

CENTRE CITY TRANSIT IMPROVEMENTS – PHASE ONE

EXECUTIVE SUMMARY

This report provides a high-level analysis of the operating and capital costs of implementing a Centre City urban transit loop. The report recommends further study of transit priority infrastructure in the Centre City to improve transit operations and enhance the customer experience for citizens travelling within, or getting to and from, the Centre City.

ADMINISTRATION RECOMMENDATION

That the SPC on Transportation and Transit recommend that Council direct Administration to focus their continued efforts towards a Centre City transit loop service on understanding travel demand, frequency of service and optimization of transit movement within the Centre City as part of ongoing Calgary Transit actions.

PREVIOUS COUNCIL DIRECTION/POLICY

At the 2013 March 4 and 5 Combined Meeting of Council, the following motion was approved as part of TT2013-0189, *RouteAhead: A Strategic Plan for Transit in Calgary - Request for Approval*:

ADOPT, Moved by Councillor Colley-Urquhart, Seconded by Councillor Mar, that the SPC on Transportation and Transit recommendations contained in Report TT2013-0189 be adopted as follows:

That Council:

1. Approve the final RouteAhead plan in Attachment 1.
2. Direct Administration to proceed with Phase 1 (high level review) of the proposed two phase Urban Transit Loop Study and report back to the SPC on Transportation and Transit in 2014 February with findings, including budgeting requirements.

The Council motion initiating the Urban Transit Loop Study included “the mandate to review transit services in the Centre City and surrounding communities and make recommendations to Council on evolving transit services, including capital and operating budget impacts.”

BACKGROUND

Calgary's Centre City is where 35,000 Calgarians currently live, 160,000 Calgarians work and 6,000 businesses operate. Over the next 30 years it is expected that 40,000 new residents and 60,000 new jobs will be added to the Centre City. To support and achieve the goals of the Municipal Development Plan, Calgary Transportation Plan, RouteAhead and the Centre City Plan, municipal services in the Centre City and surrounding neighbourhoods will have to evolve. RouteAhead identifies the Centre City as a special area for transit service due to the density of jobs, residents and activities in the area.

Calgary Transit's rapid transit network (LRT and BRT) is focussed on providing service within and to/from the Centre City. This radial pattern has served the city well in the past because of the concentration of jobs and travel demand to and from the Centre City. Supportive policies, such as the downtown parking strategy, have assisted in making transit the preferred choice for downtown trips to and from work. More than 50% of downtown workers use Calgary Transit to get to and from work each weekday.

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This study is part of a two-phase response to Council direction. Phase One included reporting back to Council with high-level opportunities, benefits and costs of providing transit-priority infrastructure in the Centre City including estimates of operating and capital budget impacts.

Phase Two will provide functional planning level estimates of infrastructure costs and will broaden the scope of public engagement to include additional stakeholders. Phase Two will return to Council no later than 2015 December and be correlated with the capital infrastructure plans for transportation at that point in time.

A Centre City circulator (or urban transit loop) would provide a specialized service for residents, workers and visitors to the Centre City. A two-way loop would be required to provide effective service. A one-way loop could provide a customer with a short trip to their destination, but would require a very long trip around the loop to return to their original destination.

Administration was specifically asked to investigate an inner city service using streetcars. Streetcars have been shown to provide advantages over bus service, but a Centre City circulator can be provided with buses.

Administration produced estimates of capital and operating costs of four different Centre City circulator routes, also known as the urban transit loop. The costs for constructing, purchasing fleet and operating the routes are provided in the attachment. The chart below provides a summary of the capital and operating costs of the four routes using both bus and streetcar technology. The figures below include construction of a necessary storage and maintenance facility at an estimated \$150 million for the streetcar fleet. Maps of the routes are included in Attachment 1 - Urban Transit Loop Investigation.

Route	Estimated Construction Capital Cost (\$000)		Estimated Fleet Capital Cost (\$000)		Annual Operating Cost (\$000)	
	Bus	Streetcar	Bus	Streetcar	Bus	Streetcar
A - Victoria Park/Stampede Station to Westbrook	600	180 000	3 000	24 000	4 000	7 000
B - Centre City Circulator Option 1	500	150 000	3 000	20 000	3 000	5 000
C - Centre City Circulator Option 2	700	210 000	4 000	32 000	4 000	8 000
D - Elbow Drive/4 Street SW to Eau Claire Market	400	120 000	3 000	20 000	3 000	5 000
Fleet Storage and Maintenance Facility	-	150 000	-	-	-	-

Due to the capital and operating costs of introducing a new vehicle technology to Calgary, Administration is recommending improving existing transit services in the Centre City, instead of

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further investigation of streetcar technology. A Centre City circulator can be implemented using buses and further investigation of the concept can be undertaken once there is certainty regarding the alignment of the North Central LRT and associated station locations.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Enhancing existing services to meet the demand of increasing ridership and respond to customer preferences has been a priority for Calgary Transit. The following issues have been identified in the Centre City:

- travel time can be unpredictable;
- schedule adherence is variable; and
- some routes experience capacity issues within the Centre City.

As part of this study Administration reviewed transit services in the Centre City and surrounding communities. Attachment 2 provides recommendations for improving transit service in the Centre City, including further investigation of transit priority infrastructure on Fourth Street SW to better serve Centre City customers and provide a corridor for the future Green Line transitway.

Calgary Transit bus routes that exclusively serve the Centre City have typically had low ridership. These routes have not experienced the type of ridership that might be expected in a dense urban environment. Possible reasons include scheduling, travel time or other preferences of transit customers that might not be met by these services. Routes 31 – Downtown Shuttle and 411 – Downtown/East Calgary carry 1,000 passengers per week. Route 412 – Westgate/Beltline carries 2,000 passengers per week. Each of these routes is well below Council-approved productivity standards. For comparison, the route with the third-lowest ridership serving the Centre City is Route 419 – Parkhill/Foothills, which carries 6,000 customers per week. Additional analysis is required to understand how a Centre City circulator will meet Council-approved performance policies for transit service by better understanding barrier to current use. The policy requires that community shuttle services carry a minimum of 15 passengers per hour and full-size bus services carry a minimum of 25 passengers per hour.

Ridership on LRT and mainline bus routes that serve the Centre City continues to increase. Calgary Transit's passenger counts in Spring 2013 indicate the LRT and mainline bus routes serving the Centre City carry over 1.6 million passengers per week. Providing transit priority infrastructure in the Centre City compliments transit service improvements including the Seventh Avenue platform and streetscape reconstruction, ongoing four-car platform expansions, opening of the West LRT and four-car CTrain service to be introduced in 2015.

Stakeholder Engagement, Research and Communication

Limited public engagement was undertaken as part of phase one of this study. Groups that provided input to the study included the North Central LRT Technical Advisory Group and North Central LRT Community Advisory Group. Administration also met with the Beltline Planning Group, TransitCampYYC, the Kensington Business Revitalization Zone and staff from City of Calgary business units. Some of the findings of the phase one report have been based on a review of the literature and case studies from across North America, including construction costs for streetcar projects. Data used for this report includes Calgary Transit's automated

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passenger counter (APC) data that is collected regularly. Geo-logger data was also collected to measure travel times and congestion points in the Centre City.

Phase two of the study will include additional data analysis and engagement with a wider range of stakeholders (public input sessions, BRZs, additional City staff) to measure concerns and support for additional transit priority in the Centre City.

Strategic Alignment

This report is aligned with the following long-term plans: Calgary Transportation Plan and Municipal Development Plan (2009), RouteAhead: A Strategic Plan for Transit in Calgary (2013), the Centre City Mobility Plan (2010), the Centre City Plan (2007), the West Village Area Redevelopment Plan (2010), the Southeast LRT Compendium of Functional Planning Studies (2010) and the East Village Master Plan (2009).

The Centre City Transit Improvements project team continues to coordinate with ongoing projects, such as the Green Line (North Central LRT and Southeast Transitway), four-car CTrain operational planning, development of the Action Plan 2015-2018 for Calgary Transit, the Centre City Implementation Team and Transportation Planning's Centre City Cycle Track Network plan.

Social, Environmental, Economic (External)

Social

High-quality public transit service is an essential requirement for the creation of attractive, vibrant and economically competitive cities. The concentration of jobs and activities in the Centre City is supported by public transit's ability to provide efficient mobility. Public transit provides low-cost mobility and accessibility to people, places, goods and services. Many specialized services are located in the Centre City, where they can be accessed by LRT and bus routes. Public transit also provides public health benefits by increasing physical activity which can lower the risk for many diseases, such as heart and vascular disease, strokes and diabetes.

Environmental

Movement of people on public transit makes the most efficient use of natural resources, allows for a more compact city and offsets the need for motor vehicle travel, resulting in fewer impacts to natural areas and the existing built environment. Implementing an increased level of transit service is a fundamental objective in the MDP and CTP. Improved, higher quality transit services will attract higher levels of ridership and decrease the environmental impacts associated with urban travel.

Economic

Mobility to/from and within Calgary's Centre City is vital to maintain the high concentration of jobs in downtown Calgary. Adequately funded public transportation is vital to reducing the costs associated with urban travel and to support investments (both public and private) in transit oriented developments. Household costs are also reduced when citizens choose transit compared to the purchase of a new automobile. Choosing transit instead of a new mid-sized

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automobile will save a household approximately \$10,000 per year in operating and maintenance costs.

Financial Capacity

Current and Future Operating Budget:

There are no current or future operating budget implications as a result of this report.

Current and Future Capital Budget:

There are no current capital budget implications as a result of this report.

Risk Assessment

There are no significant risks associated with this report.

REASONS FOR RECOMMENDATIONS:

To receive Council's approval to conduct functional planning for transit priority infrastructure in the Centre City as outlined in the Attachment 2.

ATTACHMENTS

1. Urban Transit Loop Investigation
2. Centre City Transit Improvements – Phase One Analysis