

Attachment 5: Rapid Transit Project Prioritization

Prioritizing capital investments and creating integrated infrastructure programs helps The City advocate for the comprehensive funding and implementation plans to realize the Corporate vision in a coordinated manner.

Since 2013, The City has made progress on the planning and construction of RouteAhead network investments. Phase 1 of the Green Line is advancing under Green Line Board governance, starting with Stage 1. Construction has been completed on many Bus Rapid Transit (BRT) Network projects including the MAX Orange, Purple, Teal and Yellow lines. These projects account for 158 kilometers of the 342 kilometers of rapid transit projects planned. There are 18 additional rapid transit network growth programs that include 29 individual projects that remain unfunded and at varying stages of design, shown in Figure 1.

In 2018, Council directed Administration to develop an open and transparent capital project prioritization criteria that is easy to understand and that could be applied to a variety of transit projects. The prioritization analysis used the same criteria and methodology developed for Green Line, which was based on the original RouteAhead analysis from 2012, adapted to incorporate a qualitative benefits framework using a standardized weighting and ranking process. Criteria are divided into five benefit categories: ridership, customer experience, economic, social, and environmental benefits. It considers both qualitative and quantitative measures as part of the analysis in each category. Prioritization criteria were presented to Council in 2019 and was approved.

Projects were first prioritized by analyzing project benefits in the five categories outlined above. Benefits were quantified independent of project readiness and capital and operating investments. Then, the benefits were analyzed with capital and operating investments and project readiness to examine value. Additional considerations such as high ridership corridors, Transit Oriented Development (TOD) and coordination with other City Departments and key City strategies were incorporated from a qualitative perspective to account for project readiness and Corporate coordination.

As a result of the prioritization analysis, a prioritized project list was presented to Council in December 2020. This list advances unfunded projects to the corporate prioritization process to align with other city infrastructure priorities using a programmatic approach to match with available funding. The short-term and long-term project rankings according to benefits, investment, and readiness are outlined in Figures 2 and 3. Projects are categorized into short and long-term based on factors such as functional planning completion, system capacity, and/or surrounding development. The projects are also organized according to logical sequencing for build-out.

Figure 1: Future Calgary Rapid Transit Network.



Figure 2. Short-term future rapid transit projects ranked according to benefit and investment.

Short-term Projects	Rank
52 Street E BRT	1
MAX 301 North	2
Route 305 West	3
Blue Line NE*	4
MAX 302 South	5
MAX Purple/17 Ave SE - Blackfoot Truck Stop to Downtown	6
MAX Purple/17 Ave SE - 52 St E to 84 St SE	7
Max Teal/South Crosstown BRT - Extension	8

*Includes both Blue Line NE - Saddletowne to 88 Ave NE & 88 Ave to 128 Ave NE Projects

Figure 3. Long-term future rapid transit projects ranked according to benefit and investment.

Long-term Projects	Rank
Westbrook to MRU Transit Connection	1
North Regional Context Study	2
Airport Transit Connector - Blue Line to Airport	3
Shaganappi HOV: Bowness Road to Stoney Trail	4
Red Line S Extension to 210 Ave S	5
NW-HUB / West Campus Mobility	6
162 Ave Transitway/BRT	7
Airport Transit Connector - Green Line to Airport	8
Blue Line NE - 128 Ave to Stonegate NE	9
MAX Purple/17 Ave SE - 84 St E to City Limits	10
Blue Line W to 85 St SW	11

Ongoing capital investment programs in assets such as zero emission buses and train procurement, infrastructure maintenance, and station refurbishments have not been prioritized against the rapid transit network expansion projects through this process but will need to be identified and accounted for as further capital funding streams are identified. Appropriate funding is needed for ongoing maintenance of these critical assets to remain in a state of good repair and support safe and reliable transit service.

It should be noted that the unapproved segments of the Green Line were not included in the 2020 RouteAhead Prioritization of Future Capital Projects as Administration will be updating the future planning recommendations as part of the 10-year RouteAhead Review and 2023-2026 budget cycle planning. The project prioritization update will involve collaboration to create project and funding packages that consider transit projects alongside other capital priorities from across the organization to better access funding, realize corporate goals, and achieve value for citizens.