LRT Network Expansion Projects Summary

This attachment outlines the status of each of the seven LRT network expansion projects.

CONCEPT: Downtown Circulator

The scope of the downtown circulator project includes delivering a concept plan (aligned with the approved LRT Network Plan), featuring an urban-style LRT service starting from Downtown, crossing the river to the University of Alberta and east to Bonnie Doon, and connecting back to the Valley Line corridor.

Current Project Status

The preferred Centre LRT corridor was shared with stakeholders and the public for feedback at open houses in February 2018. However, the segments through the University of Alberta and adjacent to Alberta Health Services facilities require additional discussions with those key stakeholders before finalization. A Council report to provide direction on the segments of the alignment running through Downtown and along Whyte Avenue is tentatively planned for July 2018. As part of the concept planning process, the preferred route will be used to develop the alignment of the LRT, as well as the number and location of stations. to understand the ridership projections and traffic impacts .

• Communications and Public Engagement

The project's second phase of public engagement is complete. Three public engagement meetings were held in February 2018, at which the preferred route was shared and feedback on the route, stop locations, and community integration was requested. A project update and invitation to the meetings was sent to residents throughout the study area and a letter was sent to all property owners along the preferred route encouraging them to participate. An information session for the Old Strathcona Business Association was held in March 2018, and two town hall events were held at the University of Alberta in April 2018. Specific surveys for University of Alberta staff and students and business stakeholders were available online during April 2018. Businesses adjacent to the preferred route were informed of the survey and reminded of the project through a mailout. A number of one-on-one stakeholder meetings have been held with various groups, including the University of Alberta, Alberta Health Services, community leagues, and developers in the study area.

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DESIGN: Valley Line LRT West (Downtown to Lewis Farms) Construction Priority

Valley Line LRT West is an alignment of 14 kilometres extending from City Centre West to Lewis Farms. The scope of work currently funded through PTIF includes an update of the preliminary design completed in 2013, assessment and identification of the recommended project delivery method, development of a business case for construction funding, land acquisition, utility relocation, and early works as required. Valley Line West is targeting construction procurement readiness in 2018.

Current Project Status

The preliminary design update is ongoing and scheduled to be complete by Q3 2018. In response to the direction received from Council at the non-statuatory hearing held March 21-23, 2018, additional engagement and technical design review will take place during Q2 2018. Following an LRT Crossing Assessment review completed in Q1 2018, an LRT grade separation at the 87 Avenue and 178 Street intersection was approved by Council. Work is also ongoing on the procurement approach for Valley Line West, which is targeted to begin in Fall 2018.

Communications and Public Engagement

After two public engagement sessions in November 2017, an additional public engagement session was held on January 24, 2018 to further update the community on planned adjustments and refinements to the preliminary design, and to collect additional public input to inform City Council's consideration of recommended concept plan amendments. A number of one-on-one stakeholder meetings have been held with various groups, including Glenora Pointe area residents, Women Building Futures, and MacEwan University. Additional engagement activities with Citizen Working Groups and other local stakeholders are ongoing. In April 2018, the official Valley Line West stop and station names were approved by the City's Naming Committee and publicly announced.

Ridership Projections

It is estimated that Valley Line West will have daily ridership demand of approximately 40,000 passengers and is forecasted to increase to 60,000 by 2047. The new line will divert 37,000 existing transit passengers and will attract approximately 3,000 new passengers to LRT in 2027. When taken together with the Valley Line Southeast, it is projected that the full Valley Line will have daily ridership demand of about 80,000 passengers in 2027, and will increase to 130,000 by 2047.

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DESIGN: Metro Line LRT Northwest Extension (NAIT to Blatchford - Construction Priority AND Blatchford to Campbell Road)

The Metro Line Northwest extension is comprised of two separate PTIF-funded stages of design work, which comprise the total Metro Line alignment from NAIT to Campbell Road.

The first stage, from NAIT to Blatchford, includes approximately 1,600 meters of track, replacement of the temporary NAIT station with a permanent NAIT/Blatchford Town Centre station, and the north Blatchford station. The project scope includes a review of the concept plan; preliminary design; determination of the optimal delivery method; development of a construction procurement package; and development of a business case for construction funding. The Metro Line (NAIT to Blatchford) project is targeting construction procurement readiness by the end of Q1 2019.

The second stage of the alignment (Blatchford to Campbell Road) includes a 10 kilometre extension from north Blatchford to the proposed Campbell Road station and integrated with the future City of St. Albert Park & Ride. The project scope includes review of the existing concept plan, preliminary design, and recommendation of project delivery method.

Current Project Status
 Integrated Infrastructure Services report CR_5457 Metro Line LRT (NAIT to Blatchford) - Crossing Assessments and Concept Plan was approved by Council during the March 21-23, 2018 non-statutory public hearing.

A similar process is being undertaken for the Metro Line (Blatchford to Campbell Road) with a report to Council in Q4 2018, which will include recommendations on five crossing assessments and other potential concept plan amendments.

Preliminary design is ongoing for both stages of the alignment. A Design-Build procurement package for the Metro Line to Blatchford is being developed and the potential for construction term private financing is being evaluated.

• Communications and Public Engagement

Two rounds of public engagement have been completed to re-engage citizens and gather preliminary feedback on concept options. The next phase of public engagement for Blatchford to Campbell Road is scheduled to begin in June 2018. This engagement will provide the opportunity to give feedback on key components of the project including: potential grade separation at key intersections, the Yellowhead Trail and CN Walker Yard crossing, and urban design and access. This phase will include a public

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survey, street team pop-ups, targeted stakeholder meetings, and public events, all of which will be used to inform potential concept amendments and the project's architectural design. In September, 2018, recommendations will be presented to the public and key stakeholders, in advance of the Q4 2018 non-statutory public hearing. The final design will be shared with the public in Q1 2019.

Ridership Projections

The existing Metro Line carries approximately 19,000 passengers per day. It is estimated that the Metro Line between Health Science and Blatchford Station will have daily ridership demand of approximately 43,000 passengers which includes 1,600 existing passengers diverting from bus transit andt 1,400 new passengers attracted to the Metro LRT extension in 2027. Daily ridership for the Metro Line between Health Science and Campbell Road station in 2047 is forecasted to increase to 110,000.

DESIGN: Capital Line LRT - South Extension (Century Park to Allard/Desrocher)

This project is a total of 7.3 kilometres in length and consists of two segments. First is an update to the preliminary design for the segment from Century Park to the Heritage Valley Park & Ride at Ellerslie Road and 127 Street Southwest (originally completed in 2010). Second is completion of concept planning and development of preliminary design from the Park & Ride to the Allard/Desrocher station.

The project includes development of a Neighbourhood Area Structure Plan (NASP) for Heritage Valley Neighbourhood #14, being developed jointly between the City and Province. These are provincially owned lands, home to the new hospital scheduled to be opened in 2026, which will be serviced by LRT. In addition to specifying land uses, road network, servicing strategy and so on, the NASP will also finalize the LRT alignment and station location through these lands.

A draft construction procurement package will also be developed prior to completion of the current project phase, and finalized after Council has prioritized the project for construction and staging limits are determined.

Current Project Status

A review of all major crossing along the corridor is underway per the LRT Crossing Assessment Framework. The potential of an additional station near Twin Brooks and the final location of the LRT operations and maintenance facility are also being assessed. A report will be brought to Council in Q4 2018 through a non-statuatory pulic hearing that will recap this work and provide any recommended amendments to the concept

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plan. Completion of preliminary design and accompanying land use planning will be completed by the end of Q4 2019.

 Communications and Public Engagement Engagement completed to date included pop-ups at varius community meetings and gathering locations, Community Advisory Committee involvement and Indigenous nations consultation. The next stage of engagement scheduled for summer of 2018 will provide the public with an opportunity to view proposed concept plan amendments regarding the potential addition of a Twin Brooks station and the location of the Heritage Valley Operations and Maintenance Facility. It will also be an opportunity to provide input on the LRT crossing assessments currently being undertaken, with recommendations presented in September 2018, in advance of the Q4 2018 non-statutory public hearing. This engagement will also provide opportunity for public feedback on the project's architectural elements. The Citizen Advisory Committee continues to meet regularly in order to advise the project team regarding matters of importantance to the surrounding communities. The final design will then be shared with the public in late 2019 once all design activities are completed.

BUILD: Valley Line LRT Stage 1 Southeast (Mill Woods to Downtown)
Valley Line LRT Stage 1 is an alignment of 13 kilometres extending from Mill
Woods Town Centre to City Centre West that is currently under construction. The
design, construction, vehicle supply, financing, operation, and maintenance are
being delivered through a Public-Private Partnership (P3) Agreement, with a
30-year operating and maintenance period following construction completion.

• Current Project Status Construction activities are underway along the entire corridor. Construction highlights include: utility relocation on 102 Avenue, excavation for Churchill Connector in Churchill Square, tunnel construction underneath 95 Street, Tawatina Bridge abutments construction, retaining wall construction near Muttart Conservatory and along Connors Road, elevated guideway girder construction at the Davies site, operation and maintenance facility building construction, track slab construction on 66 Street, roadwork and utility relocation along the entire corridor, and Light Rail Vehicle final assembly in Kingston, Ontario. Significant project milestones were achieved in the first half of 2018, including completion of the prototype LRV at the end of March 2018, and completion of tunnel mining on April 10, 2018. See Attachment 4 of this report for additional information.

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- Communications and Public Engagement
 As part of the P3 Agreement, TransEd Partners are responsible for
 communications and public engagement for detailed design, construction,
 operation, and maintenance. This engagement is ongoing and includes
 open houses, stakeholder meetings, website, social media, media events
 and construction notifications. Administration meets regularly with five
 Citizen Working Groups along the corridor and monitors overall project
 communications. Specific activities completed by TransEd in the first half
 of 2018 included:
 - Displayed a mockup of the LRV at the Bonnie Doon Shopping Centre that was visited by 2,400 people from February 2-7, 2018.
 - Provided a public construction update on March 15, 2018 at which time TransEd communicated a delay to the Tawatina Bridge Shared Use Path beyond the planned opening in May 2019.
 - Followed up the March 15 construction update with a series of six open houses from March 17-28, 2018.

OPERATE: Metro Line (Downtown to NAIT)

The Metro Line LRT (Downtown to NAIT) extension included a 3.3 kilometre two-track extension from downtown's Churchill Station to NAIT and also required integration of a new Communication-Based Train Control (CBTC) signal system with the existing automatic fixed-block wayside system for the alignment. The Metro Line LRT was opened in September 2015 in limited operation.

Current Project Status
 At the December 5, 2017 City Council meeting a motion was passed to provide Thales (the signalling contractor) with a deadline of April 30, 2018 for the delivery of Plan A, which is implementation of a fully functioning Communication Based Train Control (CBTC) signalling system. The motion also instructed Administration to prepare Plan C, which will form an alternate signalling approach and service outside of the CBTC system.

The CBTC system is still not fully functional, and as such, Council directed Administration to provide the contractor with a Notice of Default, which was sent on May 1, 2018. The contractor has provided Administration with a new schedule to complete the contract and Administration is working with Thales through processes set out in the Contract to achieve resolution.

The alternate signaling system, Plan C, is currently in design phase with intention of bringing an update status to Council in late Q3, 2018.

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