

December 6, 2018

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RE: Fall 2019 Expansion Options Letter Report

1.0 PURPOSE

To provide the City of Kelowna City Council with service expansion options and supporting rationale for September 2019.

2.0 BACKGROUND TO SERVICE EXPANSION REQUEST

In 2018, the City of Kelowna identified the following local expansion priorities for September 2019.

- Improvements to the core network based on results from the Transit Future Action Plan
- Improved transit connections and service reliability to the Rutland Town Centre and potential for additional Academy Way service

As identified in the table below, the total estimated resources required for these expansions include 1,800 additional annual service hours and one expansion bus.

PROPOSED EXPANSION INITIATIVES						
AOA Period	In Service Date	Annual Hours	Vehicle Requirements	Estimated Annual Revenue	Estimated Annual Total Costs	Estimated Annual Net Municipal Share
2019/20	Sep-19	1,300	1	\$26,662	\$185,265	\$89,108
		Description	Based on results from the Transit Future Action Plan: Improvements to the core network.			
2019/20	Sep-19	500	0	\$10,255	\$57,247	\$20,264
		Description	Improved transit connections and service reliability to the Rutland Town Centre and potential for additional Academy Way service.			

In August 2018, the City of Kelowna confirmed commitment to these expansion initiatives by signing a Memorandum of Understanding (MOU) formalizing the process of securing expansion funding. In early 2019, these expansion requests will be included in BC Transit's draft Service Plan to the Province to seek the matching funding required for operating costs. Following confirmation of the provincial budget, the City of Kelowna will be informed of allowable funding by BC Transit, which will initiate a phase of public engagement and the development of a Service Change Plan.

Based on a review customer complaints and operator feedback, some of the largest challenges currently facing the Kelowna Regional Transit System include service reliability and passenger loads on Routes 8 and 97, with reported challenges associated with Route 8 growing over time. Additionally, with the rerouting of Route 4 along

Academy Way in Fall 2018, there have been recent increases to ridership and recurring incidents of full busses passing up passengers heading back to Academy Way from UBCO in the afternoons.

In order to address these challenges and to continue growing ridership within the Kelowna Region, the following service options are suggested for the City of Kelowna for Fall 2019:

- Route 8 University/OK College midday weekday and Sunday expansion
- Local transit service for Academy Way
- Service optimization on Routes 13 and 15
- Reroute the 4 UBCO/Pandosy Express into Rutland

3.0 SYSTEM OVERVIEW

The Kelowna Regional Conventional Transit System consists of twenty-nine routes as shown in Figure 1. The Rapid Transit Route is denoted in orange, the Frequent Transit Routes in blue, and the Local Transit Routes in grey.

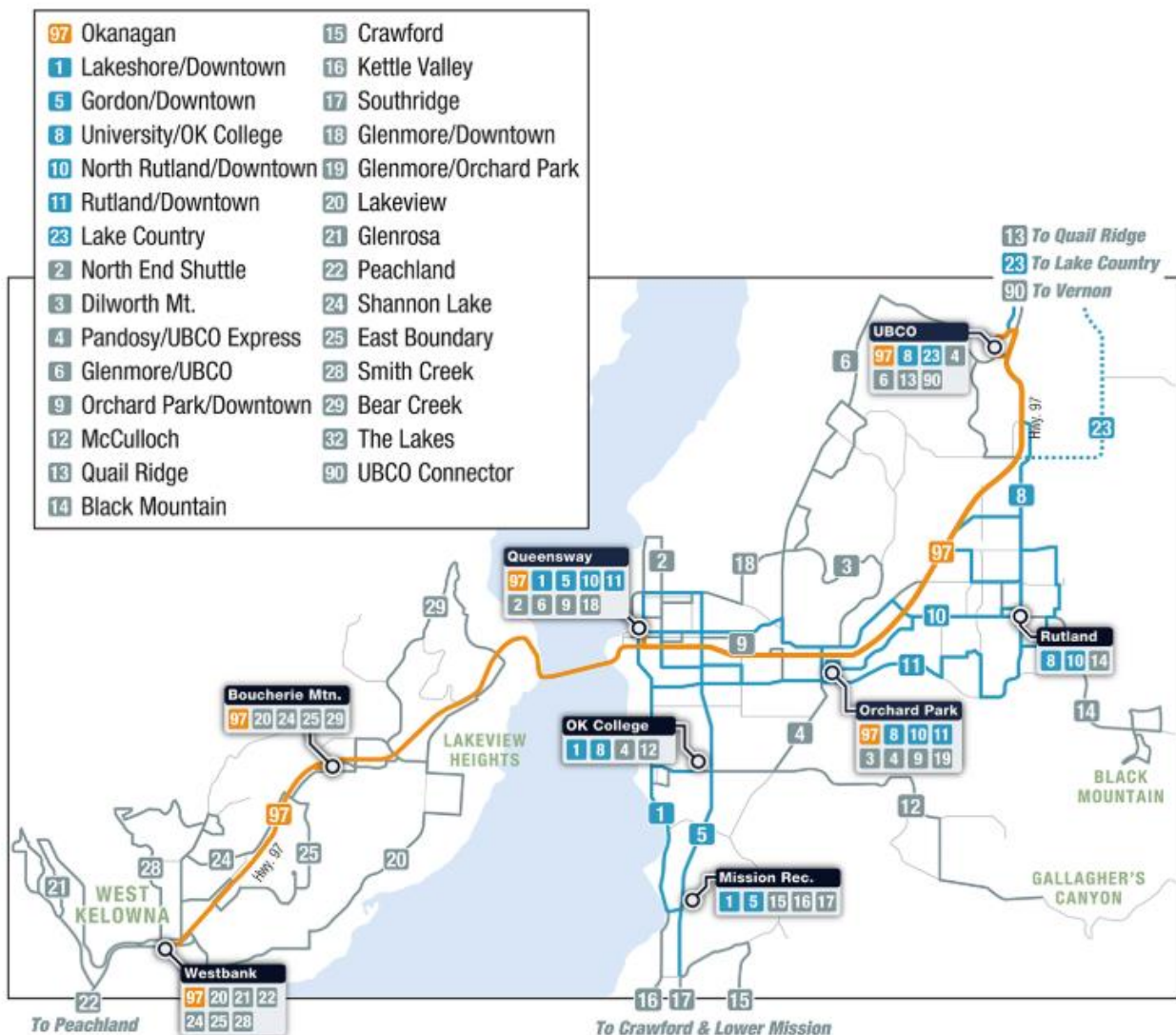


Figure 1: Kelowna Regional Transit System

4.0 EXISTING CHALLENGES

Some of the largest challenges currently facing the Kelowna Regional Transit System include service reliability and passenger loads on Routes 8 and 97, with reported challenges associated with Route 8 growing over time. Additionally, with the rerouting of Route 4 along Academy Way in Fall 2018, there have been recent increases to ridership and recurring incidents of full busses passing up passengers heading back to Academy Way from UBCO in the afternoons.

This section reviews some performance information to validate this customer and operator feedback, and to provide background and context for the service expansion proposals for Fall 2019.

General Trends

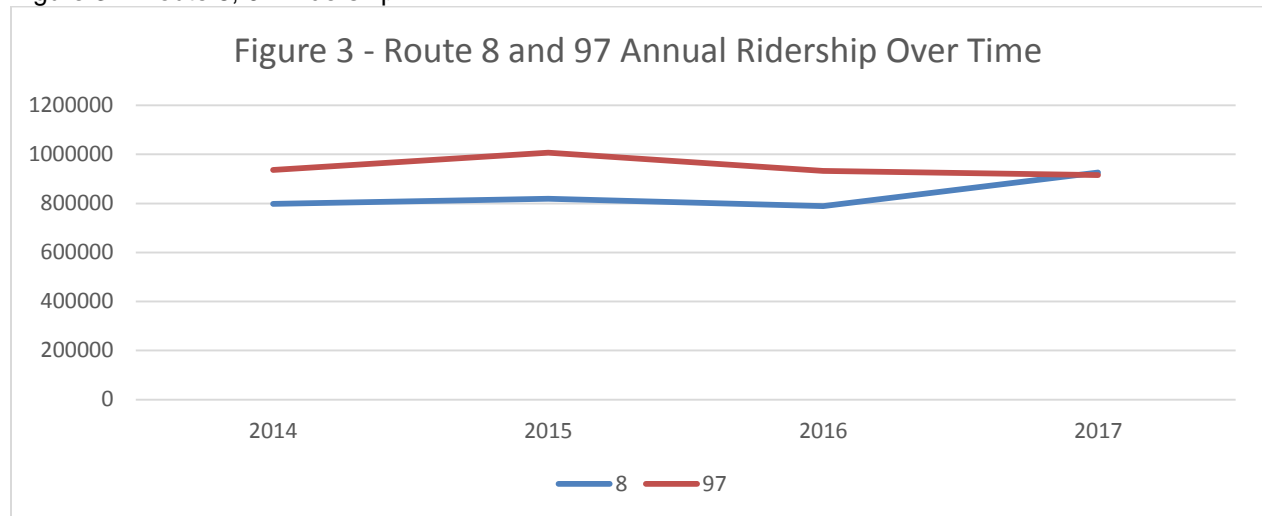
Routes 8 and 97 are currently the top performers within the Kelowna Regional Transit System in terms of ridership, both for total ridership and rides per service hour (Figure 2). Ridership has been remaining consistent on the Route 97 over the past two years, but growing substantially on the Route 8. As of 2017, annual ridership on the Route 8 surpassed the Route 97 (Figure 3). Additionally, the Route 8 operates only approximately 80% of the service hours that the Route 97 does, so the rides per service hour are noticeably higher on the Route 8 than the 97. Consequently, Route 8 has been targeted as one of the key routes for investment in Fall 2019, with service options also associated with optimizing underperforming services in order to better serve Academy Way.

Figure 2 – Proportion of Total Ridership by Route (2017)



Annual ridership = 5,240,000

Figure 3 – Route 8, 97 Ridership



5.0 SERVICE OPTIONS – September 2019

Collectively, the following proposals are focused on addressing the two most pressing needs in the system including meeting growing demand on route 8 University/OK College and resolving overloads on the segment of route 4 Pandosy Express operating between UBCO up to Academy Hill. Beyond the 1,800 annual service hours of expansion available for 2019, service optimization is also proposed on the Routes 13 Quail Ridge and 15 Crawford.

The specific service proposals include the following:

- Route 8 University/OK College midday weekday and Sunday expansion
- Local transit service for Academy Way
- Service optimization on Routes 13 and 15
- Reroute the 4 UBCO/Pandosy Express into Rutland.

Option 1: Expand Route 8 University/OK College weekday midday service from 30 minute to 20 minute frequency

Midday weekday ridership on the Route 8 is roughly 245 rides each hour with only two trips provided in each direction per hour, which works out to approximately 62 rides per trip. For context, the midday ridership on Route 8 surpasses the peak ridership on Route 10, despite Route 10 having almost double the number of trips in the peaks. See Appendix A for details about the midday weekday ridership on the Route 8.

Resource Requirements: 2,500 annual hours

Option 2: Expand Sunday service on Route 8 University/OK College by 8 trips

Current ridership data shows that Sunday service on the Route 8 University/OK College is regularly reaching an average of 125 rides each hour, with only one trip in each direction provided each hour. Consequently, the Route 8 currently experiences greater ridership per trip on Sundays than in peak periods on weekdays. These statistics mirror customer and operator comments about pass ups occurring on Sundays on Route 8. See Appendix A for additional ridership details on the Route 8.

Resource Requirements: 800 annual hours

Option 3: Route 4 UBCO/Pandosy Express through Rutland

This service option seeks to reroute the existing 4 UBCO/Pandosy Express from Highway 97 through Rutland. Given the substantial cost associated with holistically improving peak weekday service on the Route 8 University/OK College, this option seeks to strategically address some of the growing peak ridership demand within the Rutland area currently causing passenger load and service reliability issues on the Route 8.

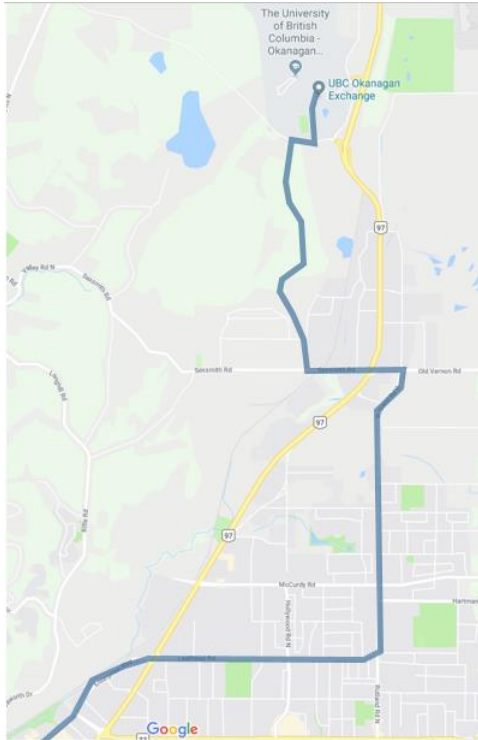


Figure 4: Proposed Route 4 Routing through Rutland

Resource Requirements: 450 annual hours

Option 4: Local Academy Way Service

This option considers a new service to Academy Hill between UBCO Exchange and the Reid's corner area (Sexsmith at Hwy 97) to supplement existing service provided by Route 4 UBCO/Pandosy Express. Route 4 is repeatedly experiencing pass-ups on inbound trips resulting from heaving loads of students travelling up the Academy Way hill from campus. The result is that riders bound for the city are being left behind while buses run with reduced loads after students disembark up the hill.

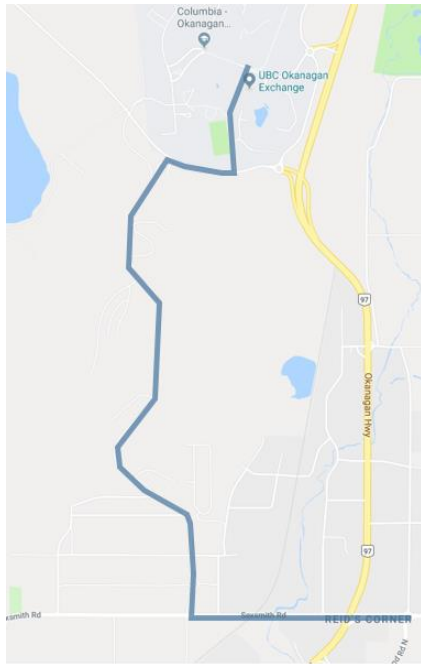


Figure 5: Proposed Academy Way Local Route

Resource Requirements: 950 annual hours

This option could be combined with the service optimization on Route 13 Quail Ridge (Option 5) to minimize the service hour cost.

Option 5: Route 13 Quail Ridge Optimization

Right-size the service vehicle to improve capacity facilitating the reduction of service frequency to hourly with savings re-allocated to improving Academy Hill service. Service was increased to 30-minute frequency a couple years ago to address overloads which were occurring as a result of use of light duty buses on the route.

The hourly passenger loads on the Route 13 (Appendix A) never gets higher than what could be accommodated by a 27.5' Vicinity. Consequently, this service could be feasibly reduced if a medium-duty vehicle were assigned to operate this service. See Appendix A for additional ridership details on the Route 13.

Resource Requirements: -850 annual hours

Option 6: Route 15 Crawford Optimization

This option includes service reductions on select trips where ridership is extremely low and resources could be reallocated with minimal impact to the community. See Appendix A for additional ridership details on the Route 15.

Resource Requirements: -550 annual hours

6.0 Next Steps

September 2019 Expansion

The table below describes a detailed timeline for the September 2019 Kelowna Regional Transit Service Expansion. Given that service optimization on Routes 13 and 15 are recommended as possible service options, BC Transit recommends that public engagement take place in February 2019 to get feedback from the community on the proposals first.

Month	Actions & Deliverables
January 2019	<ul style="list-style-type: none">• Update presentation to Council• Council approval to work with City of Kelowna staff to conduct public engagement around these proposed service options
February 2019	<ul style="list-style-type: none">• Public engagement
March 2019	<ul style="list-style-type: none">• Draft Service Change Plan and get approval from Council
September 2019	<ul style="list-style-type: none">• Implement 2019 service expansion

7.0 RECOMMENDATIONS

It is recommended that the City of Kelowna:

- Receive this report as information and provide comment; and
- Approve City of Kelowna staff to work with BC Transit to conduct public engagement on the service options included within this report.

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Appendix A

Route 8 Ridership Details

Midday ridership on the Route 8 on weekdays is roughly 245 rides each hour with only two trips in each direction per hour, which works out to approximately 62 rides per trip. For context, the midday ridership on Route 8 surpasses the peak ridership on Route 10, despite Route 10 having almost double the number of trips in the peaks.

Further, the Route 8 is seeing almost 400 rides each hour in the peaks (with the exception of 3pm-4pm at around 500), while operating approximately 4 trips in each direction per hour. So, although the rides per trip are lower in the peaks than the midday on the Route 8, additional service is still needed on weekday peaks to address passenger load and service reliability challenges as well.

The data further shows that Sunday service on the Route 8 is regularly reaching 125 rides per hour, while only providing one trip in each direction each hour. That is equivalent to the midday weekday rides per trip on the Route 8.

