

TRANSIT NETWORK EQUITY ANALYSIS

RECOMMENDATION

That the November 22, 2022, City Operations report CO01450, be received for information.

Requested Council Action	Information only		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
Connected	Healthy City		
City Plan Values	ACCESS		
City Plan Big City Move(s)	Inclusive and compassionate	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"> • Bus Network Redesign and Transit Service Policy C539A • First Kilometre/Last Kilometre Solutions (On Demand Transit Service) • ETS Annual Service Plan • Mass Transit: Planning for 1.25 million people 		
Related Council Discussions	<ul style="list-style-type: none"> • CR_6788 Bus Network Redesign and Transit Service Policy, Urban Planning Committee, November 19, 2019 • CR_7812 Further Analysis of Alternative Transit Solutions, Urban Planning Committee, February 25, 2020 • CO00605 Bus Network Redesign - Interim Review, Executive Committee, January 19, 2022 • UPE00342 Mass Transit: Planning for 1.25 Million People, Urban Planning Committee, February 15, 2022 • CO00803 Bus Network Expansion Opportunities - Transit Funding Model Options, Executive Committee, March 23, 2022 • CO01320 On Demand Transit - Service Delivery Model, Community and Public Services Committee, October 14, 2022 		

TRANSIT NETWORK EQUITY ANALYSIS

Executive Summary

- Public transit is a critical component of transportation mode shift and greenhouse gas emission reduction targets set out in The City Plan. The City Plan envisions a vibrant and prosperous city with an integrated transportation network, providing residents with convenient and equitable options. A robust transit system is foundational, including an evolved mass transit network that supports mobility and connects all areas of the city.
- Edmonton Transit Service (ETS) ridership consists of diverse riders who hold a range of identity factors and lived experiences. Travel behaviours during and post-pandemic have shown there are more riders who identify as women using transit than other genders. Newcomers, essential workers, students and families rely on transit to connect with their community, employment, education and medical needs.
- On Demand Transit specifically serves a majority of riders who identify as women, do not have access to a personal vehicle and rely on On Demand Transit to access employment, healthcare needs and education.
- The revised bus network implemented in 2021 introduced high frequency corridors to the transit network as well as On Demand Transit service.
- Administration is examining ways to further improve the transit network to better meet the needs of equity seeking groups and serve all Edmontonians. This report outlines insights from the initial phase of work and has found that some equity seeking groups are relatively well-served by the revised network while others have needs that are not being sufficiently met.
- Additional phases of work will include community engagement and assessments of the needs of other equity seeking groups such as racialized Edmontonians, newcomers, and members of the LGBTQIA2S+ community, as well as individuals who may experience overlapping and interdependent systems of discrimination or disadvantage.
- The results of this work will identify areas to improve access to frequent transit service for equity seeking groups by expanding off-peak transit service, including improved frequencies throughout the day and evening, and addressing walking distance challenges by implementing additional On Demand Transit service. These improvements will help connect more people to jobs, healthcare, after school activities, and recreation opportunities.
- Transit ridership is recovering from the COVID-19 pandemic but the recovery is not equal among all demographics. According to the ETS Customer Satisfaction Survey, youth (24 and under) have increased their transit usage since 2021. There has also been an increase in survey respondents with household incomes below \$30,000, as well as Ride Transit passes sales, indicating an increase in transit usage among low income individuals. As was the case prior to the pandemic, people identifying as women continue to make up a majority of transit riders.

REPORT

Equity is grounded in The City Plan, and specifically outlined in City Building Outcome 4.0, which states: “Edmonton advances equity through access to universally accessible spaces, services, facilities and transportation networks.” This City Building Outcome provides additional intentions and directions related to the provision of transportation in a way that reduces barriers which prevent Edmontonians from all walks of life of the ability to work, play, and travel throughout the city. Through ongoing, intentional GBA+ work, Administration is developing a deeper understanding of the impacts of City policies and service delivery on equity seeking groups in Edmonton.

There are several recent and ongoing City of Edmonton examples of incorporating equity analysis and GBA+ processes into service and policy decisions including:

- The Zoning Bylaw Renewal Initiative created a GBA+ and Equity Toolkit and consistently applied an equity lens throughout the regulations writing process to ensure equity was considered throughout the project. Applying an equity lens prompted Administration to draft regulations that are based on land use impact, accommodate all housing needs, create more flexible zones and regulations to provide more employment opportunities, and improve livability throughout the city.
- District Planning applied an equity lens through its design and development of public engagement, district planning policy and documentation. Applying a GBA+ approach helped broaden engagement with Edmontonians and their feedback as they learned more about district planning and how their community could change over time. This helped better understand how achieving a 15 minute city can vary among Edmontonians and their ability to connect and access housing, different modes of transportation (including transit), parks and open space, business, and employment opportunities. Feedback from engagement is being used to refine district planning policy, plans, and inform future work.
- The Safe Mobility Strategy included developing an understanding of which neighbourhoods have higher amounts of equity-seeking populations and areas where people were most exposed to transportation safety risks. In addition, Administration worked to better understand which areas have the highest public demand for transportation safety intervention. In many cases, the areas with higher amounts of equity-seeking populations and the greatest needs were not the areas where there was high public demand for safety interventions. This inconsistency demonstrates the need for intentional GBA+ analyses, above and beyond traditional engagement strategies which may rely heavily on public demand.

An additional initiative that builds off of the GBA+ analysis within the Safe Mobility Strategy is the Sidewalk Maintenance Strategy. The strategy considers where people walk the most, where people need sidewalks the most (i.e. high density and/or socially vulnerable areas) and overlays this information with asset condition and future capital work to determine priority areas for targeted sidewalk maintenance.

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In applying an equity lens, Administration is seeking to better understand and consider the views and perspectives of equity seeking groups that are not typically reflected through standard engagement processes, and account for these groups in the design of the services provided. As an example, there is a growing body of research in academia and in the public transit sector highlighting that the travel patterns of people identifying as women have not been well-served in traditional transit networks, despite people identifying as women being more likely than other genders to use transit. They are more likely to complete multiple transfers on a single trip, midday or off-peak trips, and shorter distance trips. These types of trips are consistent with the greater reliance on people identifying as women to complete household work and serve in caregiving roles. Traditional transit networks typically focus on “standard” commuting patterns, which may not meet the specific needs of people identifying as women.

ETS currently designs, monitors, and evaluates service levels according to City Policy C539A - Transit Service Policy. These transit service standards allow for equity considerations within the policy, as well as provide benchmarks for minimum and maximum metrics to guide decisions. ETS is working towards identifying further opportunities where service enhancements could help address unmet needs that may not be evident in evaluations driven solely by boardings or ridership data. The initial goals of this analysis is to identify opportunities for service improvements while also developing an equity-centred approach to guide future service reviews.

Transit Network Analysis

As a starting point for conducting equity analyses, Administration identified neighbourhoods with the highest prevalence of the following demographics: seniors (individuals aged 65+); low-income populations; and Indigenous¹ populations. Low-income individuals are defined as those with household incomes below the low income cut-off (LICO) set by Statistics Canada - as of 2021, LICO for a one-person household was \$27,541. These groups were selected based on the availability of data in the Government of Canada census and the recognition that, at times, these groups are underrepresented in the City of Edmonton’s engagement processes.

According to 2021 Statistics Canada data, in Edmonton, seniors represent approximately 14 per cent of the population, individuals experiencing low income represent seven per cent of the population and individuals that identified as Indigenous represent six per cent of the population. The demographic groups are also represented in the ETS Customer Satisfaction Survey where seniors represented eight per cent of survey respondents in 2022, individuals with incomes less than \$30,000 represented 21 per cent of survey respondents and individuals that identified as Indigenous represented seven per cent of survey respondents.

Administration compared the locations of these populations with the distribution of off-peak (midday, evening and weekend) transit service to explore if there were opportunities for higher frequency routes outside of peak service hours. According to academic and industry research, providing convenient, reliable travel options during off-peak service hours is a key component of

¹ The data used in this analysis is from the 2016 Government of Canada Census which uses the term ‘Aboriginal’. The term ‘Indigenous’ is used in this report for consistency in terminology within the City of Edmonton.

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enabling mobility for equity seeking groups, as this helps to meet needs related to shift work, medical appointments, and after school activities, and recreation.

The initial analysis of these groups demonstrates that many senior, low-income, and Indigenous Edmontonians, particularly those in the downtown and inner-city, are relatively well-served with off-peak, high frequency transit. Areas such as the north-central and north-east areas of Edmonton tend to have higher populations of individuals experiencing lower income levels and have higher Indigenous populations than most areas of the city. There is also a slightly higher level of seniors population in these areas. Increasing transit service frequencies in areas with equity seeking groups may help improve access to transit, better meet the needs of all Edmontonians, and encourage more transit ridership.

On Demand Transit has served equity seeking groups and connected people to jobs, training, healthcare and other services by improving access to transit. In addition to improving off-peak frequencies, there are opportunities to better connect equity seeking communities to transit hubs by providing On Demand Transit service in additional neighbourhoods that do not meet walking distance standards identified in the Transit Service policy.

Each map in the attachments identifies an equity-seeking population and transit routes with 30-minute frequency during weekday evenings and Saturday midday. Routes with 20-minute frequency or better are bolded, and areas with On Demand Transit service are also shown. The final map combines all three equity seeking communities on the same map. As shown on the maps, most routes operate every 30 minutes in the off-peak, and only a small number of routes have better service (primarily Frequent Routes and LRT). A description of the attachments are below:

- Attachment 1, Seniors Population and Transit Service shows that the distribution of seniors is concentrated in older neighbourhoods outside the core. There is little overlap between neighbourhoods with high seniors population, and Indigenous and low-income neighbourhoods. Many neighbourhoods continue to be close to frequent service, though seniors may value closer service over more frequent service. Many neighbourhoods are also served by On Demand Transit, which may be a better fit for some seniors with lower mobility as it can reduce walking distances, but we have received feedback that many seniors find On Demand Transit difficult to access as it requires pre-booking your pick-up through a phone number or app.
- Attachment 2, Low-Income Population and Transit Service shows significant overlap with Indigenous populations. Low income population is concentrated in the core and most neighbourhoods have frequent midday transit service within or adjacent to the neighbourhood. Some neighbourhoods further from the core only have 30 minute off-peak service.
- Attachment 3, Indigenous Population and Transit Service shows that the Indigenous population is more concentrated in neighbourhoods north of the river, especially in the north-central and northeast. Many of these neighbourhoods closer to the core are served by

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frequent off-peak transit service. All neighbourhoods have 30-minute transit service except for Winterburn Industrial West.

- Attachment 4, Equity Seeking Communities and Transit Service shows that neighbourhoods with more than one equity seeking group (gray areas of the map) are concentrated in the north-central and north-east and most are adjacent to frequent service.

Next Steps

Conducting further research, analysis, and engagement will help shape further improvements to the transit network during the scheduled service adjustments, which occur five times annually, or as part of a larger service initiative. The inclusion of multiple intersecting identity factors, when using a GBA+ process, will further illustrate the layered needs which must be considered when making equity based transit network decisions. As resources are allocated to provide more equitable access to transit, the revised transit network will be further improved and strengthened to meet the needs of more Edmontonians.

Further equity analysis will include groups such as:

- Racialized groups
- Newcomers
- LGBTQIA2S+ community
- The intersection of multiple identity factors, such as racialized women (or those that identify as such), Indigenous youth, and seniors who have individual mobility challenges, etc.

In addition to equity improvements to the transit network, Administration is also reviewing other aspects of the transit journey that may have equity considerations. This includes reviewing seating options at bus stops, the trip booking process for On Demand Transit service, travel training for youth riders, safety and security improvements, continuing to remove barriers to accessing fare support programs, and accessibility improvements to bus stops, transit centres or LRT stations.

COMMUNITY INSIGHT

More than 40,000 Edmontonians participated in community engagement to design and develop the revised transit network. This extensive public engagement included 37 community workshops, 11 targeted workshops with specific stakeholder groups, 23 coffee chat meetings with additional community organizations, and an online survey. Community groups who participated in this process reflected the perspectives of seniors, persons with disabilities, people that identify as women and low-income residents. Additional engagement to design the On Demand Transit Service was conducted in candidate neighbourhoods, to hear about the transit needs in these areas.

Since the launch, thousands of Edmontonians have shared feedback and requests for service improvements. Administration has been making service adjustments five times per year, incorporating feedback and aligned with the Transit Service policy and budget. Additionally, there

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is ongoing public engagement with Edmontonians regarding plans for a mass transit network for 1.25 million people. This engagement will inform an implementation framework for mass transit.

Additional public engagement was not completed for this specific report but the equity analysis conducted took into account the information gathered from Edmontonians in the processes outlined above. This analysis will continue to identify groups that are often missed or underrepresented from traditional public engagement due to a variety of factors including language, economic, cultural, or other types of barriers, to inform future engagement activities. Through the identification of these groups, and actively seeking out their needs and preferences, ETS can continue to pursue a transit network that serves all Edmontonians.

GBA+

When making transit network decisions, ETS considers community feedback, alignment with Policy C539A, and resource constraints. However, some equity seeking groups may have difficulty in providing feedback, engaging, or otherwise communicating their needs for a variety of reasons outside of their control. As a result, the transit needs of these equity seeking communities may not be fully captured when making transit network decisions.

The transit network has historically emphasized travel to and from central Edmonton (downtown and post-secondary institutions) during peak commuting times. This service may not be well suited to the travel patterns of Edmontonians who work outside the core and have shifts that do not coincide with peak times. People that identify as women, for example, tend to make more short distance trips during the midday and off-peak hours when there is less frequent transit service. Seniors who rely on community transit service, both conventional and On Demand, have found it difficult to go out in the evenings as most service ends at 4 p.m.

The work underway by ETS to review its network through an equity lens is in alignment with GBA+ principles; it aims to identify equity-seeking populations that are receiving inadequate transit service to meet their needs, remove barriers that would lead to improved transit service, and continually work towards an equitable transit network that enables mobility for all Edmontonians.

ATTACHMENTS

- Figure 1: Indigenous Population and Transit Service
- Figure 2: Low-Income Population and Transit Service
- Figure 3: Seniors Population and Transit Service
- Figure 4: Equity Seeking Communities and Transit Service