

LRT RIDER CELLULAR CONNECTIVITY

Recommendation

1. That single source agreements between the City of Edmonton and Telus Communications Inc. for cellular connectivity, as outlined in the January 22, 2025, Financial and Corporate Services report FCS02808, be approved, and that the agreements be in form and content acceptable to the City Manager.
2. That Attachment 1 of the January 22, 2025, Financial and Corporate Services report FCS02808 remain private pursuant to sections 16 (disclosure harmful to the business interests of a third party), 24 (advice from officials), 25 (disclosure harmful to economic and other interests of a public body) and 27 (privileged information) of the *Freedom of Information and Protection of Privacy Act*.

Requested Action	Committee decision required		
ConnectEdmonton's Guiding Principle	ConnectEdmonton Strategic Goals		
CONNECTED This unifies our work to achieve our strategic goals.	Urban Places		
City Plan Values	Access		
City Plan Big City Move(s)	Catalyze and converge	Relationship to Council's Strategic Priorities	Conditions for service success
Corporate Business Plan	Transforming for the future		
Council Policy, Program or Project Relationships	<ul style="list-style-type: none"> • City Policy C539A - Transit Service Standards Procedures • Enhanced Transit Safety Plan 		
Related Council Discussions	<ul style="list-style-type: none"> • June 11, 2024, City Operations report CO02358, Quarterly Update on the Transit Safety Plan and the Downtown Core • November 30, 2022, Financial and Corporate Services report FCS01393, Proposed 2023-2026 Capital Budget (Amendment 47) • November 13, 2014 Transportation Services report, CR_1505, Cell Phone and Wifi Coverage in LRT Stations and Tunnels 		

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Executive Summary

- The City of Edmonton's proposed agreements with Telus Communications Inc. (Telus) address cellular connectivity gaps in LRT tunnels and stations to enhance safety, communication and the transit experience.
- The infrastructure being proposed in these agreements provides transit tunnels and stations with infrastructure ready for 5G+ and emerging technologies.
 - Other technology benefits include the expansion of the City's internal network in these hard-to-reach spaces that can increase safety and efficiency.
- Without this partnership, the City risks higher costs, an extended project schedule and added operational expenses. Proceeding with this agreement ensures a cost-effective and timely solution that benefits the City and residents, primarily transit riders.

REPORT

Administration first responded to Council's interest in expanding cellular and data connectivity in the LRT system with the November 13, 2014, Transportation Services report, CR_1505, Cell Phone and Wifi Coverage in LRT Stations and Tunnels. Uninterrupted use of cellular devices while riding transit to communicate and access the internet is not currently possible given connectivity gaps in LRT tunnels.

From a safety perspective, while LRT trains have on-board alarm buttons, emergency strips and video surveillance managed by the ETS Control Centre, expanded cellular connectivity would enable riders the option of reporting issues via their phones.

Initial efforts to improve communications connectivity focused on deploying Open City Wi-Fi at LRT stations, which started with University Station in 2015 and completed in all stations by 2018. The desire to expand cellular and data connectivity has been identified in the past and Administration explored options to partner with telecommunications providers.

In the 2023 Fall Supplemental Capital Budget Adjustment, Council approved \$4.7 million to expand access to emergency communication services by leveraging the Alberta First Responder Radio Communications System (AFRRCS), which would support public access for emergency calls.

To determine options for improvements, Administration surveyed the physical tunnel environment and engaged external parties, including but not limited to, the provincial government (which governs the AFRRCS) and the telecommunications industry.

Upgrade Proposal

The outreach to external stakeholders resulted in a proposal from Telus that goes beyond the scope of what the City could have achieved with an improved AFRRCS system. Telus' proposal is to offer a complete 5G and 5G+ cellular network that will be open for use by all telecommunication service providers in LRT tunnels and all seven underground stations. Telus' proposal has full implementation targeted by March 31, 2026.

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The project proposal from Telus is a significant step forward for the City to achieve its public transit connectivity goals. Without private-sector partnership, the City risks higher costs, significantly more time to deliver and added operational expenses.

In addition, this agreement with Telus can establish a framework for the City to structure future agreements with other telecommunications carriers to connect other hard-to-reach City locations such as the North East River Valley Park.

Partnership Model

Under the proposed agreement, Telus will provide system design, installation and maintenance of the cellular network, with integration for other carriers, for up to 30 years. This network would also be available to the City to securely leverage to increase operational efficiency and safety measures.

In exchange, the City would provide funding that has already been budgeted for this connectivity objective (details in private Attachment 1) and the required infrastructure to support network deployment including: space; power infrastructure; HVAC and the fibre optic network. In addition, a partner benefits agreement is still being negotiated which will include promotional opportunities for Telus.

Budget/Financial Implications

\$4.7 million was approved for work related to cellular connectivity in LRT tunnels as part of capital profile CM-18-1515 Technology Infrastructure - Renewal during the 2023 Fall SCBA - Critical Unfunded Renewal Items/Projects - Financial and Corporate Services. No additional funding is required.

Legal Implications

As per the City Administration Bylaw 16620, agreements exceeding \$1 million that do not arise from a competitive procurement process must be approved by the appropriate Standing Committee.

The City is subject to trade agreements that require an open competitive process for procurements of this value, unless a trade agreement exemption applies. Additional legal implications are included in private Attachment 1.

Community Insight

Perception of safety, a key factor to improving safety, is also a key determinant of transit ridership.

In addition to the safety and security measures already in place (discussed below), cellular connectivity enhances safety and the perception of safety. Improving cellular and data connectivity on the LRT system would also address feedback provided from focus groups and interviews as part of GBA+ research conducted in 2022 (details in the GBA+ section), as well as ongoing feedback from rider groups and riders.

The Transit Watch program (780-442-4900) will remain available for all riders to report safety concerns like harassment, disorder or suspicious behaviour. There are several security measures

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for riders, including almost 4,000 security cameras across the service, blue emergency phones on all LRT platforms and transit centres, alarm buttons, pull handles and alarm strips on all LRT trains that connect passengers directly with the LRT operator, who can connect with additional resources if needed.

GBA+

Expanding cellular services to underground transit tunnels and platforms can have a positive impact on accessibility and inclusivity. GBA+ considerations for this project include:

- Not everyone has equal access to reliable connectivity due to financial or technological barriers. By implementing a solution that all telecommunication service providers can access, all transit users with a cellular plan can access coverage in LRT tunnels and platforms without additional costs regardless of their service provider.
- Cellular connectivity provides an additional option for riders to connect to safety measures while riding the LRT and further complements existing measures in place to ensure riders feel safe and supported while using public transit. The agreement with Telus also allows the City to use the system to promote awareness of safety apps and emergency contact features.
- Administration completed a GBA+ on transit safety and security in March 2022, which included focus groups and individual interviews with riders and non-riders representing equity-seeking groups. Improving cellular and data connectivity on the LRT system would address feedback suggesting better access to TransitWatch and technology, which was provided in focus groups with youth and Islamic and Family Social Services Association. In addition, similar feedback has been received from Council advisory boards, the Edmonton Student Alliance as well as transit riders.

Environment and Climate Review

This report was reviewed for environment and climate risks. Based on the review completed no significant interactions with the City's environmental and climate goals were identified within the scope of this report.

Attachment

1. PRIVATE - Telecommunications Update - Additional Details