Green Line Program Update: North, Centre City-Downtown, and Southeast Segments

Green Line North

This segment is from 24 Avenue North to 160 Avenue North (Keystone).

<u>Design</u>

Functional design has concluded and final reviews are underway after various refinements were made to the original corridor study through public consultation, ridership forecasts, LRT requirements and technical constraints while keeping the original vision of the report.

Based on the current level of functional planning, the Green Line alignment proposes to be grade separated at McKnight Boulevard, 96 Avenue North, Country Hills Boulevard, Stoney Trail North, and 144 Avenue North. The in-street, surface running alignment proposed is in the centre of the roadway along Centre Street North between the centre city portal and Beddington Trail interchange. At this point, the LRT alignment would shift to the east side of Centre Street/Harvest Hills Blvd to facilitate a future airport connection as well as unencumbered access to an LRT storage facility location at Aurora Business Park. A review of potential routing and vehicle technology options is currently underway.

Cost Estimates

Cost estimates continue to be refined and the current opinion of probable costs are based on a Class 4 estimate (-40% to +75%).

Public Engagement

Following previous station workshops, three transit oriented development (TOD) charrettes were held to further explore the future of Green Line in key identified station areas. Each selected area proposed unique opportunities for social equity, economic diversification, and gateway revitalization. These sessions allowed members of the public to play an active role in the future growth and redevelopment of their community, through a 30 year visioning exercise.

Three public engagement sessions are planned to take place in 2017 March. These sessions will offer a report back on the technically preferred north alignment including station locations, access and circulation, grade separations, and track alignment. It will also allow Administration to capture any key public input on the functional design to date.

Transit Oriented Development and Land Use Policy

Please refer to Administration's report to SPC on Planning and Urban Development (PUD2017-0249) for further details.

Land

Land impacts and costs continue to be assessed.

<u>Risks</u>

A quantitative risk workshop is planned for early 2017. This process will allow Administration to further refine cost estimates related to the north segment. Other risks include the operational trade-offs between modes (transit operations and community integration).

Next Steps

The recommended functional alignment and station locations will be presented to Council through SPC on Transportation and Transit no later than 2017 June.

Green Line Centre City: Downtown Section

This segment is from 24 Avenue North to 10 Avenue South and includes the Bow River crossing.

<u>Design</u>

Preliminary design for the tunneled alignment (Option D) is progressing including the revision of the portal location to north of 16 Avenue N. The station locations are also currently being reviewed for final placement and connectivity.

Cost Estimate

Cost estimates for the downtown section continue to be refined as design progresses. The current opinion of probable costs is based on a Class 3 estimate (-30% to +50%).

Public Engagement

Administration continues to meet with stakeholders along the corridor to discuss opportunities to integrate the Green Line within existing and future developments.

Land

Land impacts and costs continue to be assessed.

<u>Risks</u>

Technical risks such as geotechnical, hydrotechnical, and utility relocations continue to be reviewed in addition to the tunnel constructability, which is being further evaluated. Tunnel constructability includes the review of construction methods required to tunnel adjacent to existing buildings.

Next Steps

Administration will continue to refine design, cost estimates, and proceed with land acquisitions as identified. Stakeholder engagement will continue including discussions with building owners/managers, and development industry partners to identify opportunities to integrate stations within existing and future developments.

Green Line Southeast

This segment is from the Inglewood/Ramsay Station to Seton.

<u>Design</u>

Design efforts continue to progress towards development of procurement documents. This includes continued refinement of the preliminary design, discussions with developers and adjacent land owners, and further coordination with other relevant City projects.

Cost Estimates

Cost estimates continue to be refined as design progresses and the current opinion of probable costs is based on a Class 3 estimate (-30% to +50%).

Public Engagement

Program updates for communities along the southeast alignment have been carried out through newsletters, online information and in conjunction with other City engagement events. The City has received letters from the four First Nations communities engaged on the Green Line Southeast expressing that they do not have concerns with the proposed alignment.

Transit Oriented Development and Land Use Policy

Please refer to Administration's report to SPC on Planning and Urban Development (PUD2017-0249) for further details.

<u>Land</u>

Administration is actively engaging in negotiations with multiple property owners along the southeast alignment between Inglewood/Ramsay Station and Seton, with the goal of reaching negotiated agreements. To date, Administration has finalized negotiations on 18 property acquisitions including the lands required for the long term maintenance facility at Shepard Station. Administration will continue to work towards finalizing negotiations on the remaining properties with closings expected throughout 2017 and 2018. Negotiations with Canadian National Railway and Canadian Pacific for land required for the Green Line are ongoing. Administration is working closely with both railways to come to resolution.

<u>Risks</u>

Risk of communities not supporting the evaluation and outcome of Beltline decisions to connect to approved Southeast alignment.

Construction

The initial transit improvement projects including the intersection upgrade at Barlow Trail and 114 Avenue SE and a temporary transit-only connection from 40 Street SE to 126 Avenue SE were completed and operational as of 2016 December 19. These projects were designed to provide short term improvements to transit customers on routes in the area, including the route 302 BRT, and help build ridership in advance of the Green Line. Further transit improvement projects are currently being evaluated, with potential implementation in 2017 and 2018.

Next Steps

The GreenTRIP and Public Transit Infrastructure Fund (PTIF) Phase 1 funding announcement was received 2016 December 3. Enabling work projects are being advanced for construction start dates in 2017 and 2018. Initial projects include major utility relocations (southeast and north segment of Green Line), CN and CP rail adjustments, building removals, environmental remediation, and transit improvements.