

RouteAhead: Prioritization of Future Capital Projects

RECOMMENDATION(S):

That the Standing Policy Committee on Transportation & Transit recommend that Council:

1. Use the results of the prioritization analysis to advance projects to the corporate prioritization processes to align with all City priorities and make the best match with available funding.
2. Conduct ongoing advocacy with the federal and provincial government for capital funding for rapid transit expansion projects, fleet purchase/maintenance, and state of good repair.
3. Return to Committee by Q4 2022 with an updated prioritization list as part of the 10-year review of RouteAhead.
4. Direct Administration to use the analysis in this Report to create Appendix 1 of RouteAhead that will identify priority transit projects to be used for infrastructure prioritization.

HIGHLIGHTS

- This report provides an updated list of prioritized future rapid transit network growth projects as identified in Calgary Transit's 30-year strategic plan using a prioritization analysis.
- What does this mean for Calgarians? The report will indicate "what's next" for rapid transit expansion projects with the completion of MAX Purple, Teal, Orange and Yellow.
- Why does it matter? Without long-term plans, integration with municipal growth decisions may be misaligned as well as inconsistent messaging around growth priorities for the transit system.
- Attachment 2 provides the prioritization results for projects by first analyzing project benefits, independent of readiness, capital and operating investments. Then secondly, by analysing the benefits with capital and operating investments and readiness to examine the value.
- Additional considerations such as High Ridership Corridors, Transit Oriented Development and coordination with other City Departments and key City strategies are incorporated from a qualitative perspective to account for project readiness and corporate coordination.
- The top five projects ranked according to benefits and readiness are: 52 Street East BRT, MAX 301 North, Route 305 West, Blue Line NE, and MAX 302 South.
- Unapproved segments of the Green Line are not included in the RouteAhead Prioritization of Future Capital Projects as Administration will be updating the future planning recommendations.
- We are advancing the RouteAhead report with an understanding that as Canada recovers there may be more opportunity to advocate for additional transit funding outside of the Green Line.
- Pending Council approval, the projects are then advanced to departmental and corporate infrastructure prioritization processes to align with other needs and make the best match with available funding.

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- The prioritization analysis was conducted the same criteria and methodology developed for Green Line Stage 1 which was based on the original RouteAhead analysis. It was adapted to incorporate a qualitative benefits framework using a standardized weighting and ranking process.
- It is also important to note that adequate funding must be considered for fleet (bus and LRVs) and to maintain infrastructure in a state of good repair to ensure Calgary Transit can maintain and operate the current system.
- At the 2019 July 7 Standing Policy Committee on Transportation and Transit report TT2019-0637, was approved the Council adopted Administration's recommendations contained in report TT2019-0637 and directed Administration "to use the framework and list of major transit growth projects in Attachment 1 for prioritizing the future stages of growth of the rapid transit network, and provide an update through the SPC on Transportation & Transit by Q4 2019."
- Strategic Alignment to Council's Citizen Priorities: A city that moves
- Background and Previous Council Direction is included as Attachment 1.

DISCUSSION

Since 2013, Calgary Transit has made strong progress on the planning and construction of RouteAhead network objectives. Major construction has been completed on many Bus Rapid Transit (BRT) Network projects, with service commencing on the MAX Orange, Purple, Teal and Yellow lines. These projects account for 158 kilometers of the 342 kilometers of rapid transit projects planned which equals 46 percent.

Prioritization of the projects will not change the current approved capital projects in One Calgary 2019-2022 as the projects are outside of the four-year anticipated capital funding envelope.

Prioritization Approach

A two-dimensional prioritization approach was used to evaluate rapid transit projects by first analyzing project benefits, independent of capital and operating cost constraints. This allowed projects to be analyzed using the criteria and values approved by Council that capture social equity, employment connections and environmental benefits. The second dimension used the results of the benefit analysis and compared the projects against the estimated net operating costs for 30 years and capital investments using Net Present Value (NPV), to evaluate the relative benefits, value and financial impacts. Additional considerations such as High Ridership Corridors, Transit Oriented Development and Coordination with other City Departments and key City strategies are incorporated from a qualitative perspective to account for project readiness and corporate coordination.

Project List

The evaluated rapid transit projects have been identified in RouteAhead (2012) as well as additional projects approved by Council after RouteAhead (Westbrook to MRU Transit Connection, in-street MAX improvements to Routes 301 and 302). Some projects (e.g. 162 Ave SW Transitway, Shaganappi HOV and North Regional Context Study BRT) were previously identified as beyond the RouteAhead timeframe but are now being included because of advances in approved development adjacent to the project area.

The Green Line North and South segments were not included as Administration will be updating future planning recommendations in 2021. In the case of Blue Line NE and MAX Purple

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extensions, programs have been defined into discrete projects to allow for incremental expansion based on operational and customer requirements, development and consistent with the traditional, successful expansion model of the LRT network. This does not preclude multiple projects from being constructed together if funding is available at the time.

Prioritizing State of Good Repair

It is important to note that while funding new projects is important to the growth of the transit system, there remains critical asset replacement and renewal needs to sustain existing service and keep up with current ridership demand. Capital programs that improve the state of good repair (SOGR) of public transit and that support system optimization and efficiency will be essential to fund. This funding ensures that Calgary Transit is able to continue providing reliable, efficient and safe service. Assets in this category include fleet vehicles, buildings, tracks and related equipment, electrical systems, fare systems, and other technology systems. Recent significant reductions in capital funding for lifecycle maintenance have increased the risk of service disruptions and failures of these assets, which will negatively impact the ability to sustain reliable operations. As significant portions of the Red and Blue Lines are greater than 30 years old, reduced capital funding for regular maintenance and lifecycle replacement will increase the likelihood of significant failures and extended unplanned reactive maintenance. Industry best practices recommend budgeting approximately 10 percent of replacement capital asset value to maintain a SOGR. Appropriate funding is needed for ongoing maintenance of these critical assets to remain in a SOGR and support safe and reliable transit service. These requirements will need to be prioritized with network growth as further capital funding streams are identified.

Internal Consultation

Calgary Transit consulted internally with Calgary Neighbourhoods, Calgary Housing, Calgary Parks, Transportation Planning, Transportation Infrastructure, and Green Line to populate and analyze project prioritization data, ensuring data and methodology consistency. Calgary Transit further consulted with Transportation Planning and Green Line to ensure alignment with the Green Line Program, MDP/CTP update, and Transportation COVID-19 Recovery Scenarios.

Next Steps

The next steps will be to amend the current RouteAhead document to include an Appendix 1 containing information from Attachments 2 and 3 of this report. Following future planning work with the Green Line, an updated priority list will be developed that includes refined cost estimates for the Green Line and Passenger Rail as well as other projects. In 2022, RouteAhead will be 10 years old and Administration will provide a major review and update to the long-range strategy.

STAKEHOLDER ENGAGEMENT AND COMMUNICATION (EXTERNAL)

- Public Engagement was undertaken
- Public Communication or Engagement was not required
- Public/Stakeholders were informed
- Stakeholder dialogue/relations were undertaken

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This report has been developed internally based on a technical review of Bus Rapid Transit Network projects using updated data and a standardize weighting and ranking process as previously approved by Council.

IMPLICATIONS

Social, Enviromental and Economic Implications

The RouteAhead is an important contributor to the City meeting Council’s approved GHG reduction target of 80 percent below 2005 by 2050. Rapid transit projects are also key contributors to social inclusion and economic vitality. The Social, Environmental and Economic Implications are summarized in Attachment 4.

Service and Financial Implications

No anticipated financial impact

Administration has responded to economic conditions by focusing on improved efficiency and effectiveness of service delivery and support. Strategic direction for capital investments in the rapid transit network have been proposed. There are no capital budget implications associated with the recommendations in this report.

RISK

There is potential for unforeseen impacts on project prioritization due to COVID-19 as summarized in Attachment 5.

ATTACHMENT(S)

1. Previous Council Direction, Background
2. Route Ahead Prioritization Report
3. Project Summary Pages
4. Social, Environmental and Economic Implications
5. Risks

Department Circulation

General Manager	Department	Approve/Consult/Inform
Doug Morgan	Transporation	Approve