

BUS NETWORK SERVICE PLAN UPDATE

Recommendation

That the March 19, 2024, City Operations report CO02242, 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.	Healthy City		
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"> • C539A - Transit Service Policy • ETS Annual Service Plan 		
Related Council Discussions	<ul style="list-style-type: none"> • November 22, 2022, City Operations report CO01450, Transit Network Equity Analysis. • August 29, 2023, City Operations report CO01337, Edmonton Transit Services in Newer Developing/Developed Communities • November 7, 2023, Financial and Corporate Services report FCS02053, Fall 2023 Supplemental Capital Budget Adjustment - 2023-2026 Capital Budget 		

Previous Council/Committee Action

At the November 21/22/27/28/29, 2023, City Council - Budget meeting, the following motion was passed:

That Administration provide a report and analysis on the recommended route and service adjustments for the additional transit service hours delivery including a transit equity lens.

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Executive Summary

- Each year, Edmonton Transit Service (ETS) publishes an Annual Service Plan to outline planned service changes, major projects and report on performance. Service plans are developed considering the Transit Service Policy and service standards, resource availability, as well as equity considerations and rider feedback.
- The 2024 Annual Service Plan builds on the network changes made in the redesigned bus network and addresses growing ridership demand in new and mature areas. The plan also reflects an increase in 70,000 annual bus service hours, approved by Council during the Fall 2023 Supplementary Budget Adjustment.
- Service changes associated with the additional 70,000 bus service hours include the introduction of a new route; service enhancements to address overloads; increased service levels to support growing communities; off peak service enhancement to provide more options for people who rely on transit the most; enhanced service on several routes that primarily service youth and schools; and improved schedule adherence.
- Across the public transit industry, the practice of including equity considerations continues to evolve and mature. ETS is one of the first transit properties in Canada to include an equity-related review during service decisions, to identify the needs of equity deserving groups, as well as identify how transit service decisions can improve equity-related outcomes for riders.
- As part of the service adjustment decision-making process, ETS reviews social vulnerability to help inform how the current transit network could be improved to further meet community needs. ETS is also developing a “proof of concept” for incorporating qualitative information as part of equity analysis in transit service planning. The goal of this work is to incorporate both quantitative and qualitative equity data into service standards to be intentional about their importance in the service planning process.

REPORT

Thousands of Edmontonians rely on public transit to connect them to where they work, learn, play and live. Edmonton Transit Service (ETS) remains focused on delivering a service that is convenient, reliable and safe, and 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 and delivers most of the conventional transit service hours to Edmontonians. Public transit is an essential service in the everyday lives of Edmontonians, and critical to meeting the goals and targets set in ConnectEdmonton and The City Plan. ETS service enables mobility, connects riders to essential services, creates economic outcomes, reduces social isolation and improves health outcomes. Ridership grew by 27 per cent in 2023 and this year’s service plan will support further ridership growth.

ETS produces an Annual Service Plan that includes planned service changes, major projects and outlines performance data for transit service. Service plans are developed considering the Transit Service Policy C539A and service standards, resource availability, as well as equity considerations

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and rider feedback. Feedback includes input from public inquiries via 311 and Council, online feedback forms, ETS' rider engagement research, as well as comments at open houses and outreach events.

The 2024 Annual Service Plan, included as Attachment 1, continues to build on the network changes made in the redesigned bus network and addresses growing ridership demand in new and mature areas. The plan includes the additional 70,000 bus service hours Council approved in the Fall 2023 Supplementary Operating Budget Adjustment. In total, there is a gap of 260,000 service hours between bus service hours and meeting ETS service standards; 70,000 hours addresses 27 per cent of the service hour gap in the network.

In 2025, an additional 50,000 service hours will be added following receipt of 20 growth buses, representing an additional 19 per cent of the service hour gap in the network. These changes will be outlined in the 2025 Annual Service Plan and have not been through detailed service planning.

Approach to Bus Service in 2024

Transit Service Policy C539A and the associated Transit Service Standards Administrative Procedure, which are included in Attachment 2, identify minimum requirements for introducing new service and provide guidance for service adjustments related to the productivity of each route. Productivity refers to the number of people getting on a bus in an hour, and the transit service standards stipulate minimum boardings per hour based on the time of day and service type.

Administration is reviewing transit service levels in areas where ridership does not meet the minimum ridership thresholds in the productivity standards, as specified in the transit service standards. Before proceeding with service changes on routes with lower productivity, ETS evaluates alternative service options, demographics and social vulnerability to minimize impacts to equity deserving riders. Details on productivity by route can be found in the Annual Service Plan and also summarized in Attachment 3. This year, to ensure service is provided consistently across the City, Administration will be updating transit service standards to explicitly include On Demand Transit and equity considerations in transit service planning. These components were not established at the time service standards were created, providing an opportunity to refresh the procedures.

Informed by service standards and equity-related needs, service changes in 2024 include:

- adding a new bus route; making improvements to manage overcrowding,
- boosting service in expanding neighbourhoods; enhancing off-peak service to offer more choices for frequent users,
- improving routes mainly serving young people and school,
- making changes for On Demand Transit, and
- ensuring better adherence to schedules.

The detailed changes include:

- Redeploying articulated buses from the former Route 73 (Valley Line Southeast LRT precursor service) to Route 8, to provide more capacity on the busy corridors of 118 Avenue and Whyte Avenue, and on Route 500X, to provide more capacity for those travelling to post-secondary institutions and downtown.

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- Establishing Route 926 as a new route to replace On Demand Transit in Stillwater, The Uplands and east Edgemont. Conventional transit is more effective for high ridership areas and allows On Demand Transit resources to be redeployed to other On Demand Transit neighbourhoods with high ridership.
- Additional service for Meadows Transit Centre, which is experiencing high ridership growth, including enhancements to Route 55, 56 and 500X.
- Additional peak period service will be implemented on routes with high ridership growth and crowding. Routes 52, 107, 116, 509, 523, 901, 902, 903, 904, 916, 919 and 922 will have more trips during morning and afternoon peak periods.
- Additional service will be added during weekday midday periods on Routes 4, 902 and 913. This will facilitate off-peak travel to busy locations including Whyte Avenue, NAIT, University of Alberta and West Edmonton Mall. These enhancements benefit youth accessing post-secondary institutions and shift workers.
- Improved Saturday service will start on Routes 56, 116, 123 and 902. These changes include more frequent service on Route 56, which connects major destinations and transfer points, including Meadows, Mill Woods, Century Park and West Edmonton Mall. Expanded service (earlier or later service) on Routes 116, 123, 902 will also benefit shift workers and improve access to social and recreational opportunities.
- On Demand Transit will be introduced to Enoch Cree Nation, with proposed bus stops at the River Cree Resort and Casino, Enoch 108 Building and along Winterburn Road, with a connection to Lewis Farms Transit Centre. This new service will enhance regional service, supports the City's commitment to reconciliation and aligns with the Memorandum of Understanding between Enoch Cree Nation and the City of Edmonton - one of the outcomes of which is to advance economic, social and cultural prosperity and development for both parties.
- On Demand Transit will be added to serve the ACT Centre and Family Centre in Rundle Park. This service will help connect users to programming and destinations within the park. Timelines for this service are still to be determined as some infrastructure improvements are required to accommodate two new bus stops.
- On Demand Transit service in the Heritage Valley area has been experiencing growing ridership, resulting in longer wait times and varying travel times to Century Park. Resources are being redeployed to reduce wait times and improve the rider experience.
- Service reallocations from six routes with low ridership may take place, following further analysis.

Equity in Transit Service Planning

Across the public transit sector, integrating equity into transit planning is an evolving practice; ETS is one of the first transit properties in Canada to intentionally incorporate equity considerations into service planning. The November 2022 Council Report CO01450 Transit Network Equity Analysis outlined how neighbourhoods with a higher proportion of seniors, Indigenous and low income persons are served by transit. This report outlined areas with multiple equity deserving groups and highlighted the importance of off-peak service for those who rely on transit.

In addition, the transit network has historically been designed for peak hour commuters travelling to and from central Edmonton (downtown and post-secondary institutions). While commuters remain an important component of ridership, the transit network continues to evolve to better serve all riders. Peak hour service may not be well-suited to the travel patterns of

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Edmontonians who work outside the downtown core and have travel purposes that do not coincide with peak times. Providing additional transit service outside of central Edmonton and during off-peak time periods helps support riders who rely on transit for non-work trips, including travel for social, recreational, shopping and other purposes. These service planning adjustments particularly improve the overall experience for transit riders from marginalized communities, by enabling them to have a wider range of affordable and more reliable travel options to travel to daily activities.

A further review of transit sector literature¹ indicates that there are two broad themes related to addressing equity gaps in transit services: service levels and physical accessibility. The first main theme is related to providing consistent service in all time periods, and the second theme, related to physical accessibility, is related to the walk distance to the bus stop and accessibility of the journey to the bus stop. To conduct further analysis related to service levels, Administration reviews social vulnerability to identify areas likely to have a higher reliance on low-cost mobility modes, such as public transit, and assesses service levels relative to social vulnerability. To conduct further analysis related to accessibility, Administration has also partnered with the University of Alberta's School of Urban and Regional Planning to conduct a review of bus stop amenities. More information about this project will be shared in future Council reports as the work unfolds.

Equity Factors Considered in 2024 Service Planning

The 2024 Annual Service Plan outlines how the 70,000 annual service hour investment in transit service will be used, and includes improvements intended to benefit equity deserving groups. In total, there is a gap of 260,000 service hours between bus service hours and service standards; 70,000 hours addresses about one third of the gap. There remain rider needs that are not being met, including needs from equity deserving groups across the city.

The application of GBA+ has demonstrated that there are multiple ways in which improving transit service can address the needs of equity deserving groups. As examples:

- Equity-deserving groups rely on transit as their primary mode outside of peak commuting hours; expanding the span of service (hours of operation) can address these needs. In February 2024, an additional five routes gained service span on weekend evenings, providing more options for shift workers and more social and recreational opportunities.
- Some neighbourhoods or destinations may have a higher proportion of equity-deserving groups but have no transit service, such as Rundle Park/ACT Centre, which provides a significant amount of recreational programming for persons with disabilities. On Demand Service Transit is planned for Enoch Cree Nation and Rundle Park/ACT Aquatic and Recreation Centre to provide access for some equity deserving communities.
- Overloaded bus routes means that some riders are not able to access service because buses are sometimes full and cannot pick up additional riders. Service that is overloaded will also run late and not meet on time performance targets, which is important for equity-deserving

¹National Academies of Sciences, Engineering, and Medicine. 2022. *Assessing Equity and Identifying Impacts Associated with Bus Network Redesigns*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/26487>

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groups because it connects riders to employment, education and other essential services. Alleviating overloads on busy routes and ensuring buses have enough time to remain on schedule as the city grows are important factors to maintaining service reliability.

Additionally, as equity is a consideration when reviewing routes with low ridership, routes that do not currently meet the productivity thresholds outlined in the Transit Service Standards, that serve areas with high social vulnerability, and have limited or no alternative service options will be prioritized for retention above routes that serve lower socially vulnerable areas.

Community Insight

Administration receives feedback from the community through numerous channels, including discussions at in-person and virtual meetings and events with select stakeholders and the general public; ETS' rider engagement research; public inquiries via 311 and Council inquiries; and online transit feedback forms. Each channel of feedback provides a different level of insight, and ETS strives to elevate the needs of equity-deserving groups, especially those who rely on transit as their primary means of transportation, including youth, seniors, persons with limited mobility, newcomers and people with lower incomes.

In 2023, 3,000 responses were collected from transit riders through the online monthly transit rider satisfaction survey, including feedback on various transit aspects related to the first stop/station experience, on-board experience, transfer experience and overall experience. Overall satisfaction with the transit experience was 73 per cent in 2023, decreasing from 82 per cent in 2022.

The primary drivers of overall satisfaction were sense of safety/security, cleanliness of the vehicle, level of comfort on-board, bus/train arriving on-time (reliability), reaching their destination on-time and overall trip duration (key driver for commuters only). Satisfaction with the bus/train arriving on-time and overall trip duration were some of the higher performing scores in 2023 - these metrics are impacted by service planning and scheduling. Further, when asked about suggested enhancements for ETS, top themes that emerged from the survey comments included improving route schedules and connections and increasing service frequency.

Through the development of the 2024 Annual Service Plan, over 100 pieces of recent input regarding concerns and requests were reviewed, resulting in several issues being analyzed in more detail. In response, ETS is implementing route extensions, schedule adjustments, redeployment of articulated buses, new school specials, On Demand service changes and other corresponding improvements incorporated as service changes for 2024. Examples of routes where service was improved in response to public input include Routes 8, 54, 56, 500X and 916.

GBA+

As outlined above, GBA+ and equity considerations are embedded within ETS service planning decisions and were a core focus of this report. The following paragraphs provide additional insights into the equity data that Administration collects through ETS' rider surveys, with a focus on transit usage by equity-deserving groups.

An analysis of data from the monthly transit rider satisfaction survey shows that equity-deserving groups, such as youth (ages 15-24), those with incomes less than \$30,000 annually, those who

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identified as Indigenous and those who identified as persons with disabilities are more likely to use transit for non-work or school trip purposes that are typically conducted during off-peak hours. Over 40 per cent of respondents in these groups indicated they frequently use transit (more than five trips per month) for running errands, shopping, getting to recreational activities and leisure/visiting friends or family. Furthermore, when analyzing additional layers of intersecting identities, such as youth in lower income households or those who identified as both persons with disabilities and Indigenous, trip frequency for non-work/school trips was even higher. These groups also showed lower overall satisfaction levels with their transit experience compared to overall respondents.

Demographic and travel pattern data from the transit rider satisfaction survey shows that riders include a diverse range of intersecting identities, and that those who come from marginalized communities are more likely to rely on transit as their primary mode of transportation.

Demographics of respondents from the 2023 transit rider satisfaction surveys are outlined below:

- 19 per cent of respondents indicated their annual household income was below \$30,000
- 16 per cent of survey respondents were between the ages 15 and 24
- 9 per cent of survey respondents were aged 65 and older
- 51 per cent of survey respondents identified as a woman
- 9 per cent of respondents identified as Indigenous

Administration is developing a “proof of concept” for including qualitative data more formally as part of equity analysis in service planning. This will be done by engaging community groups representing equity deserving communities to gather their perspectives about the current transit network and gain better insight into barriers some riders experience. Their responses, along with social vulnerability, will inform the addition of equity criteria into transit service standards.

Attachments

1. Edmonton Transit Service 2023/24 Annual Service Plan
2. City Policy C539A - Transit Service Policy
3. Transit Productivity