
Plan for Growth – Bus Rapid Transit Preferred Configuration

Recommendation

That the Standing Policy Committee on Transportation recommend to City Council that the preferred configuration and conceptual network for the Bus Rapid Transit system, as outlined in this report, be approved as the basis for further engagement and design.

Topic and Purpose

This report identifies the components of a Bus Rapid Transit system and requests City Council's approval of a "preferred configuration" to form the basis for more detailed planning, design, and engagement work.

Report Highlights

1. HDR Corporation (HDR) has reviewed the Growth Plan to Half a Million (Growth Plan) and Saskatoon's existing transit system and has submitted a preferred configuration for Saskatoon's Bus Rapid Transit (BRT) system.
2. HDR's preferred configuration identifies the main components of the Red and Blue BRT lines, which includes Transit Signal Priority Measures, Roadway Geometric Measures, Stations, Customer Systems, and Runningways.
3. Based on its experience developing BRT systems in other markets, HDR has identified a preliminary cost estimate of \$120 million, plus or minus 25%, to implement the preferred configuration.
4. The project timeline is intended to position the City of Saskatoon (City) for the second phase of the Public Transit Infrastructure Fund (PTIF) program.

Strategic Goals

This report supports the City's Strategic Goals of Moving Around and Sustainable Growth by taking the next steps toward implementation of the Transit Plan component of the Growth Plan.

Background

At its July 26, 2017 meeting, City Council awarded a contract to HDR for Bus Rapid and Conventional Transit Planning, Design, and Engineering Services. The major deliverables of this project include:

- a) Existing Conditions Assessment;
- b) a BRT Functional Plan;
- c) BRT Station Design;
- d) BRT Detailed Design;
- e) a Park and Ride Study and Concept Design;
- f) a Transit System Plan; and
- g) an Implementation Plan.

Report

Review of Growth Plan and Existing Transit System

To prepare for later stages of transit planning and design work, HDR has reviewed the Growth Plan with a focus on the Transit Plan component. HDR has also reviewed Saskatoon's existing transit system. Attachment 1 is the summary of this work, identifying the benefits of BRT, the major components of BRT systems, and a preferred configuration for Saskatoon's BRT.

Bus Rapid Transit Components and Preferred Configuration

Each of the components of BRT systems can be included to a greater or lesser degree, providing flexibility in building a system at a scale to match community aspirations, passenger demand, and funding availability.

Based on the Growth Plan and assessment of the current transit system, HDR has identified a preferred configuration of the Red and Blue BRT lines that will focus the planning and design effort on the most appropriate BRT system for Saskatoon.

The preferred configuration for each BRT component is as follows:

1. Transit Signal Priority Measures – apply at all beneficial locations.
2. Roadway Geometric Measures – apply at select beneficial locations.
3. Stations – develop medium-scaled stations that will accommodate 12 to 20 waiting customers in a safe, protected, and well-lit environment that will be seen as a positive influence on the public realm and adjacent community. Stations should have a common design theme; however, each one would be sized to accommodate the expected customer traffic at specific locations.
4. Customer Systems – provide good destination, wayfinding, route, schedule, next bus information, and security monitoring. Off board fare processing could be added in the future.
5. Runningways – develop a mixed-traffic system with exclusive lanes in select short road sections along 3rd Avenue in the downtown, Broadway Avenue, and College Drive.

Preliminary Cost Estimate and Construction Timing/Phasing Approach

HDR has identified a rough order of magnitude cost for implementation of the preferred configuration of \$120 million, plus or minus 25%. This estimate is expected to be refined as a result of the next stages of the project – Functional Planning and Detailed Design.

Subject to available funds, the above system could be fully implemented over a three-year construction schedule.

The Administration supports this preferred configuration as it balances cost implications with improvements to transit system speed, reliability, and customer experience, while supporting the city building objectives outlined in the Growth Plan.

Options to the Recommendation

City Council has the option to adjust the “levels” of each of the five BRT components from those recommended in the preferred configuration. Adjusting the levels at this stage will not significantly affect HDR’s timeline to complete the Functional Planning or Detailed Design, though that may affect the capital cost to construct.

HDR has identified Transit Signal Priority Measures as the foundation of a successful BRT system. Significant reductions to the use of Transit Signal Priority Measures in the system will impact the future BRT system’s ability to function successfully.

City Council could choose to not approve any configuration at this time. This would impact the timeline to deliver the project and could impact PTIF funding eligibility as a result. Further direction would be required.

Public and/or Stakeholder Involvement

Applicable City divisions have been working closely with HDR through the development of the preferred scenario to ensure it aligns with both the City’s policies and standards and the input received from the community through development of the Growth Plan.

Opportunities for specific stakeholder and public engagement are identified in HDR’s work plan and will occur as the project progresses to the next stages.

Communication Plan

The Administration has developed a comprehensive communication and engagement plan for the Growth Plan implementation initiatives, including the BRT/Transit Plan Implementation project.

This plan identifies numerous opportunities to communicate project progress with the public through the project website, the City’s forthcoming engagement page, news releases, press conferences, monthly Plan for Growth newsletters, and a range of social media and public space communication channels. Also, each component of the Growth Plan has identified stakeholder and public engagement touchpoints.

A communication and engagement timeline is attached (see Attachment 2). This timeline may be adjusted as necessary to accommodate project circumstances.

Financial Implications

There are no financial implications as a direct result of this report. More detailed plans/designs and an implementation plan with funding options will be brought forward in due course.

Safety/Crime Prevention Through Environmental Design (CPTED)

CPTED Review will be conducted at the appropriate times during the functional planning and detailed design phases.

Other Considerations/Implications

There are no policy, environmental, or privacy implications or considerations.

Due Date for Follow-up and/or Project Completion

A decision-oriented report regarding the BRT Functional Plan and Implementation Plan will be submitted to the Standing Policy Committee on Transportation early in 2018, with a target for completion of detailed design by mid-2018.

The project schedule is based on the timelines prescribed under the PTIF. Eligibility for PTIF reimbursement may be affected by significant delays in the project.

This timeline is intended to position the City to seek support under the second phase of the PTIF program and to facilitate the potential for BRT system preconstruction activities to commence in the summer of 2018 (using existing capital funds supported by the PTIF). BRT construction is expected to be possible as early as 2019, subject to final City Council approval and the availability of funding.

Public Notice

Public notice, pursuant to Section 3 of Public Notice Policy No. C01-021, is not required.

Attachments

1. Saskatoon Bus Rapid Transit – Preferred Configuration
2. Communication and Engagement Timeline

Report Approval

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