

ROUTEAHEAD UPDATE

EXECUTIVE SUMMARY

This report provides Council with an update on the status of implementation of RouteAhead, a 30-year strategic plan for public transit in Calgary. The report also highlights trends, in particular the economic downturn, and their effects on transit service delivery.

ADMINISTRATION RECOMMENDATION(S)

That the SPC on Transportation and Transit recommends that Council direct Administration to:

1. Identify operating budget implications associated with the bus rapid transit (BRT) network as part of the Adjustments to the 2018 Business Plan and Budget; and
2. Develop a fare strategy and revenue framework to support the development of the Calgary Transit 2019-2022 business plan and budget, and report results to the SPC on Transportation and Transit by Q2 2018.

RECOMMENDATION OF THE SPC ON TRANSPORTATION AND TRANSIT, DATED 2017 MARCH 15:

That Council direct Administration to:

1. Identify operating budget implications associated with the bus rapid transit (BRT) network as part of the Adjustments to the 2018 Business Plan and Budget;
2. Develop a fare strategy and revenue framework to support the development of the Calgary Transit 2019-2022 business plan and budget, and report results to the SPC on Transportation and Transit by Q2 2018; and
3. **Bring a scoping Report to Council no later than 2017 September outlining a potential pilot project to field test synthetic diesel fuel in Calgary Transit buses that includes cost, funding requirements, potential emissions benefits and the utilization of existing infrastructure.**

Excerpts from the Minutes of the Regular Meeting of the SPC on Transportation and Transit, Held 2017 March 15:

“AMENDMENT, Moved by Councillor Carra, that the Administration Recommendations contained in Report TT2017-0185 be amended by adding a new Recommendation 3, as follows:

- “3. Bring a scoping Report to Council no later than 2017 September outlining a potential pilot project to field test synthetic diesel fuel in Calgary Transit buses that includes cost, funding requirements, potential emissions benefits and the utilization of existing infrastructure.”

Opposed: R. Pootmans

CARRIED”

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PREVIOUS COUNCIL DIRECTION / POLICY

At the 2013 January 14 Combined Meeting of Council, report TT2012-0833, RouteAhead: A Strategic Plan for Transit in Calgary, was approved with the recommendation that Council direct Administration to prepare an annual status report on implementation of RouteAhead. Reports providing updates were subsequently prepared in 2013, 2014, 2015 and 2016.

BACKGROUND

In 2011 Council directed that a new long-term plan for Calgary Transit be created in accordance with the Calgary Transportation Plan (CTP). The RouteAhead strategic plan was developed to guide both operations and investment in transit over the next 30 years. The plan was approved by Council on 2013 March 04. RouteAhead establishes a clear vision for transit in Calgary and will be used by City Council and Administration to make informed decisions regarding customer-centric improvements, investments in capital and operating budgets, impacts of fare adjustments, service changes and other major business decisions. The next section is organized under the headings of chapters in RouteAhead: Customer Experience, Network, and Finance.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Customer Experience

Calgary Transit's customer satisfaction scores improved significantly year-over-year. The sample of customers responding that they are either "satisfied" or "very satisfied" increased from 72 per cent in 2015 to 81 per cent in 2016. This was driven by improvements to on-time performance, bus routes, crowding levels, and the quality of information delivered to customers.

Customer satisfaction improvements are also apparent in performance measures related to our Customer Commitment. Calgary Transit implemented a Customer Commitment in 2015 September, promising to measure, report and deliver on six qualities of service that customers and employees identified as most important. From 2015 to 2016 the Customer Commitment measures of helpfulness, information, ease of use and cleanliness improved as follows:

Cleanliness: 2% (69% to 71%)
Helpfulness: 3% (73% to 76%)
Ease of Use: 3% (62% to 65%)
Information: 6% (56% to 62%)

Bus reliability also increased by 2% on average (85% to 87%), while CTrain reliability remained stable at 86%. The ratings for Safety were maintained at 7.8 out of 10.

Administration will continue to identify improvements to address performance relative to Customer Commitment targets. The next significant improvements to the customer experience will be the enhancements to waiting, riding and connecting associated with the Bus Rapid Transit (BRT) network implementation.

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Network

New funding approvals under the Public Transit Infrastructure Fund and GreenTRIP programs were received in 2016. Funded projects include Green Line (including design, early works, utility relocation, land acquisition and bus improvements), 17 Avenue SE BRT Phase 2, CTrain station refurbishment, and new CTrain light rail vehicles.

Groundbreaking for the Stoney Compressed Natural Gas (CNG) Bus Storage and Transit Facility occurred in 2016 October. The facility will enable indoor storage and maintenance of vehicles currently stored outside at existing facilities, improving the reliability of service delivery and customer comfort.

The status of planning, design and construction of 10-year projects highlighted in the RouteAhead plan is included in Attachment 1.

As a result of corporate direction to accelerate capital projects for economic resilience and the potential for future funding, Administration is initiating planning and pre-design for a number of other projects:

- Blue Line Extension from Saddletowne to 128 Avenue N;
- Airport Rail Connection (connecting the Blue Line to the Calgary International Airport and to the future Green Line); and
- Red Line Extension from Somerset-Bridlewood to 210 Avenue S.

Several external factors will influence future growth of the RouteAhead rapid transit network:

- The Federal government announced it intends to establish a future funding stream for public transit infrastructure. Projects that could align with this future funding source include CTrain network expansion, BRT network expansion, the Airport Rail connection, and regional transit projects. Details regarding future funding are anticipated to be available later in 2017.
- The Federal government has committed to developing new accessibility legislation, which could include “physical and architectural barriers that impede the ability to move freely in the built environment, use public transportation, access information or use technology”. Consultation with the public closed at the end of February 2017. Legislation is anticipated in 2018 and it will likely affect public transit (e.g. approach to service delivery, infrastructure design standards).
- The Provincial government has mandated a Growth Management Board in the Calgary Region. The regulations are expected to take effect by Fall 2017. The amendments aim to “support how municipalities work together and plan for growth.” Members of the Growth Management Board are “required to amend statutory plans and make decisions consistent with the growth plan for the entire region.” The growth plan is anticipated to include a regional transit network to guide capital investments.

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- The Provincial government began engagement in 2016 seeking public and stakeholder input into the future of public transit across the province. Input was sought on funding criteria for new municipal transit initiatives and rural bus service, as well as a new provincial transit strategy. Administration anticipates the new strategy will be released in 2017.

These external factors will be monitored and incorporated into the review of the Calgary Transportation Plan (CTP) in 2019.

Finance

Recent direction, influences, and trends, particularly economic, are having an effect on the implementation of the RouteAhead plan. Some of the important impacts are highlighted in this section.

Trends Affecting Financial Performance

Calgary Transit's ridership is closely connected with the economy and oil prices. Alberta's economy contracted by an estimated 2.0 per cent in 2016 after declining 4.0 per cent in 2015. Low oil prices are expected to remain a barrier to renewing the oil industry. Combined with the addition of new office space, this will impact Calgary's downtown vacancy rate. Recovery will be dependent upon external factors including U.S. oil production and sourcing, pipeline construction, global oil production cuts, and changes in demand from developing and maturing economies. Calgary's oil and gas industry plus related supply chain industries were heavily geared towards exploration and development. Recovery in these activities may not occur while there is investment risk coupled with no long-term projections for growth and industry expansion.

Ridership declined 6.8 per cent (7.47 million trips) from 2015 to 2016. The ridership loss has been, primarily, among those who used transit for work. The main fare products impacted have been the adult and youth monthly passes and ticket books. Low income pass ridership has been increasing. These combine to result in significant year-over-year declines in revenue from fares.

The Province is funding a Fair Entry Low-Income Transit Pass program with a funding commitment of \$4.5 million per year from 2017 to 2019 inclusive. The program will provide low-income Calgarians with a fare discounted up to 95 per cent based on the Adult Monthly Pass depending on their income. In 2016, the proportion of customers approved for a low-income pass increased by 38 per cent. It is expected that provincial funding will not fully cover the increase in uptake. To sustain the program, Administration has been instructed to "report back with an update on the implementation and funding framework to the SPC on Community and Protective Services no later than Q4 2017" [Council, 2016 July 25, item 6.1, #3].

The provincial carbon tax will also impact existing operating budgets by adding to fuel costs. Based on 2014 fuel consumption rates and considering the introduction of carbon pricing in 2017, an additional minimum of \$1.5 million in added fuel costs is forecasted in 2017 and \$2.25

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million in 2018 (Carbon pricing applied to natural gas consumption would be additional costs, roughly one third more). Effectively, these additional costs would represent losses equivalent to 15,000- 22,500 hours of transit service.

Previous economic downturns have demonstrated that declines in travel are not spread evenly between modes and typically have a greater impact on transit. Between 2014 and 2016 the share of trips made in cars increased by 1.5 per cent to 40.8, and transit's mode share declined by 2.2 per cent to 47.9 between 2014 and 2015. This modal split is a product of the downtown office vacancy rate, high unemployment, and public transit's competitiveness for downtown employment trips.

High office vacancies and unemployment are also decreasing the overall demand for parking in the downtown core. The increased availability of parking has led to lower revenues (both from lower rates and from lower demand), and as such increased incentives to choose auto travel to these areas over other travel modes like Calgary Transit.

Decreased overall demand for parking is also directly impacting Calgary Transit revenue streams. Park and Ride reservations have declined by 35% between 2014 and 2016. More customers are able to find free parking in Park and Ride lots or find parking at their destinations.

Addressing Trends

Declining Revenues

Funding of transit service in Calgary relies on a combination of municipal taxes, transit fares and other revenue (e.g. advertising and Park and Ride reservation fees). Council direction calls for Calgary Transit to achieve a Revenue / Cost (R/C) ratio of between 50 and 55 percent. The cost of service delivery is increasing at a faster rate than revenues. Cost increases are mainly attributed to increasing prices for labour, parts, technology, and fuel. In 2015-2016, these impacts were further exacerbated by the effects of the economic downturn on revenues, as described above. Calgary Transit's fare strategy and revenue framework will need to be updated in advance of the development of the 2019-2022 business plan and budget to address these impacts. Eroding revenues pose a significant risk to providing targeted levels of service coverage for Calgarians.

Administration has responded to economic conditions by eliminating all the growth approved in Action Plan 2015-2018 (65,000 hours in 2017 and 55,000 in 2018). In select areas, service will be strategically expanded while taking advantage of some savings where growth pressure is low through transit service reviews.

Service to New Communities

RouteAhead directs the future evolution of Calgary Transit routes emphasizing a progression of service from introductory service to base service to – in some corridors - the primary transit network. Attachment 2 outlines the challenges Administration faces in steering this evolution in Calgary today.

Several new communities and employment areas in Calgary meet the criteria for introductory transit service: road networks are sufficiently built, and the population/job densities are

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significant enough to warrant service. However while the development-dependent criteria are met in these areas, Calgary Transit does not have the resources to implement service to these areas. Finding a new and innovative approach to this challenge is recommended as part of the 2019 CTP review. Shared-ride services have been introduced as a complement to fixed-route transit service in other cities. Attachment 3 includes an overview of these services and the ways in which they might be suited to fill this service gap in Calgary in the long term. This new trend will also be discussed in the forthcoming report to the SPC on Transportation and Transit on the future of transportation.

BRT Network Operating Costs

As outlined in Attachment 1, there are significant costs associated with the introduction of the BRT Network and Green Line (further into the future). While these will be offset in part by increasing ridership and the other benefits of transit enhancement (e.g. economic mobility, higher productivity of land, attractiveness of Calgary as place to invest, and increased tax revenue), there are considerable operating costs that need to be budgeted. Action Plan 2015-2018 included provision for some of these increased operating costs, and the 2019-2022 business plan and budget will need to reflect these costs.

Fleet Costs and Fuel Diversification

The Calgary Climate Change Accord (2009) requires a 20% reduction in GHG emissions from 2005 levels by 2020 and an 80% reduction in GHG emissions by 2050. Calgary Transit is committed to meeting these targets and continues to pursue new technologies and fuels to meet our goals of GHG reductions, reliability and cost efficiency.

On-road vehicle and engine emission regulations and other regulations made under the Canadian Environmental Protection Act will introduce stricter limits on air pollutant emissions from new vehicles beginning with the 2017 model year. These regulations will impact bus engine design and operation and have the potential to increase maintenance costs for buses.

Calgary Transit continues to investigate options to diversify fuel for the transit fleet to minimize the impact of these changes. Electric buses and hydrogen fuel cell buses trials are in the planning stages. The City of Calgary applied for a grant in 2015 [from the Climate Change and Emissions Management Corporation] for an electric bus trial but was not successful in receiving funding. Calgary Transit continues to explore a trial of electric buses with bus manufacturers and CUTRIC (Canadian Urban Transit Research and Innovation Consortium). Calgary Transit has also started discussions to be a part of an Alberta-wide trial of hydrogen fuel powered buses.

Building on a successful CNG (compressed natural gas) bus trial, CNG buses will be part of the procurement strategy for Calgary Transit fleet. Construction on a new CNG maintenance and fuelling facility has started and will be complete in 2019. The new facility will enable Calgary Transit to begin shifting some new fleet purchases to CNG-powered vehicles.

Fuel technologies aside, it is important to recognize that investments in transit service – regardless of the fuel source – have the potential to reduce GHG emissions by getting people to switch from a single occupancy vehicle to using transit. Although one transit vehicle might

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produce more emissions than a single occupancy vehicle, the ability of the vehicle to move more people can result in an overall reduction in emissions, particularly when combined with land use and growth management strategies.

Zero-Based Review

Calgary Transit will implement recommendations arising from the 2016 Zero-Based Review to offset increasing costs in some areas (e.g. outside maintenance, supply of parts for fleet). Administration will be presenting an update to Council in June 2017 with further details.

Stakeholder Engagement, Research and Communication

A letter from the Calgary Transit Customer Advisory Group is included in Attachment 4. The letter was written in 2017 January and expresses the views of a group consisting of 15 members with 11 new members as of 2015 November.

Strategic Alignment

The investments discussed in this report are aligned with Action Plan 2015-2018, RouteAhead, the Calgary Regional Transit Plan (2009), and the Municipal Development Plan/Calgary Transportation Plan.

Social, Environmental, Economic (External)

Public transit options allow citizens to take part in a variety of economic and social activities. The Canadian Urban Transit Association (CUTA) has outlined the public health benefits of public transit to include improved urban air quality and increased physical activity, which can lower the risk for many diseases.

The appropriate quantity and quality of transit service and complete communities attract higher levels of ridership, decreasing the economic and environmental impacts associated with urban travel. The Green Line will lead to a significant reduction in green house gases. The City of Calgary uses a wind power contract for the LRT network, enabling zero-emissions door-to-door travel in Calgary for CTrain customers.

Improving travel options in established communities makes them more attractive to residents and developers, and allows people of all ages to reside and have their needs met within their communities.

Financial Capacity

Current and Future Operating Budget:

Administration has responded to economic conditions including fuel prices by reducing operating expenditures including eliminating all the growth approved in Action Plan 2015-2018 (65,000 hours in 2017 and 55,000 in 2018). The provincial carbon tax will also impact existing operating budgets by adding to fuel costs; effectively those additional costs would represent losses equivalent to 15,000 to 22,500 hours of transit service. Service levels will need to be suppressed to offset lower revenues.

Current and Future Capital Budget:

There are no capital budget implications associated with these recommendations.

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Risk Assessment

Transit service for employees is one reason major employers choose central Calgary over other locations to locate. It will be increasingly difficult to attract these investors if transit service targets for introductory service are not met.

REASON(S) FOR RECOMMENDATION(S):

The economic downturn has exacerbated existing service delivery and funding issues (e.g. service gaps, revenue/cost ratio). Exploration of alternatives to current standards and approaches to service are best timed with a review of other aspects of the Calgary Transportation Plan. This comprehensive review is scheduled for 2019.

ATTACHMENT(S)

1. RouteAhead Update: Status of Capital Projects
2. RouteAhead Update: Progress Toward Service Goals
3. Shared-Ride Service Models
4. Calgary Transit Customer Advisory Group Letter