

ETS Branch Highlights Report

Date: October 24, 2022

1. RIDERSHIP

Ridership calculations are currently under review. The information is temporarily unavailable.

2. ETS UPDATES

On Demand Transit Service Delivery Model

On October 11, Administration presented the On Demand Transit - Service Delivery Model report to Council. The report included an analysis of the On Demand Transit service and the potential of a public service delivery model. On Demand service launched in April 2021 as part of the Bus Network Redesign (BNR) to address first kilometre / last kilometre challenges, connecting 37 neighbourhoods and 16 seniors' residences with low demand for fixed route service to the conventional transit network. Since then, On Demand Transit has expanded to 14 additional neighbourhoods in response to public feedback and with the realization of cost efficiencies. The service has contributed to transit ridership recovery and the number of On Demand trips have increased from 21,000 in September 2021 to 32,000 in May 2022.

On Demand Transit service is currently being delivered by a third-party contractor who owns and operates 57 On Demand buses. Shifting to a public service delivery model would require Administration to purchase vehicles through capital investment, requiring additional transit garage facility capacity. Therefore, a public service delivery model would be contingent on capital funding and delivery of the new transit garage in 2027 to proceed, as outlined in the ETS Fleet Storage and Maintenance Facility Strategy.

2023-26 Budget Process

During November and December, Council will be considering the 2023-26 budget which includes the capital and operating budgets and utility services capital and operating budgets. The budget process will begin on October 31, starting with the capital budget. Council will be considering budget items that fund programs and projects to maintain transit service and grow the mass transit network to support a population of 1.25 million by 2030. The public hearing will take place on November 28-29, offering the opportunity for residents to speak to Council about the budget.

ETS Stuff a Bus 2022

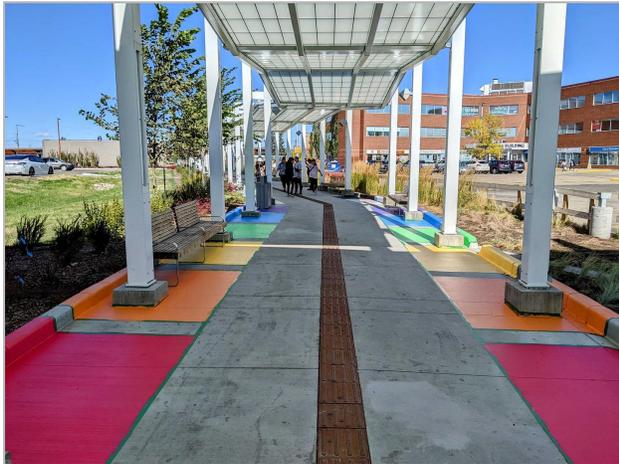
In partnership with Save-On-Foods, ETS will be launching the annual ETS Stuff a Bus campaign in November to support the food bank during the holiday season. As part of the campaign, ETS

buses and Transit Peace Officer cruisers visit Save-On-Foods locations, collecting non-perishable food and cash donations for Edmonton’s Food Bank. Since 1995, Stuff a Bus has collected over 553,000 kilograms of food and \$496,000 in cash donations, contributing to the fight against hunger in our city.

3. ETSAB INFORMATION REQUESTS

Mill Woods Transit Centre Pride Walkway

The Pride Walkway at Mill Woods Transit Centre was an initiative part of the Community Based Budgeting project led by Councillor Andrew Knack and Councillor Keren Tang. The project allows Edmontonians to submit ideas for small projects to support Ward Karhio and Nakota Isga with a chance to receive a Community Choice Award. During September, the Pride Walkway at Mill Woods Transit Centre was painted by community members and volunteers in collaboration with ETS. Organizations who participated in the initiative include Institute for Sexual Minority Studies and Services (iSMSS), Camp Fyrefly, Sangat Youth, and South Edmonton Youth.



Arc Fare Vending Machines Signage

ETS is currently working on signage for the Arc fare vending machines to help clarify some confusion among non-Arc cardholders attempting to use the machines to purchase transit fares. The Arc fare vending machines located in LRT stations and some transit centres can only be used by Arc pilot volunteers at this time. Riders who do not have an Arc card can purchase transit fares at older ticket vending machines or any of the other ETS sales channels, including the retail outlets and online store.

Battery Electric Buses vs. Hydrogen Buses

ETS is committed to helping the City meet climate resilience goals and reduce carbon emissions by transitioning to a zero-emission fleet. Since introducing the first 20 electric buses in 2020, the electric fleet has grown to 60 buses as of 2022. In 2023 ETS and Strathcona County will begin piloting Alberta’s first two hydrogen transit buses after safety protocols, training and infrastructure are established.

Battery electric buses are powered by an electric motor that obtains energy from on-board batteries. Alternatively, hydrogen fuel cell buses generate electricity through an electro-chemical reaction with the fuel cell and hydrogen fuel. In 2021, there were approximately 606 battery electric and hydrogen buses deployed, on order or soon to be on order across transit agencies in Canada. Both electric and hydrogen buses offer a clean and environmentally sustainable ride.

Key facts about electric buses and hydrogen buses:

Electric Buses	Hydrogen Buses
<ul style="list-style-type: none"> ● Electric buses have very low emissions. ● Electric buses generate roughly 40% fewer GHG emissions than current diesel buses (when considering production of electricity vs diesel). ● Electric buses have a travel range of up to 350 kilometres. ● Electric buses are quieter than current diesel buses. ● Electric buses are roughly 30% less expensive to service and maintain than current diesel buses. ● It can take approximately 3.5 hours to fully charge an electric bus. ● Based on available information, we expect the lithium-ion battery to last approximately 12 years. ● Each electric bus is able to eliminate approximately 1,690 tons of carbon dioxide over its 12-year lifespan (Source: U.S. Department of Transportation). This is the equivalent of taking 27 cars off the road for each electric bus. ● The bus body is made of carbon-fibre-reinforced composite material. 	<ul style="list-style-type: none"> ● The buses produce no exhaust-pipe emissions and are classed as “zero emission capable.” ● The buses generate roughly 40% fewer GHG emissions than current diesel buses (when considering production of electricity vs diesel). ● The buses will rely on hydrogen produced in Alberta’s Industrial Heartland. ● Hydrogen fuel cell buses have a travel range of up to 480 kilometres. ● The fuel cell uses hydrogen and oxygen to generate electricity that powers the bus. ● The byproducts of the chemical reaction are heat and water. We recover the heat for heating the bus, and water comes out of the exhaust pipe of the bus. ● Hydrogen fuel cell buses are quieter than current diesel buses. ● Hydrogen fuel cell buses are roughly 30% less expensive to service and maintain than current diesel buses. ● Each hydrogen fuel cell bus is able to eliminate approximately 1,690 tons of carbon dioxide over its 12-year lifespan (Source: U.S. Department of Transportation). This is the equivalent of taking 27 cars off the road for each hydrogen fuel cell bus.

LRT - Major Rail Incidents

The safety of riders and staff is a top priority and one incident is too many. ETS has several safety measures in place to prevent the risk of rail incidents occurring within the LRT system. These

measures include the use of gates, warning bells, flashing lights, signage and pedestrian signals to alert riders, pedestrians, vehicle drivers and City staff when it is not safe to cross the tracks. Between January and September 2022, there were seven major rail incidents within the LRT system which included major vehicle collisions, fatalities, serious injuries and a person being hit by a train. The table outlines the number of major rail incidents by type from 2018-2021:

Major Incident Type	2018	2019	2020	2021	Jan-Sep 2022
Major Vehicle Collision ¹	1	-	2	4	2
Non-Vehicle Related Serious Injury	3	-	-	-	2
Non-Vehicle Related Fatality	4	-	1	3	3
Total Major Incidents	9	-	3	6	7

1. Collision between a passenger vehicle and train that has resulted in major damage, serious injury or a fatality.

Note: There may be some differences in incident categorization between the years.

Security Cameras on Buses

There are over 3,900 security cameras across the ETS transit network, including multiple cameras on buses and trains. The ETS Control Centre regularly monitors cameras and can dispatch security personnel if needed. ETS buses are equipped with security cameras located near the bus operator’s seat and on the exterior of the bus near the front door.

4. ETS COUNCIL REPORT TRACKING - 2022-2023

Report #	Report Title	Meeting Date*	Committee*
Upcoming reports being led by ETS:			
CO00576	Transit Fare Fines - Repayment Options	Oct 26, 2022	Exec
CO01192	Ride Transit and Leisure Access Programs	Oct 26, 2022	Exec
CO01450	Transit Network Equity Analysis	Nov 22, 2022	UPC
CO01337	Edmonton Transit Services in Newer Developing/Developed Communities	Feb 2023	UPC
Other upcoming reports of interest:			
OCM01136	Amendments to Bylaw 8353 Conduct of Transit Passengers	Fall 2022	CPSC
FCS01246	Revenue Source for Transit - Potential, Risk and Implementation and Intergovernmental Advocacy	Q1 2023	Exec

*Subject to change

AC = Audit Committee

CC = City Council

CPSC = Community and Public Services Committee

Exec = Executive Committee

IRCD = Inter-municipal and Regional Development Committee

UPC = Urban Planning Committee