

CITY OPERATIONS

Edmonton



EDMONTON TRANSIT SERVICE

2021/2022 Annual Service Plan



INDIGENOUS ACKNOWLEDGEMENT

Edmonton Transit Service acknowledges that our City operates within the traditional land of Treaty 6 Territory. We acknowledge this land as the traditional territories of many First Nations such as the Nehiyaw (Cree), Dene, Nakota Sioux (Stoney), Anishinaabe (Saulteaux), and Niitsitapi (Blackfoot). We also acknowledge this as the Métis' homeland and the home of one of the largest communities of Inuit south of the 60th parallel.

The City of Edmonton owes its strength and vibrancy to these lands and the diverse Indigenous Peoples whose ancestors' footsteps have marked this territory, as well as settlers from around the world who continue to be welcomed here and call Edmonton home.

Together we call upon all our collective honoured traditions and spirits to work in building a great city for today and future generations.

THE CITY OF EDMONTON INDIGENOUS FRAMEWORK

The Indigenous Framework, released in 2021, is a living document that will continue to evolve over time as our relationships with Indigenous Peoples continue to grow. Over the course of 2021, the Seven Commitments were activated through the development of both corporate-wide and department-specific action plans. City employees had the opportunity to participate in a wide variety of learning opportunities and were encouraged to and given the appropriate support to apply the four roles (listener, connector, partner, and advocate) in their everyday work. City Operations and Edmonton Transit Service's focus areas for 2022 include but are not limited to:

- » Indigenous Framework Communications Plan (started in 2021).
- » Land acknowledgements in documents and at each Edmonton Transit Service weekly meeting to express gratitude and connect to Indigenous people who reside on the land we gather and have lived on this land historically (started in 2021).
- » Leadership presence at Indigenous events (started in 2021).
- » Review Branch Action Plan (BAP) and work plans to identify opportunities to connect work to the Truth and Reconciliation Calls to Action.
- » Establish clear signage at Edmonton Transit Service facilities confirming commitment to anti-racism and that discrimination will not be tolerated.
- » Place signage with land acknowledgement in buildings/facilities.
- » Provide notice of Indigenous events on facility notice boards, electronic displays, etc.
- » Encourage and provide support (and time, if appropriate) for staff to attend Indigenous events.



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A blue Edmonton Transit Service bus, number 4843, is shown in the background. The bus has "Edmonton Transit Service" written on its side and "4843" on its front. A yellow horizontal bar is on the left side of the page.

MESSAGE FROM THE BRANCH MANAGER



Edmonton Transit Service (ETS) safely moves hundreds of thousands of transit riders every day connecting people to their community and enabling access to employment, health, social and education opportunities. As we continue to welcome more people back to transit, our teams are working hard to improve the rider experience – making it easier for people to choose transit as part of their daily journeys. We accomplished a lot in 2021 and have more exciting opportunities ahead for 2022.

This year, we will continue to work with our City partners to further improve the rider experience. This includes continuing to adapt and respond to transit service needs following the implementation of the Bus Network Redesign, further enhancing safety and security measures on transit, and continuing with our phased implementation of Arc, the regional smart fare payment technology. We have renewal work underway to continue to improve our transit facilities, and I look forward to seeing these revamped spaces in action again.

We will also bring another 20 electric buses into our fleet reaching a total number of 60, implement a pilot test of a hydrogen electric bus, and continue to work on plans for our next transit garage to allow opportunities for service growth and lower our

greenhouse gas emissions. Lastly, we are excited about the launch of our Valley Line Southeast service later this year, adding an urban-style LRT to our layers of transit service. This list is “the tip of the iceberg” – as we have more information outlined in this Annual Service Plan and I encourage you to read ahead.

I am very proud to work with more than 2,200 employees and partners across the City to deliver a safe, reliable and convenient transit service for Edmontonians. I look forward to the year ahead and what we will accomplish together with our community.

EXECUTIVE SUMMARY



Public transit plays an essential role in shaping our urban communities. Transit reduces traffic congestion, builds more compact and lively neighbourhoods, reduces our carbon footprint, links workers with jobs and riders with businesses and enables Edmontonians to be connected to urban life.

Despite the ongoing impacts of the COVID-19 pandemic, ETS remains an essential service to thousands of Edmontonians each day and will continue to play a pivotal role in how our community looks, feels and moves.

The Transit Strategy, approved by Council in July 2017, reflects the priorities of Edmontonians and will modernise Edmonton's transit system. By understanding our riders evolving needs and expectations, we are focused on providing a transit journey that is safe, reliable, convenient and fast. The strategy identifies the long term vision for ETS and will guide development and investment in the transit system, which is foundational to building a great city. ETS has been putting tremendous effort to implement the strategy over the past five years, and will continue to do so over the next few years.

The ETS Annual Service Plan highlights the ambitious initiatives and service improvements that are underway, in line with our strategy. As a fully integrated public service, ETS serves a wide variety of riders from all areas of the city, and in doing so, is continually improving the nature of the service we provide. With the newly implemented bus network, on demand service, ongoing safety and security improvements, LRT upgrades, and various technology advancements, ETS strives to continue enhancing the transit experience of Edmontonians.

Appendix A provides a broader understanding of key performance measures for the branch and transit service. Appendix B provides a route report card for each of ETS' routes highlighting boarding information, on-time performance and each route frequency.

1.0 INTRODUCTION

The Edmonton Transit Service Annual Service Plan provides an overview of service changes, major projects and infrastructure developments planned for 2022, while recapping some accomplishments from 2021.

1.1 STRATEGIC ALIGNMENT

The City of Edmonton has adopted the ConnectEdmonton strategic plan (2019 – 2028) to guide how Edmonton grows and develops and the services provided to our community. The four strategic goals of the ConnectEdmonton strategic plan are:



HEALTHY
CITY



URBAN
PLACES



REGIONAL
PROSPERITY



CLIMATE
RESILIENCE

The three objectives to advance the City of Edmonton's goals are:

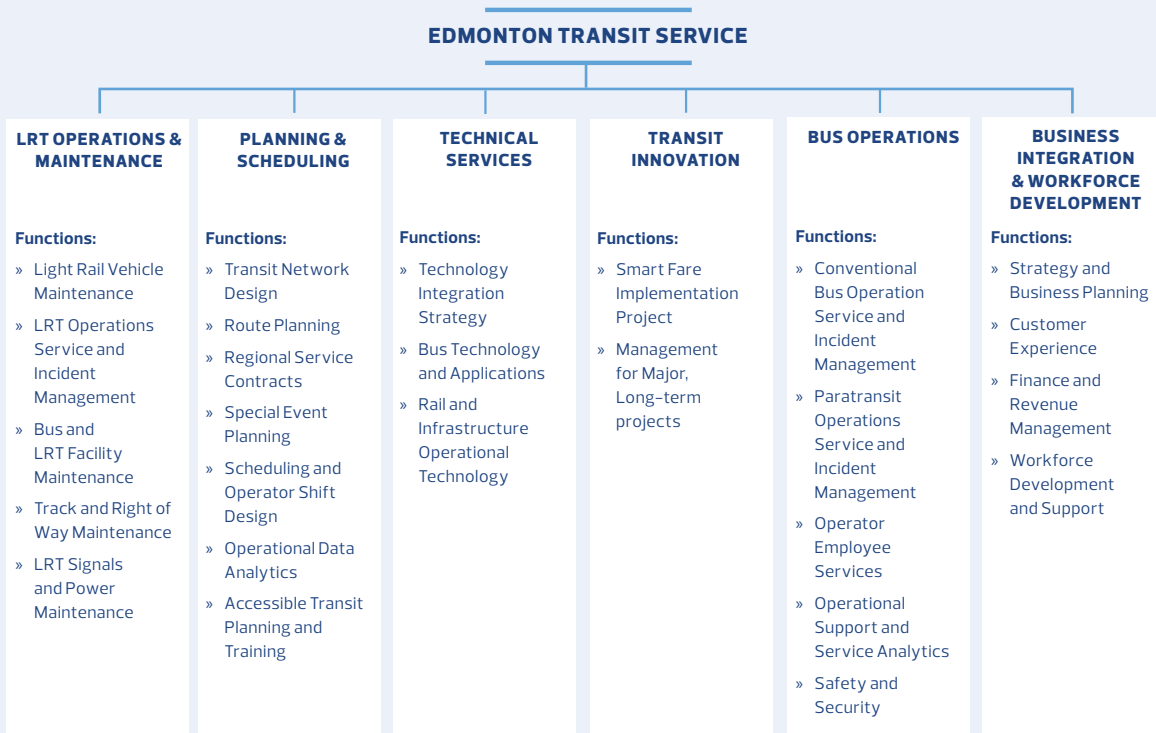
- » **Strategic Objective:** Make transformational impacts in our community.
- » **Public Service Objective:** Deliver excellent services to our community.
- » **Supporting Service Objective:** Manage the corporation for our community.

ConnectEdmonton has also informed the City Plan – Edmonton's approach to how it builds and develops to welcome an additional one million residents. ETS directly and indirectly supports these strategic plans through its operations and through transit's ability to support future initiatives as Edmonton grows.

2022 will also mark the midpoint of our 10-year strategic plan: the Edmonton Transit Strategy. Approved in 2017, this plan was developed to guide specific service improvements to ETS. These improvements include the bus network redesign completed in 2021, redesign of the transit Fare Policy completed in 2019, as well as the adoption of Arc, the smart fare electronic payment system.

1.2 BRANCH STRUCTURE

ETS is a branch within the City of Edmonton's City Operations department. There are six sections within the branch.



Transit Service – Delivering integrated public transit service to Edmontonians to enable mobility

BUS & LRT

Conventional transit service

DELIVERY MODELS:

- » In house: conventional bus and high floor LRT
- » P3 Valley Line Southeast LRT
- » Contracted: On Demand service, Security guards, Community Outreach Transit Team

PARATRANSIT

Door-to-door services to Edmontonians who are unable to use conventional transit due to cognitive or physical disability.

DELIVERY MODELS:

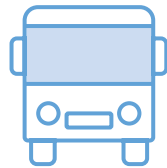
- » In-house and up to 50% contracted delivery



YEARS OF TRANSIT SERVICE AS OF 2021

Starting with street car service.

89 YEARS OF BUS SERVICE
AS OF 2021



41,785,363 KM

Annual Vehicle kilometres (Bus)

848,611 KM

Annual Vehicle kilometres (Electric Bus)

1,043 TRIPS AROUND THE WORLD

completed by buses in 2021

47 YEARS OF LRT SERVICE
AS OF 2021



7,064,443 KM

Annual Vehicle kilometres (LRT)

177 TRIPS AROUND THE WORLD

completed by LRT in 2021



25 Transit Centres



5,896 Bus Stops



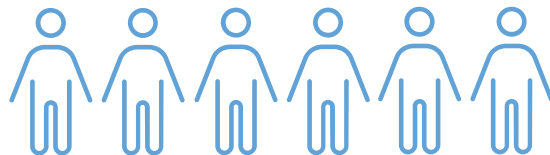
18 LRT Stations

1,750

Conventional Transit Operators

134

DATS Operators



Bus



121
REGULAR
BUS
ROUTES

81
SCHOOL
BUS
ROUTES

5
REGIONAL
ROUTES

40
Electric buses
Adding 20 more in 2022

809
40 foot buses

54
60 foot
articulated buses

49
Community
buses

952
TOTAL



On Demand



57
number
of buses

5,409
weekly trips

23,848
monthly trips

223
community stops

12
transit centres

LRT



76
TOTAL
TRAINS

27.7 KM
TOTAL LENGTH
OF TRACK



*Additional 13 km will be added with VLSE.
Running during weekday peak hours.*

DATS

130 
DATS buses



13,222
Registrants

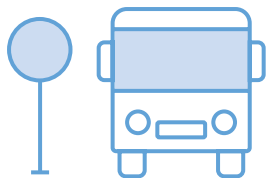
3 
Light duty
vans

382,133
Trips 

2,968,240
Kilometres driven
annually

98.7% 
DATS ride
accommodation
rate

Transit Stops / Centres



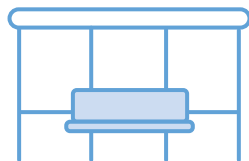
5,267
BUS STOPS
IN SERVICE

25
TRANSIT
CENTRES

2,317
ADVERTISING
BENCHES

2,629
GARBAGE
CANS

6
GARAGES



2,090
BUS
SHELTERS

ETS YEAR IN REVIEW

Performance Measures



95.2%
Bus On-Time
Performance

96.2%
DATS On-Time
Performance

Customer Measures

66.3%

Percent of Highly
Satisfied Users on
ETS. *Conventional
User Survey.*

82%

Percent of
Satisfied Users
on ETS

1,900

Number of monthly
passes distributed to
the homeless (PATH
program)

Ridership

COVID-19 PANDEMIC

86,715,541
2019 RIDERSHIP

47,484,519
2020 RIDERSHIP

40,683,308
2021 RIDERSHIP

606,000

Number of Passenger boardings on
an average workday



2,089,752

Revenue Hours
Excluding DATS

45%

Farebox recovery
ratio

Notes:

- » Annual vehicle kilometres operated by revenue vehicles for regular auxiliary services.
- » Annual vehicle kilometres are the total of revenue passenger kilometres, deadhead kilometres, garage in/out kilometres, other non-revenue kilometres.
- » The annual vehicle kilometre for ETS buses are reported via CUTA records and include all bus types and community buses.
- » The annual vehicle kilometres for ETS LRT vehicles are reported through GOAL records.
- » Trips around the world are calculated with the equatorial circumference of the earth (40,075 km).



LRT Operations and Maintenance manages ETS' LRT service including the maintenance and renewal of LRT vehicles, tracks, LRT systems (traction power, signals, and substations), transit facilities (LRT stations and transit centres), tunnels, LRT bridges and all bus stops and bus shelters across the City. LRT Operations and Maintenance is also responsible for managing the day to day LRT service, making schedule changes and reacting to planned and unplanned service impact events.

Planning and Scheduling is responsible for developing optimally designed transit routes and schedules to meet the objectives of Edmonton's Transit Strategy and providing safe, reliable and convenient service for riders. This includes the recent implementation of the Bus Network Redesign in 2021. In addition, Planning and Scheduling manages activities related to special events and regional partnerships.

Technical Services manages ETS' specialized transit technology systems, applications and tools and is accountable to ETS' technological integration strategy. This includes programming of route information into various apps used by riders, as well as the computers onboard buses that provide route information to operators. Technical Services also manages the rail communications and infrastructure

technologies such as the ETS Control Centres, LRT and bus transit centre facilities.

Transit Innovation Programs is responsible for implementing new and innovative products into ETS. This includes the implementation of Arc, the electronic fare payment system.

Bus Operations manages ETS' conventional bus service, Dedicated Accessible Transit Service (DATS), On Demand Transit, operator employee services and transit security. Bus Operations administers and manages service on the road on all bus routes within Edmonton. Bus Operations also manages transit security and maintains the relationship between ETS, Community Services and Corporate Security.

Business Integration and Workforce Development includes revenue, budget and business planning, policy support, fare program management, customer care and workforce development.

The section defines the branch strategy and ensures branch plans are aligned with department and corporate goals.

1.3 IMPACTS FROM COVID-19

The COVID-19 pandemic and related disruption has changed how people work, shop and gather, but it has also reminded us about the essential nature of transit service. Each day, thousands of Edmontonians use transit to get to work, school, healthcare appointments and connect with their communities.

The path that ETS is taking to realise its goals may have changed in the past 18 months due to this disruption, but the destination remains the same – providing safe, convenient and reliable transit service to enable mobility for Edmontonians. Our teams and partners have worked tirelessly to keep people moving throughout the pandemic. Our commitment to enhanced cleaning and disinfecting our facilities, buses and trains continues. In late 2021, we reached our highest level of bus boardings since the start of the pandemic and we anticipate it will continue to increase throughout 2022.

2.0 HIGHLIGHTS FROM 2021



2.1 BUS NETWORK REDESIGN AND ON DEMAND SERVICE

After several years of public engagement, research and design, the Bus Network Redesign was implemented on April 25, 2021, the same day that On Demand Transit was launched. The previous bus network was implemented in 1997 and had not significantly changed over the last 24 years. The revised network reflects input from more than 40,000 Edmontonians and follows principles established with Council through the Transit Service Policy (C539A). The network redesign responds to on-time performance, crowding on buses, and inability to provide transit service to new and growing areas.

To support the transition to the new network for riders, ETS developed a public engagement campaign. Online tools allowed riders to pre-plan their routes before the network launched, and ETS staff were on hand to support in-person engagement sessions during the first several weeks of the launch.

On Demand Transit was introduced alongside the revised bus network to complement regular bus service and provides service to 37 neighbourhoods and 16 seniors residences. The service provides the right amount of service for areas that typically have

lower demand, or are geographically isolated. On Demand transit ridership has steadily increased since its launch and now averages slightly under 6,000 rides per week.

To record transit user feedback about the new bus network, ETS launched an online feedback form and over 1,900 responses were recorded. The most common issue raised was the removal of service on the Valley Line West LRT corridor. To mitigate these concerns, a new shuttle bus route was created to provide service between Jasper Place Transit Centre and Unity Square along Stony Plain Road during LRT construction.

Additional feedback pointed to a lack of transit service to the recently developed neighbourhood of The Hills at Charlesworth. In response, ETS introduced On Demand Transit service to the neighbourhood on February 14, 2022. This new addition provides residents of The Hills at Charlesworth a direct connection to Mill Woods Transit Centre.

Ongoing concerns of increased walking distances to the nearest bus stop were also noted. This issue was anticipated from the onset of the Bus Network Redesign since one of the route design principles was an increase in walking distance from 400 metres to 600. Concerns about walking distances were related to a lack of service in newer areas where the availability of On Demand Transit was not well-known and along the Valley Line West alignment. There were also some comments about increased walking distance, and general comments about the increased walking distance related to the policy change.

The City has been monitoring performance of Edmonton's bus network closely, listening to Edmontonians about opportunities to improve the user experience and refining the service in response to community needs. Since the implementation, more than 50 service adjustments have been made.



2.2 CONSTRUCTION OF VALLEY LINE SOUTHEAST LRT

Throughout 2021, TransEd, the private operator of the Valley Line Southeast LRT, continued to build and test Edmonton's newest LRT line. In anticipation of service commencement, ETS has made several changes to the bus network in Southeast Edmonton to provide bus service connections to almost every new station along the line. In April 2021, ETS launched the Valley Line Southeast precursor bus service that would operate until the LRT line opens to the public. Service on the precursor express bus route was designed to be very frequent (four to five minutes in the peaks) and use a significant component of Edmonton's articulated bus fleet.

2.3 SAFETY AND SECURITY IMPROVEMENTS

Safety and security on public transit is of highest importance and we'll keep improving our efforts to make transit safe for everyone – from the staff who operate, clean and guard transit – to everyone who relies on this service to get to their jobs, school and the places they need to go, everyday.

City Administration works closely with EPS to conduct patrols in transit to support riders. In the fall of 2021, the City launched the Community Outreach

Transit Team (COTT) that partners Transit Peace Officers with Bent Arrow Outreach Workers with the aim of building relationships and connecting individuals within the transit system to specialised community services and support to increase safety and reduce harm. COTT is guided by the values of dignity and respect, provides coordinated care, and will be delivered through a compassionate, trauma informed and human-centred lens. The partners are committed to the central role that connections to culture, land and relationship must play and are committed to use alternative approaches that have not been attempted in the past.

In addition to the COTT program, ETS continued to deliver a safe transit experience with:

- » Security guards onsite at 21 transit centres and LRT stations
- » Transit Watch – a discreet reporting tool which allows riders to text or call 780-442-4900 to report a concern 24/7
- » Emergency blue phones at all transit facilities that connect to the Control Centre
- » Push alarms on trains that connect to the train operator
- » Over 3,800 security cameras monitor transit service across the system



- » The use of video analytics to automate trespasser detection and deterrence for street level LRT tunnel entrances

2.4 SPECIAL EVENTS SUPPORT

In 2021, ETS provided frequent shuttle service to and from the Heritage Festival at Hawrelak Park. ETS also provided enhanced services for sporting events that were restarted in 2021, such as Park & Ride service for the Canadian Football League. In the seven home games hosted by the Edmonton Elks, Park & Ride helped move more than 21,400 people by bus and more than 27,200 by LRT.

ETS played a crucial role in supporting the FIFA events. Over 300 bus/LRT operators and 55 inspectors and support staff helped bring fans to World Cup Qualifier games at Commonwealth Stadium on November 12 and 16, 2021. In addition to frequent LRT service, Park & Ride buses operated to and from the Stadium throughout the night. This was a big team effort across the City, as over 6,000 people took Park & Ride buses to the games and over 40,000 people took the LRT to and from Stadium Station. The LRT operated at five minute service frequency for both FIFA games which helped to clear the massive crowd in about an hour after the games ended.

2.5 ETS RIDER RESEARCH

ETS is committed to a culture of continuous improvement and this means understanding the evolving needs and expectations of our riders. To do so, ETS conducts regular surveys and other rider feedback tools to understand user perceptions and travel behaviour. This has been especially important during the COVID-19 pandemic to better understand riders' needs. In listening to feedback, ETS is able to more effectively respond and adapt. ETS receives feedback through various tools, including 311 calls, feedback forms, rider inquiries and Council inquiries. In 2021, ETS continued this important work through a monthly rider survey, and surveys focused on DATS users, non-transit riders and Edmonton based businesses and organisations. In addition, an app based mobile ethnography tool was used to assess rider experience with the bus network implementation.



2.6 PATH (PROVIDING ACCESSIBLE TRANSIT HERE) ADMINISTRATIVE REVIEW

The PATH program provides 1,900 monthly and youth passes to those experiencing homelessness or who are at risk of experiencing homelessness. The program has been highly successful in removing transportation barriers for those most in need. An administrative review initiated in 2021 is identifying areas for improvements to best meet the needs of its clients. In tandem, the Donate-A-Ride program, which provides a similar service but with a slightly different scope of clients, is also being reviewed to identify how the PATH and Donate-A-Ride programs can work together to provide different types of fare products to the clients they serve under Arc (our smart fare electronic payment system).

2.7 MILL WOODS TRANSIT CENTRE

The Mill Woods Transit Centre opened in 2021. This transit centre is built adjacent to the Valley Line Southeast LRT line and provides connections to bus routes in the Southeast quadrant of Edmonton. The transit centre features modern accessibility options and will support redevelopment of the Mill Woods Town Centre which includes plans to expand both residential housing and commercial businesses.

2.8 INTERIM WEST EDMONTON MALL TRANSIT CENTRE AND VALLEY LINE WEST

To accommodate Valley Line West LRT construction, the West Edmonton Mall Transit Centre was closed and moved to an interim location to the north of the mall for the next five to six years, until the Valley Line West construction is completed in the area. The interim Transit Centre has heated bus shelters and transit operator washroom facilities so it can continue to provide seamless service to riders and Bus Operators.

2.9 METRO LINE LRT SIGNALLING

The Metro Line alternate signalling system is now in place and is functioning reliably as per the intended design. The Metro Line alternate signalling system gave us the confidence to move Capital Line service frequency to five minutes during the peak periods in September 2021, improving service on the entire LRT system. Transit riders are now able to board a Capital Line train downtown every five to six minutes during weekday peak hours (6–9 a.m. and 3–6 p.m.), including between Churchill and Clareview LRT Stations.

2.10 TECHNOLOGY UPDATES

In 2021, ETS made a number of upgrades to its technology infrastructure. These include major version upgrades of HASTUS (transit scheduling software) and TransitMaster (Computer Aided Dispatch / Automatic Vehicle Location software), along with upgrades to the

Text and Ride and Buslink systems to provide real time information. New mapping data was used to add a turn-by-turn navigation system on the buses, helping Operators with the transition to the new bus network routes. There is also an ongoing project to add detours, stop closures and other service adjustments or disruptions to real time tools.

2.11 INTEGRATION WITH ACTIVE TRANSPORTATION MODES

Starting in 2021, ETS launched a pilot project to install bike lockers at two LRT stations, to better improve integration with active transportation modes. ETS continues to explore different bike locker options and gather public feedback before rolling this program out to all major facilities with high amounts of bike use. In the fall ETS adjusted service to pilot allowing bikes on the LRT at all times of the day. These steps further enable mobility for Edmontonians.

2.12 TRAIN TO TRACK WORKER PROTECTION SYSTEM

In 2021 ETS successfully installed a train to track worker communication and warning system. This system warns wayside workers when a train is approaching through an arm band that flashes, vibrates and gives audible warnings when the train is approximately 30 seconds away. This same system also alerts LRT Operators in the LRT cab if they are approaching a work crew. The warning system will provide a safer work environment for workers with the aim of eliminating all near misses and incidents between train and wayside workers.

2.13 RAIL GRINDING

Every two to three years, ETS hires a speciality contractor to grind the rails which involves restoring the profile or shape of the rail. Rail grinding smooths out the rail which maintains a smooth ride quality, reduces noise, and prolongs the life of the rail and LRT train wheels. Without it, LRT riders would experience a rockier ride and trains would have to run at a slower rate. This work is vital to keeping the LRT rail system safe, reliable and comfortable for riders.

2.14 WATER BOTTLE FILL STATION INSTALLATIONS AT TRANSIT FACILITIES

In late 2021, ETS started installing water bottle fill stations in the public areas of our major facilities to give Edmontonians access to clean drinking water. This service enhancement supports riders and individuals experiencing homelessness during extreme heat wave events. All water bottle fill station installations are expected to be installed before April.



800 STRAIGHT DAYS OF MEETING LRT TRAIN CAR DEMAND

In late 2021, the LRT Fleet Engineering and Maintenance team crossed a remarkable milestone – for 800 days in a row there were enough train cars available to provide the required level of LRT service for each day. This is a huge accomplishment and milestone considering about 40 per cent of our LRT fleet is over 40 years old and there are few spare vehicles available. If the team does not meet the demand for LRT train car book out rate, there would be fewer LRT cars on the track which means shorter trains and reduced passenger capacity.

3.0 2022 TRANSIT SERVICE PLAN AND SERVICE IMPROVEMENTS

3.1 BUS AND LRT SERVICE PLAN

Looking forward to 2022, and in the spirit of continuous improvement, ETS will make a number of important changes to its service that will continue to improve the rider experience. ETS has five schedule changes per year, to reflect changes in demand due to school calendars as well as changing seasonal travel patterns.

February Schedule Changes

The following is a summary of service changes implemented on February 6, 2022:

- » Changes to route 924 to accommodate the construction of Valley Line West and associated closure of Meadowlark Transit Centre. The route 924 loops around Meadowlark Health and Shopping Centre with a new stop by the grocery store on 156 Street.
- » The addition of a stop on Route 900X and Route 940X at 112 Street and Jasper Avenue
- » Adjustments of schedules to reflect observed travel times on Routes 4, 7, 8, 9, 107, 117, 120X, 121, 506, 589, 716, and 902
- » Adjustment of schedule on the School Special 684 to reflect school schedule

April Schedule Changes

Changes in the April timeframe are primarily to reflect changes in travel demand due to post secondary schools ending winter term classes. Service levels in the peak periods are adjusted to match anticipated reduced demand. Service changes expected as of April 24, 2022, include:

- » The following routes will transition to 10-minute frequency in the AM peak:
 - 2, 7, 110X, 120X, 500X, 700X, 721, 722
- » The following routes will transition to 12-minute frequency in the AM peak:
 - 3, 4, 108, 518, 702, 703, 707, 910X, 917

- » The following routes will transition to 15-minute frequency in the AM peak:
 - 51, 116, 118, 150X, 516, 706, 902
- » Route 110X will transition to 20-minute frequency in the midday
- » The following routes will transition to 10-minute frequency in the PM peak:
 - 7, 120X, 500X, 700X
- » The following routes will transition to 12-minute frequency in the PM peak:
 - 2, 3, 4, 108, 702, 703, 721, 722
- » Route 150X will transition to 15-minute frequency in the PM peak
- » Route 510X Mill Woods – Downtown will transition to 4-minute frequency in the AM peak and 5-minute frequency in the PM peak
- » Route 723 will transition to 30-minute frequency in the AM peak
- » Route 900X will transition to 7.5-minute frequency in the AM peak and PM peak
- » Route 902 will transition to 20-minute frequency in the PM peak
- » Route 920X will transition to 20-minute frequency in the AM peak and and PM peak
- » The Route 4 short trips between University and Bonnie Doon will be cancelled until September
- » Movement of the timing points for Route 719 and Route 721 on MacEwan Road near 111 Street to be closer to Ellerslie Road
- » Additional stops on Route 700X near 111 Street and 115 Street on Ellerslie Road
- » Various adjustments of schedules to reflect observed travel times will be made closer to the implementation date



June – December Schedule Changes

Service level changes in June are primarily to reflect changes in travel demand due to the end of K-12 School and lower travel volumes in summer. To match the decrease in demand, several routes will see reduced frequencies in the AM and PM peaks compared to the April sign up and all school specials will stop service until K-12 School resumes. Service level changes in September are primarily to reflect an increase in travel demand due to K-12 school and post secondary institutions starting up. December service levels are similar to September service levels, allowing ETS to refine and routing changes and timings. Further details about these changes will be communicated several weeks in advance of their launch.

Additionally, ETS is exploring a number of projects that require engagement from community members so any service changes will reflect community needs.

» ETS is exploring piloting additional weekend transit service to areas with a higher number of religious and cultural hubs that are not well served by conventional transit. ETS will explore options for these areas.

» ETS has received several requests for service changes in Blackburne, Blackmud Creek, MacEwan and Westview Village since the launch of the new network. Most of these relate to frequency, span of service and walking distance. As a result, research and engagement will be conducted for possible service changes in these communities to better accommodate travel needs.

ETS continually monitors ridership and public feedback to determine where additional improvements and adjustments can be made while still respecting service standards and budgeted resources. The evaluation of every route, along with public feedback, will help inform future priorities for service adjustments and improvements.

Equity Analysis

In addition to planned service changes, ETS is undertaking an equity analysis of the transit network to better understand further opportunities for improvement. Transit plays an essential role in our communities and understanding equity impacts of the transit network will help guide further changes. This analysis will build on work ETS has undertaken to incorporate Gender Based Analysis (GBA+) processes, including a GBA+ review of transit safety and security, as well as completing an anti-racism review of low income fare programs.

3.2 ON DEMAND SERVICE REVIEW AND IMPROVEMENTS

ETS launched the new on demand service on April 25, 2021, in conjunction with the new bus network. Following the implementation of this service, ETS has been monitoring ridership and public feedback to determine where adjustments and service expansion are feasible and beneficial. Wait times for On Demand Transit have been considerably lower than expected since the start of service. In November, over 80 percent of trips had a wait time of less than 15 minutes and On Demand vehicles were often underused. As a result, the following no-cost changes are in the process of being implemented February 14, 2022:

- » New service for the Hills at Charlesworth to Mill Woods Transit Centre
- » Adding Leger Transit Centre as a secondary destination for Falconer Heights and Henderson Estates (Leger was also added as a destination in addition to Century Park for Keswick, Hays Ridge, Graydon Hill and Cavanagh on Dec 13, 2021)

ETS has also received requests for expanding new service into several growing areas as well as sections of neighbourhoods beyond the 600 metre walking distance to transit service. As a result, ETS is also proposing new On Demand service to the following areas by reallocating service with a tentative implementation date of April 25, 2022:

- » North Chamberly and North Elsinore to Eaux Claires Transit Centre
- » South Klarvatten (82 Street and 167 Avenue area) to Eaux Claires Transit Centre
- » The Uplands and Stillwater to Lewis Farms Transit Centre
- » Balwin to Coliseum Transit Centre
- » Glenridding Ravine to both Century Park and Leger Transit Centre
- » Possible service to the Edmonton Remand Centre, Young Offender Centre, and Northwest Police Campus



Credit: William Wang

3.3 SAFETY AND SECURITY PROJECT

ETS' highest priority is safety of the community, transit riders and transit staff. New processes, measures and tools implemented in 2021 will further enhance safety and security for staff and transit riders. In addition, ETS will be:

- » Completing GBA+ analysis and action planning to address safety concerns through diverse community feedback
- » Developing a Bystander Awareness and Intervention program that empowers riders to report issues and educate them on how to report concerns
- » Expanding the Community Outreach Transit Team (COTT) program in summer 2022
- » Upgrading analog CCTV cameras with newer HD digital models to increase video resolution for surveillance and assist in investigations



3.4 VALLEY LINE SOUTHEAST (VLSE) LRT INTEGRATION

The opening of the VLSE is an important step in expanding Edmonton's public transit network. Through a P3 arrangement, TransEd will operate the new service in collaboration with ETS. Integrating the VLSE into ETS' transit network will provide residents with additional transportation options. Edmontonians will be able to ride the LRT from the Mill Woods station through 11 stations to downtown on a low-floor, light-rail model that will operate at street level for the majority of its journey.

The transit network in Southeast Edmonton will change when VLSE opens:

- » Route 510X will be cancelled and replaced by the LRT
- » Park & Ride will be offered at the New Davies Transit Centre
- » Millgate Transit Centre will be closed and replaced with the new Davies Transit Centre at Wagner Road and 75 Street
- » Routes 6, 501, 502, 503, 504, 505, 506, and school specials will be modified to connect to the new Davies Transit Centre and will no longer connect to Millgate



3.5 SMART FARE ELECTRONIC PAYMENT SYSTEM, ARC

The first phase of the Regional Smart Fare Electronic Payment system, known as Arc, launched in 2021 with the provision of Arc cards to U-Pass holders. As of January 1, 2022, only Arc cards are accepted as proof of payment for students participating in the U-Pass program. Since January 2022, ETS began piloting Arc cards with 500 regular adult fare users. All fare groups will be onboarded to the Arc system in phases.

4.0 PROJECTS AND INFRASTRUCTURE FOR 2022

Each year ETS takes on a range of projects that support its operations and the services it provides. The following is a summary of this work planned for 2022.

4.1 LRT STATION IMPROVEMENTS AND LRT RENEWAL PROJECTS

Improvements to Stadium LRT Station started in 2020 and are expected to be completed in early 2022, with the exception of some landscaping work that will need to be completed later in the year. The expanded capacity of the station will accommodate new residential development in the area and a new road and pedestrian crossing over the tracks. The renewed station provides easier access from Commonwealth Stadium and Stadium LRT Station and will also promote greater safety, comfort and barrier-free accessibility.

The TLC for LRT campaign will continue in 2022 with additional maintenance and enhancement projects like a track crossover replacement near 129 Avenue, tunnel drainage replacement at Government Centre Station, escalator replacements at Central Station and elevator replacements at Bay, Central, Corona

and University Stations. Other LRT renewal projects include LRT catenary lifecycle replacement and LRT signal lifecycle replacement.

With the opening of the Valley Line Southeast, the new Davies Transit Centre will open adjacent to Davies Station. Conventional bus, DATS and On Demand service will shift from Millgate Transit Centre to Davies, and a new Park & Ride will be available at the new facility.

4.2 LRV (LIGHT RAIL VEHICLE) REPLACEMENT STRATEGY AND PLAN

Administration continues to develop a replacement strategy and plan for the U2 LRV fleet, which has served Edmontonians faithfully for more than 40 years. Ideally, LRVs have a 30-year life cycle. A replacement strategy helps to control costs and support service reliability.

4.3 VALLEY LINE WEST LRT

The Valley Line West LRT extension is a transformative project for the City of Edmonton by expanding LRT west through the city for the first time. Early construction work began in 2021 and will continue throughout 2022 with utility relocations, building and tree removals. As part of the Valley Line West LRT project, the Lewis Farms Transit Centre Park & Ride facility will be expanded and is expected to open in late 2022.



4.4 TERWILLEGAR DRIVE RENEWAL

Stage One of the Terwillegar Drive Expansion is under construction until 2026 and will be implemented in three stages. The first stage includes the Terwillegar Drive widening north (Rabbit Hill Road to Whitemud Drive) which is expected to be completed towards the end of 2022. The overall program will see road upgrades along Terwillegar Drive, Anthony Henday Drive and Whitemud Drive. Along this route, transit users will see upgrades to bus stops, longer pull outs and weather protected shelters. There will also be connections to shared-use paths and a new rapid transit service.

4.5 PANTOGRAPH COLLISION DETECTION WARNING SYSTEM

In 2022, ETS will implement a unique sensory system on LRVs that will identify defects or abnormalities in the overhead catenary system (the overhead electrical lines that power the trains). This technology will identify potential issues with the catenary and allow work crews to correct deficiencies before they result in a system failure such as a catenary tear down. Catenary tear downs not only negatively impact LRT service but it can damage other infrastructure such as the trains and substations.

4.6 ACTIVE AIR PURIFICATION SYSTEM

As part of the City's pandemic recovery efforts, ETS received funding to incorporate active air purification technology on ETS buses and Light Rail Vehicles. In 2022, ETS in partnership with Fleet and Facility Services, will procure and install this technology on the entire fleet. Active air purification technology will enhance the safety for riders and transit employees by helping reduce the potential of airborne transmission of COVID-19 and other airborne viruses.

4.7 HYDROGEN BUS PILOT

The City Operations department is engaged in a project as a part of the Alberta Zero Emissions Hydrogen Transit initiative, with \$4.6 million in secured funding from Emissions Reduction Alberta. The project involves the testing of two fuel cell



A SPECIAL RIDE

Kudos to a number of staff who decided to spread some holiday cheer and created a special charter ride for an autistic boy and his family on Christmas Eve.

It all started when transit operator Steven Laflamme noticed a Facebook post from someone looking for some ETS souvenirs for a nephew who has autism. As Steven began gathering items from the transit operator pool, another operator, Mark Mallon, suggested doing an in-house charter to offer this child and his family a short tour. He volunteered to drive the charter and other staff offered to split the cost. The ETS management team was fully supportive of helping out.

Steven coordinated a gift collection from ETS staff. On Christmas Eve, Mark drove an excited boy and his family on a tour, accompanied by a few other staff. Bus cleaner James Gabrielson dressed up as Santa Claus and made the ride even more special. Staff remained physically distanced on the bus while the family sat together in the front. The young boy was thrilled with the entire experience.

This special event could not have happened without the kindness and cooperation of so many people including operators, dispatchers, a supervisor and a bus cleaner. Thank you to each of you for taking the time to bring some joy to a family at the end of a very difficult year. You made an incredible impact, one that will always be remembered by a grateful family.



electric buses in real world conditions in Alberta and compares their 'fit for purpose' with other low carbon alternatives. ETS and Strathcona will each pilot a hydrogen bus for 23 months in regular revenue service starting in the summer of 2022.

4.8 REAL-TIME SERVICE ALERTS AND NEW BRANDED TRIP PLANNER

ETS will be reviewing and modernising the current ETS customer trip planning tool sets to ensure riders are receiving high-quality and up-to-date information, as follows:

- » *Implementation of real-time service alerts into a standardised GTFS feed.* Although riders can currently receive real-time bus arrival information in all trip planning tools, there is a gap if unplanned service disruptions happen (eg. Weather delays, unplanned construction, etc.) In addition to the current approach of communicating these disruptions through social media, the information will also be shared in a standardised data format for consumption by all 3rd party trip planners.
- » *Replacement of ETS live tools with a branded trip planner.* ETS live tools will be modernised with a newer, branded trip planner. Historically, ETS Live-To-Go tools were lagging behind 3rd party trip planners (such as Google maps and Transit App) due to outdated hardware, software and data. This became evident with the need to make

quick schedule adjustments due to COVID-19. The replacement trip planner will provide Edmonton Transit with the flexibility required to respond to emerging needs for schedule changes.

4.9 SECURE BIKE STORAGE PILOT PROJECT

ETS made many improvements in 2021 to support cyclists using transit and we plan to make more improvements throughout 2022. In 2022 we plan to pilot new and improved secure bicycle parking at high demand facilities. The new secure bicycle parking features to be tested will be selected based on feedback from Planning and Environment Services and the Edmonton bike community groups. Stakeholder engagement will be completed in early 2022 with the aim of having bicycle storage options for testing in mid-2022. Planning and Environment Services is working with ETS on this pilot to shape how secure bicycle parking could look for the entire city moving forward.

4.10 ACTION PLAN: ACCESSIBILITY POLICY FOR PERSONS WITH DISABILITIES

The City of Edmonton's updated Corporate Accessibility Policy guides the development and implementation of accessibility improvements to City policies, programs, and services, including public transit. The Policy is meant to ensure perspectives and needs of people with disabilities are considered in City programs, services and infrastructure. Ultimately, the goal is to reduce barriers and ensure all members of the community have equitable access to fully participate in the community. ETS supports the vision of the Policy and the City's three-year Corporate Accessibility Plan (2021-2024) by implementing priorities identified by the Accessibility Access Committee throughout transit facilities. ETS is working on enhancing accessibility features in LRT stations and transit centres and improving the travel training program to support people with disabilities in using transit safely and confidently.

4.11 ACTIVATING INCLUSIVE AND INVITING TRANSIT SPACES

Creating inviting spaces in transit stations and transit centres supports a safe and inclusive city and will help welcome riders back to transit. In 2022, ETS will continue to animate and enliven spaces through partnerships with local artists and businesses and street team activities. In alignment with the City's Indigenous Framework, and to continue the journey of Truth and Reconciliation, this work will include intentional actions to welcome Indigenous people in transit spaces.

4.12 SETTING LONG TERM TRANSIT PRIORITIES THROUGH THE 2023-26 BUDGET CYCLE

The four year budget process is a core component of building the transit service for the future. Along with advancing key projects to increase the service's capacity and transition to a more environmentally efficient service, the budget will also help define the type of service to align with the vision outlined in Edmonton's City Plan.

ETS will collaborate with internal stakeholders to set a clear plan for fleet and infrastructure growth and renewal priorities, and define the type of investments for roads and other infrastructure priorities to continue building a convenient, safe and reliable service.

4.13 ENTERPRISE COMMONS

Enterprise Commons, our new cloud Enterprise Resource Planning (ERP) solution, will be deployed across the City in 2022 and will:

- » Simplify how the City works with respect to its core services including finance, human resources and supply chain management
- » Standardise systems and align processes
- » Adopt industry leading practices for all human resource, finance, inventory and warehouse management functions, as well as enterprise asset management and workflow practices



- » Focus on solutions with minimal customization to reduce the costs of upgrading, maintaining and supporting enterprise systems

ETS is preparing for this important transition.

4.14 CITY OF EDMONTON EMPLOYEE TRAINING

The City offers essential training for employees to ensure they have the right knowledge and skills to carry out their roles and responsibilities. The focus for 2022 includes:

- » Enterprise Commons – on-boarding City employees to the new cloud-based enterprise resource planning solution
- » Enabling Conversations series – specific training for supervisors to support performance tools embedded within Enterprise Commons
- » Anti-racism and GBA+ training – city-wide training to support the City's work around anti-racism and GBA+ and how to integrate these frameworks into city operations

4.15 OCCUPATIONAL HEALTH AND SAFETY (OHS)

The safety of employees is a primary concern in ETS' operations. Through the City of Edmonton's LifeMark Program, there has been a city wide reduction in lost time injury statistics which can be attributed to early intervention including quick access to Occupational Injury Service, and modified duties. The following initiatives and projects were also implemented in 2021 to improve the conditions and better protect staff:

2022 Certificate of Recognition (COR) Audit

The COR audit is a systematic evaluation of an organization's health and safety program for the assurance of meeting a minimum standard. In 2022, the City of Edmonton will undergo an external audit of its occupational health and safety system in order to maintain its COR. This audit is conducted by an external third-party auditing team, and recommendations specific to ETS can be expected in the summer of 2022.

Upon receiving the audit recommendations, the Workforce Safety and Employee Health (WSEH) branch will work with ETS to transition the recommendations into branch action items for the completion of ETS safety program improvements in 2023.

ISNetworld: Ensuring the City's Contractors are Safe

The City of Edmonton utilizes contractors to carry out significant amounts of work to support the services provided to residents. In order to ensure contractors work in compliance with the required legislation and are competent in doing that work in a safe and healthy manner, a system has been procured to prequalify contractors based on the evaluation of their safety program. ISNetworld, the prequalification system, will be rolled out to City Operations, including ETS, for all high- and medium-risk contracts by the

end of 2022. The implementation and adoption of the new prequalification system for contractors will ensure that the contractors hired by the City of Edmonton, and within ETS, comply with Occupational Health and Safety Standards.

Safeguarding

In 2019, the City pled guilty to section 310(2)(h) of the OHS Code for a failure to provide safeguards if a worker may come into contact with a hazard. This was the outcome of an incident where a drainage tunnel foreman was fatally injured while working for the City of Edmonton. A safeguarding project was started to prevent subsequent incidents and focuses on the identification, evaluation and correction of any potential safeguarding gaps in the City's safety program. The assessment portion of the project has been completed and a new safeguarding standard will be developed. WSEH will be supporting ETS in the implementation of the safeguarding standard into branch business processes for managing and reducing equipment and machinery, safeguarding risks and liabilities.

Hazardous Work Locations

The Workforce Safety and Employee Health (WSEH) branch is working to address organizational safety program gaps through the revision and creation of new safety standards such as Confined Space Entry, Ground Disturbance and Safe Work at Heights. WSEH will be supporting ETS in the promotion and implementation of at least two of these safety standards within the branch for injury and risk reduction related to applicable work.

5.0 PERFORMANCE MEASURES

ETS participates in the corporate-wide Enterprise Performance Management (EPM) system which provides a structure to measure and track branch performance. The City uses Enterprise Performance Management to:

- Enable a better life for Edmontonians by being accountable for results
- Provide better service by understanding how we are doing and where we can improve
- Make better decisions by managing our performance with frequent and more accurate data

ETS collects both measures of rider perception and operational performance.

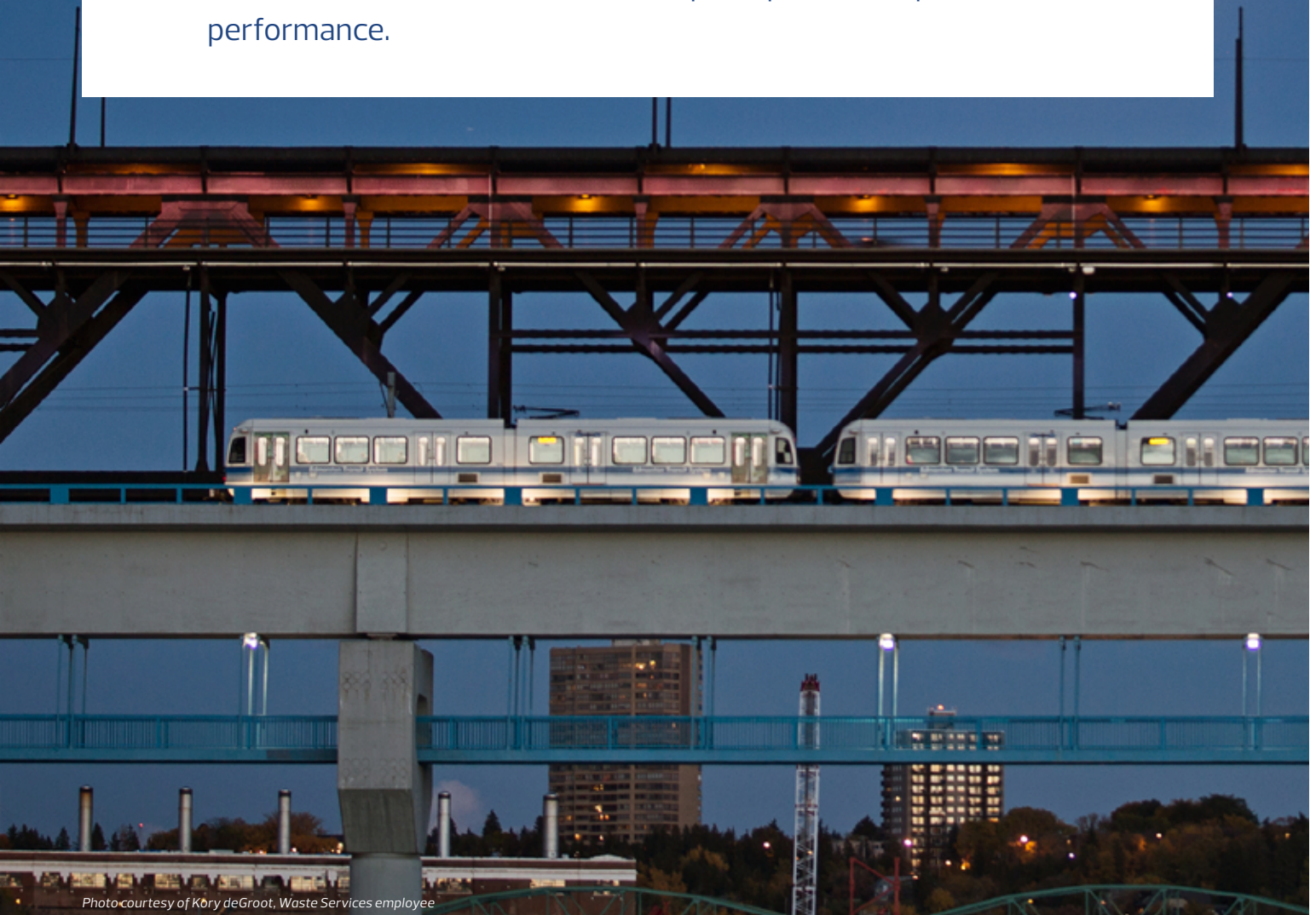


Photo courtesy of Kory deGroot, Waste Services employee

5.1 OVERALL TRANSIT MEASURES

MEASURE	MEASURE DESCRIPTION AND NARRATIVE	TRENDING STATUS
Rider Satisfaction with Overall Transit Experience	This measure asks riders how satisfied they were with overall transit experience during their previous transit trip. To be recorded as satisfied, a survey participant would need to select the top two boxes (satisfied or extremely satisfied – of a 7 point scale). In 2021, around two thirds of respondents have indicated they are satisfied with the Overall Transit Experience.	
Ridership	Transit ridership has been negatively impacted by the COVID-19 pandemic. While overall ridership remains below seasonal averages, there has been an increase in the fall of 2021 with the return to in-person instruction at post-secondary and some employees to offices and worksites.	
COVID-19 Safety	This is a measure of rider perception of safety related to the COVID-19 pandemic. COVID-related safety concerns while travelling to and from bus stops as well as at transfers have decreased significantly.	

5.2 RIDER PERFORMANCE TARGETS

ETS is committed to providing a service that is safe, reliable and convenient. All of our work ties back to our service commitment with the ultimate goal of growing ridership. To ensure accountability to City Council, taxpayers and residents, ETS has identified performance measures and ongoing targets in each of these three areas:

MEASURE	MEASURE DESCRIPTION AND NARRATIVE	TRENDING STATUS
SAFE: Rider Satisfaction of Safety (non-COVID-19 related)	This is a measure of rider perception of safety and security (non-COVID-19 related). Following a challenging period in early 2021, ETS and stakeholders implemented a Transit Security Operations Committee (TSOC) to oversee safety operations across Edmonton's public transit service and associated areas. The TSOC is collaborating to deliver safety and security services in a more efficient and effective way.	
RELIABLE: Rider Satisfaction with On-Time Performance	This measures perceptions of the on-time performance (OTP) of bus and LRT service. While operational measurement of on-time performance remains consistently high, the perception of on-time performance shows a larger variance.	
CONVENIENT: Percentage of riders who select ETS for convenience (Primary reason)	This measures the percentage of riders whose primary reason for choosing to travel on ETS is for convenience. In 2021, approximately a third of respondents chose to ride ETS for convenience, increasing from only 13% in 2020. Due to ridership impacts of the pandemic, the percentage of riders who select ETS for convenience has been lower than prior to the pandemic.	

5.3 OPERATIONAL PERFORMANCE TARGETS

In addition to information gathered from riders, ETS collects operational information to understand the performance of the overall system. Operational objectives are listed below, along with targets and performance measures.

MEASURE	MEASURE DESCRIPTION AND NARRATIVE	TRENDING STATUS
Actual On-Time Performance	This is the measure of the on-time performance (OTP) of bus and LRT service. Traffic patterns have been altered during the pandemic which has meant less congestion, especially during peak periods. This has improved the OTP of transit.	
Operational Cost per Revenue Hour	The Operational Cost per Revenue Hour is a measure of efficiency and an indication of how much it costs to operate the conventional transit network for each hour a vehicle is in service. ETS has been able to meet targets in 2021.	

APPENDIX A: FINANCIAL SUMMARY OF EDMONTON TRANSIT SERVICE

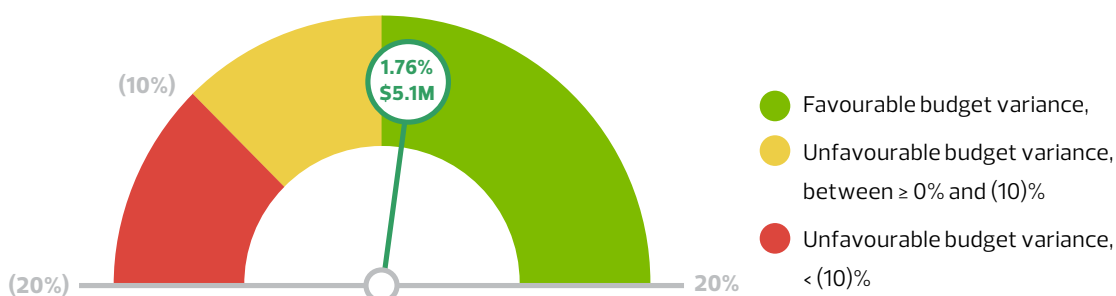
2022 BUDGET (000S)

Expenses	409,106,189
Revenue and Recoveries	-110,078,024
Net Position	299,028,165

SERVICES	EXPENSES	REVENUE	NET
Bus and LRT	377,478,869	-109,043,378	268,435,491
DATS	31,627,320	-1,034,646	30,592,674
TOTAL (000s)	409,106,189	-110,078,024	299,028,165

YEAR END FINANCIALS (2021)

Net Position Budget Variance



(000S)	BUDGET	ACTUAL	YEAR END VARIANCE
Expenses	386,205,486	356,974,264	29,231,222
Revenue and Recoveries	-91,613,958	-67,573,003	-24,040,955
Net Position	294,591,528	289,401,261	5,190,267

APPENDIX B: SERVICE STANDARDS

[BNR REPORT CARD](#)

[ON-DEMAND SERVICE RIDERSHIP INTERACTIVE MAP](#)

