ranging from no planning completed to some with advanced designs. In turn, the understanding of respective costs similarly vary. The mobility network assessment prioritization work was completed independent of project cost considerations as these considerations are better suited during the planning and design process. As a result, cost escalation and tariff implications (keeping in mind tariff impacts are expected to be negligible) were not a factor in the prioritization process.

Next Steps

Administration will review top locations across all composite bundles and complete a more detailed analysis to determine design readiness for these areas and develop cost estimates in preparation for 2027-2030 budget cycle deliberations.

Budget/Financial Implications

The updated mobility network assessment presents no immediate financial implications. Priorities identified through this assessment will guide recommendations for growth funded projects (depending on funding availability) through the City's established four-year or supplemental budget processes.

Community Insight

This project is informed by the policies and directions provided in The City Plan and other strategic documents, such as The Bike Plan and Mass Transit Planning, which were developed through extensive engagement with Edmontonians. Feedback gathered through that process reflected the priorities, values and mobility needs of a broad range of residents and has guided the principles, objectives and evaluation criteria used in the updated mobility network assessment. Additionally, resident input from 311 reports and City Council inquiries were also considered when identifying which locations to consider for identification as top funding priorities.

Further engagement with the public and other interested parties will occur at the project level, where required, as individual projects advance through planning and design following funding approval.

GBA+

The project prioritization approach used in this assessment recognizes barriers to equity resulting from socio-economic factors such as age, gender, income, newcomer status and physical ability that influence how different groups experience and use the transportation system. These barriers disproportionately impact individuals living in neighborhoods with high social vulnerability, including low-income households, newcomers, people with language barriers, lone-parent families and those with lower educational attainment or limited mobility. Not all community members have equal access to private vehicles and many, particularly equity seeking groups, rely

MOBILITY NETWORK ASSESSMENT UPDATE

heavily on public transit and active transportation for their daily travel or for parts of their daily commute. Infrastructure investments that focus primarily on vehicular throughput or congestion for drivers inherently neglects the majority travel mode needs of these vulnerable groups.

Transportation infrastructure recommendations in this report aim to support equality of outcomes by considering projects from various travel modes (i.e. active, transit and vehicular) within the prioritization process. This ensures that investment decisions are better informed to support a variety of modal choices and populations. The prioritization framework also includes evaluation based on Social Vulnerability Index (SVI) to help identify areas where mobility investments could improve outcomes for residents with higher levels of social vulnerability. The use of this equity account alongside other technical and operational criteria in the evaluation provides an additional layer of insight through consideration of communities that may have been historically underserved or face greater social challenges.

GBA+ process will continue to be applied at future planning and design stages as projects are funded to ensure potential impacts on equity-deserving groups are effectively identified and addressed.

Environment and Climate Review

The mobility network assessment update was prepared in consideration of The City Plan's strategic goals of supporting multi-modal mobility options to meet the future transportation needs of two million people. The 2024 Carbon Budget Update indicated that 37 per cent of Edmonton's community greenhouse gas (GHG) emissions in 2023 were resulting from transportation emissions, while in 2021 both transportation and urban planning were identified as focus areas for major GHG reduction for Edmonton.² The prioritization of the identified mobility infrastructure includes the following environmental and climate considerations:

- The prioritization framework that resulted in the top three multi-modal mobility network projects considered impact on roadway capacity, transit operations and active modes of transportation. Using multi-modal transportation options helps reduce GHG emissions and improve local air quality.
- Pedestrian realm improvements, such as streetscaping, aims to improve the pedestrian experience and active transportation connectivity. This encourages walkability and cycling, which may result in reductions in GHG emissions and improvements in local air quality.
- Except developing or growth areas, there are limited opportunities to build or widen arterial roads for multi-modal conversion purposes. This may impede the goal of network connectivity for active modes in developed areas within the transportation network.

Linkages to The City Plan:

1.4.1 Support Edmontonians' transition to a low carbon future in their daily lives.

1.4.2 Ensure Edmonton's air, land and water are safe and clean.

4.4.1 Support a low-carbon mobility system.

² City of Edmonton. (2021). Community Energy Transition Strategy and Action Plan.

MOBILITY NETWORK ASSESSMENT UPDATE

Attachments

1. Process to Identify Top Locations and Composite Program
2. MNA Top Locations and Composite Bundles
3. Arterial Roadway Widening Within Top 100 MNA Locations