

TRANSIT PRIORITY MEASURES IMPLEMENTATION UPDATE

Recommendation

That the March 19, 2024, City Operations report CO02133, 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		
City Plan Big City Move(s)	A community of communities	Relationship to Council's Strategic Priorities	Mobility Network
Corporate Business Plan	Serving Edmontonians		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • Charter Bylaw 20000 - Edmonton City Plan • UPE00342 - Mass Transit: Planning for 1.25 Million People • City Policy C539A - Transit Service Policy 		
Related Council Discussions	<p>Past Reports:</p> <ul style="list-style-type: none"> • October 30, 2018, CR_5074, Transit Priority Measures Feasibility Study First Phase 1 • October 31, 2022, Financial and Corporate Services report FCS01393, Proposed 2023-2026 Capital Budget <p>Upcoming Reports:</p> <ul style="list-style-type: none"> • May 22, 2024, Urban Planning and Economy report UPE02216, Mass Transit: Implementing for 1.25 Million People 		

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Executive Summary

- Transit priority measures make transit faster and more reliable, reducing the amount of time people need to spend traveling and improving the efficiency of service by reducing the amount of service hours required to complete trips.
- Service hour efficiencies gained from transit priority measures can be reinvested into the transit network to address transit service gaps, helping meet service standards.
- In the 2023-2026 budget, Council funded \$7.1 million to plan, design and implement transit priority measures.
- Locations for transit priority measures have been selected and the planning phase will be confirmed by the end of Q2 2024. The project is scheduled to be completed by 2026.

REPORT

ETS remains focused on delivering a service that is convenient, reliable and safe. ETS provides travel options through a range of services, including conventional fixed-route bus service, Light-Rail Transit (LRT), Dedicated Accessible Transit Service (DATS) and On Demand Transit.

With the furthest reach and highest ridership, the bus network continues to be an integral component of ETS service. It also delivers the most conventional transit service hours to Edmontonians. Public transit is an essential service in the everyday lives of Edmontonians, and is critical in meeting the goals and targets set in ConnectEdmonton and The City Plan.

Between 2022 and 2023, transit ridership increased by 27 per cent¹. To further grow ridership, Administration is focused on internal ridership levers, including transit network improvements, improving service coverage and frequency, continuing to implement the Arc regional fare payment system and implementing safety and security measures.

One of the most cost-effective strategies to improve the transit network is to implement transit priority measures, which give priority to transit over other traffic. Doing so helps improve operational efficiency, makes transit more reliable and reduces travel times.

A variety of transit priority measures have already been implemented in Edmonton. These measures vary in complexity, from simple changes, such as adding a signal phase or an exception for turning at select intersections, to more comprehensive solutions, such as dedicated bus lanes or bridges designed to prevent speed reductions for transit vehicles. There are three main categories of transit priority measures:

- **Regulatory Measures:** These are strategies that can be implemented through existing or new laws and regulations. They often use a combination of signs and pavement markings to indicate priority for transit vehicles.
- **Traffic Signal Measures:** These involve modifying the timing or sequence of traffic lights to give preference to transit vehicles.

¹ Calculated using Automated Passenger Counting system.

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- **Physical Measures:** These are changes made to the physical infrastructure to create dedicated spaces for transit vehicles; for example, dedicated bus lanes. This reduces their interaction with other traffic, aiming to improve travel times and reliability for public transit.

More detailed information can be found in Attachment 1.

Administration implemented transit priority measures at a number of locations across the city. These include traffic signal measures at more than 40 locations, including bus detection, transit-specific traffic lights and queue jumps. Edmonton also has transit lanes on seven corridors, including:

- Terwillegar Drive (Haddow Drive to Whitemud Drive)
- 97 Street (Yellowhead Trail to 118 Avenue)
- Fox Drive/Belgravia Road (Fort Edmonton Park Road to 116 Street)
- 109 Street (South of Whyte Avenue to 72 Avenue / 87 Avenue)
- Jasper Avenue (112 Street to 120 Street)
- 104 Street (76 Avenue to 83 Avenue)
- 100 Street (102A Avenue and 100 Avenue)

As part of the 2023-2026 Capital Budget, City Council approved \$7.1 million for the planning, design and delivery of transit priority measures, as well as \$5.5 million for Mass Transit planning. Administration reviewed the 2019 transit priority measures study, which prioritized potential investments into transit priority, the Mass Transit Planning for 1.25 Million Population² report related to Mass Transit routes B1 and B2, as well as alignment with The City Plan. Based on this review, the following locations have been identified as the first phase of locations that will benefit from transit priority measures:

- Hewes Way (23 Avenue to 28 Avenue)
- Jasper Avenue (109 Street to 95 Street)
 - Jasper Avenue and 95 Street
 - Jasper Avenue and 97 Street
 - Jasper Avenue and 105 Street
 - Jasper Avenue and 106 Street
- 97 Street (107 Avenue to 118 Avenue)
- 101 Street (Kingsway to Jasper Avenue)
- 109 Street and 97 Avenue
- 118 Avenue and 80 Street
- Whyte Avenue (109 Street and 99 Street)

Some of the locations noted will consider that any measures selected may require coordination with the Mass Transit Plan Implementation for 1.25 million Population project. Measures on Whyte Avenue will also consider the Old Strathcona Public Realm Strategy.

Next Steps

The planning phase of the transit priority measures project will be completed by the end of Q2 2024. Potential measures include regulatory and lane management changes, signal timing and

² See February 15, 2022, Urban Planning and Economy report UPE00342, Attachment 4

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associated lane and signal modifications, and detection-based transit priority. Measures will include a combination of:

- Queue jumps
- Signal retiming and/or upgrades
- Transit signal priority (TSP) systems and technologies
- Lane modifications to permit buses and local access only
- Parking removal/restrictions

The project includes further evaluation of transit operation issues on the seven corridors, identification of appropriate transit priority measures, evaluation of the high-level benefits of these measures, estimation of costs (at the concept level) and prioritization of locations for implementation. Preliminary and detailed design will start following the concept phase. The project is scheduled to be completed by 2026.

The delivery of the transit priority measures will be staged. Easier locations that warrant improvements such as signal retiming or upgrades will be sequenced earlier than more complex improvements such as bus/right turn lanes, lane modifications and other similar measures.

The service hour efficiencies achieved through transit priority measures, by making transit service hours more efficient from faster service delivery, can be redirected towards filling gaps in transit services to meet established service standards. This can be accomplished during regularly scheduled service changes, shared in the ETS Annual Service Plan. The earliest opportunity to reallocate these efficiencies is in 2027.

Community Insight

The need for fast and more reliable service has been identified by riders through public engagement for the bus network redesign, planning for implementing the Mass Transit Plan to 1.25 million people and ongoing engagement with riders identified the need for fast and more reliable service. ETS regularly engages riders through a robust customer engagement research program. In 2023, approximately 3,000 responses were collected from transit riders through the monthly transit rider satisfaction survey. During this period, 78 per cent of respondents were satisfied with their bus/train arriving on-time, decreasing from 82 per cent in 2022. On-time performance was also identified as a key driver for overall satisfaction with transit for frequent riders, including all-purpose riders who ride transit frequently for both work or school and non-work or school trips, and commuters who ride transit frequently primarily for work or school.

In addition, ETS conducts an online annual survey with non-riders to understand reasons for non-transit usage, past satisfaction with ETS, perceptions of ETS and service enhancements that would increase their likelihood of using ETS. In 2023, ETS collected feedback from 400 respondents who have not used transit or have used transit very infrequently in the past year³. When asked about service enhancements that would increase their likelihood of using ETS, the second most frequently suggested enhancement was more routes that allow them to reach their destination faster and the third-most frequently suggested enhancement was more direct service to destinations.

³ Edmonton Transit Service Annual Non-Rider Survey (2023).

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Longer travel times and lower service reliability can be a barrier for riders who rely primarily on transit to travel to daily needs and opportunities. Data from the 2023 transit rider satisfaction surveys shows that transit riders from equity-deserving population groups are more likely to rely on transit as their primary mode of transportation. For example, over 40 per cent of survey respondents who have household incomes below \$30,000 annually, identified as persons with disabilities, are parents with children under 18 years, are youth under 24 years and/or are Indigenous peoples that stated they are all-purpose riders who rely on transit more frequently for both work or school and non-work or school trip purposes. This can include medical appointments, shopping, running errands and leisure.

Transit priority measures are valuable tools that contribute to a faster and more reliable, and therefore more equitable, public transportation network. Implementing measures, such as dedicated bus lanes, traffic signal priority for buses and improved scheduling can enable reduced travel times and improved service reliability. This directly benefits those who rely on transit as their primary mode of transportation by enabling greater mobility to access social and economic opportunities.

In addition, transit routes that pass through key intersections and corridors are most impacted by travel time and reliability improvements. This enables operational efficiencies resulting in a reduction of service hours that can be reinvested back into the transit network. These hours could be used to further reduce service gaps experienced by marginalized communities that have historically been underserved by public transit by applying an equity lens.

Overall, improvements in transit service reliability, travel times and other service planning elements can lead to better access to jobs, social opportunities, education, and other critical services for equity-deserving communities. This, in turn, supports social and economic mobility, helping to break cycles of poverty and isolation that can affect marginalized groups.

Attachment

1. Transit Priority Measures Types