
SUBJECT: PLANNING UPDATE

PURPOSE

This update on transit planning activities in the Victoria Region is provided to the Victoria Regional Transit Commission (the “Commission”) for **INFORMATION**.

SUMMARY

Winter 2020 (Effective January 6, 2020)

Service levels for winter 2020 remained consistent with the expansion implemented in the fall of 2019. Some minor changes were required to improve service reliability. Due to operational challenges throughout the fall, select service changes were made to mitigate the risk of last-minute trip cancellations during peak times. Changes were targeted to routes with surplus capacity and high frequency to minimize impact on transit users and will be monitored closely.

Spring 2020 (Effective April 6, 2020)

The Spring seasonal service change reduces service levels on routes serving post-secondary schools to better match transit demand and allow for service to be focused where demand is greatest. Pursuant to the Annual Service Plan adopted at the November 5, 2019 meeting of the Victoria Regional Transit Commission, additional trips are being added on the 47 Goldstream Meadows/Downtown and the 48 Happy Valley/Downtown to better meet morning and afternoon peak commute demand from Colwood and Langford into downtown Victoria.

As a regular annual change, service levels are increased on the 75 Saanichton Exchange/Royal Oak Exchange/Downtown and the vehicle is switched from a light-duty bus to a heavy-duty bus on the 81 Brentwood/Saanichton/Sidney/Swartz Bay to better match transit demand to Butchart Gardens.

SERVICE PLANNING INITIATIVES

Work undertaken or proposed since the last Commission meeting includes:

Local Area Transit Plans

- The Local Area Transit Plan has been completed for Sooke and is included in this agenda package.
- Both phases of public engagement have completed for the Jubilee and Burnside/Tillicum Local Area Transit Plans. A summary of this work is included in this agenda package.
- Phase two of public engagement is underway for Esquimalt/View Royal and Broadmead/Cordova Bay. Results from these engagements will be incorporated into the Transit Future Action Plan.
- Local area transit planning for the peninsula is slated to begin in 2020 through the Transit Future Action Plan process. An update to local area transit planning for the Westshore will commence in 2020 as part of the Transit Future Action Plan.

Related Municipal Work and Transit Initiatives

BC Transit participated in a number of local initiatives on behalf of the Commission over the last few months, including the following:

- **BC Ferries (Swartz Bay Terminal Design)** – BC Transit staff met with BC Ferries staff to review a proposed redesign of the Swartz Bay Ferry Terminal. Staff provided comments on possible improvements to the terminal for efficient operation of transit buses and large volumes of passengers.
- **City of Victoria AAA Bike Network** – BC Transit staff had a number of meetings with City of Victoria staff to review impacts of the proposed “All Ages and Abilities” bike lanes on the transit network – especially in regards to Haultain and Richardson Roads. BC Transit staff provided recommendations to enable ongoing transit service, to support improvements to bus stops and pedestrian access on adjacent routes, and to ensure ongoing outreach to any transit users that may be effected by proposed route changes. BC Transit continues to collaborate with the City of Victoria to support the implementation of AAA bike facilities in concert with improvements to the transit network.
- **District of Saanich AAA Bike Network** – BC Transit staff met with District of Saanich staff to review recent reconstruction of Finnerty Road between Arbutus Road and Sinclair/McKenzie Road and proposed improvements to Haliburton Road. BC Transit provided comments on factors that impact transit movement and measures to enable future transit network expansion.
- **Development Referral Process** – BC Transit receives and responds to development referrals from local governments considering rezoning and large-scale development proposals. BC Transit provides comment on opportunities for transit supportive development, transit supportive infrastructure such as bus stops and sidewalks, and provides comments on the feasibility of future transit service to the proposed development. Since the last planning report, planning staff have received a large volume of development referrals and provided comment to six local governments.

SERVICE MONITORING

Fall 2019 Service Performance Report

The attached Service Performance Report provides information on the system performance at the system level and ridership performance at the route level. It summarizes ridership over the period from September 2, 2019 to December 8, 2019 against the performance guidelines developed in the Victoria Regional Transit System 2013/14 Service Review.

RECOMMENDATION

It is recommended that the Commission receive this report for **INFORMATION**.

Respectfully,

Seth Wright
Transit Planner

Attachment: Fall 2019 Service Performance Report

Attachment: Victoria Regional Transit System Fall 2019 Service Performance Report

Introduction

This report presents the ridership performance review for the Victoria Regional Transit System – at the system and route level – during the period from September 2, 2019 to December 8, 2019 against the performance design guidelines established in the Victoria Regional Transit System 2013/14 Service Review.

Performance Guidelines

What they are and what they define: Performance Guidelines define numeric thresholds and targets for a particular system and its routes and services.

Why they matter: Working in tandem with Service Design Standards, Performance Guidelines are tools that evaluate existing services, identify trends in performance and, based on this evidence, determine how service and supporting features (fares, marketing, facilities, etc.) should be adjusted to improve the effectiveness and efficiency of the system to optimize resources.

For a service to be efficient and productive, a balance should be achieved between oversupply and overcrowding. A number of measures can establish this equilibrium such as:

- Implement transit priority
- Alter frequency
- Reduce/increase coverage
- Targeted marketing/corridor branding
- Change service span
- Change bus stop spacing
- Bus route changes
- Vehicle type allocation



When performance falls below the set guidelines, recommendations to the Commission will focus on the utilization of the above tools to maximize efficiency.

KEY ASSUMPTIONS

Data

Ridership information used was collected through automated passenger counters which are in place over 60 percent of the buses assigned to the Victoria Region’s conventional fleet. This system counts the number of persons boarding and disembarking from a vehicle. A person may board more than one bus to complete a single trip.

External Factors

In addition to service changes, there are a number of external factors that may affect transit ridership. Some of these include fare increases, changing fuel prices, changing community economics and land use changes.

Performance Measures

Performance measures have been chosen that evaluate the effectiveness of service planning investments on a system and route level.

System level

The measures used for the system guidelines are:

- **Operating cost per passenger trip** – annual operating cost divided by the total number of passenger trips predicted from farebox revenue and transit passes
- **Cost recovery** – the portion of operating costs that are recovered from fare revenues
- **Boardings per route km** – the total number of passengers boarding a bus divided by the total kilometres of in-service routes
- **Boardings per revenue hour** – the total number of passengers boarding a bus divided by the total time of in-service hours

Route level

The measures used for the route level guidelines are averaged on a daily basis according to the following definitions:

- **Trips Operated** – the total number of trips operated
- **Service Hours** – the total number of hours where buses are in service per day, including recovery (layover) and deadhead time
- **Revenue Hours** – the total number of hours where buses are in service carrying passengers, excludes recovery and deadhead time
- **Passenger Boardings** – the total number of passengers boarding a bus
- **Boardings per Trip** – the total number of passengers travelling on a bus divided by the number of trips operated to express the mean usage level of buses on a route
- **Boardings per Revenue Hour** - the total number of passengers travelling per day divided by the revenue hours to express the operational efficiency of a route
- **Boardings** – the number of passengers that board transit buses. Passengers are counted each time they board a vehicle regardless of whether they pay the full fare, use a pass or need to use more than one bus to arrive at their destination.

Route level performance guidelines have been classified into four categories (Rapid Transit, Frequent Transit, Local Transit and Targeted Transit) to acknowledge different performance expectations based on a route's objective, and in accordance with the 2011 Transit Future Plan and the Victoria Regional Transit System 2013/14 Service Review.

Performance Targets

Tables 1 and 2 outline the performance targets set for the system and route level. As well as monitoring existing performance against these guidelines, historical trends will also be monitored to determine if the system or routes are becoming more or less efficient over time. Significant variance (+/- 25 per cent) from the target will place a route on an action list for further investigation and will require more detailed analysis. Routes that fall below the 25 per cent variance will be candidates for corrective adjustments, and routes that are above the 25 per cent variance will be candidates for service improvements. BC Transit will report on an annual basis how the system and routes are performing and this will help guide planning decisions.

System Level

The purpose of monitoring system wide performance is to identify trends in system performance, and compare the performance of the transit system with other peer transit systems. These measures are designed to monitor the pulse of the Victoria Regional Transit System as a whole and guide service planning decisions. This can be particularly useful when identifying system wide impacts of major investments in the transit network, such as development of the Rapid and Frequent Transit networks.

Table 1: System Level Performance Guidelines

Metric	Target	2018/19 Actual
Operating cost per passenger trip	\$4.08	\$3.84
Cost recovery	30.0%	41.3%

Route Level

Analysis on a route-by-route basis gives a detailed indication of how individual components of the transit system are performing. A route-by-route analysis allows observations of the impact of service changes and investments made in the past and identifies future opportunities for strategic investment or re-investment.

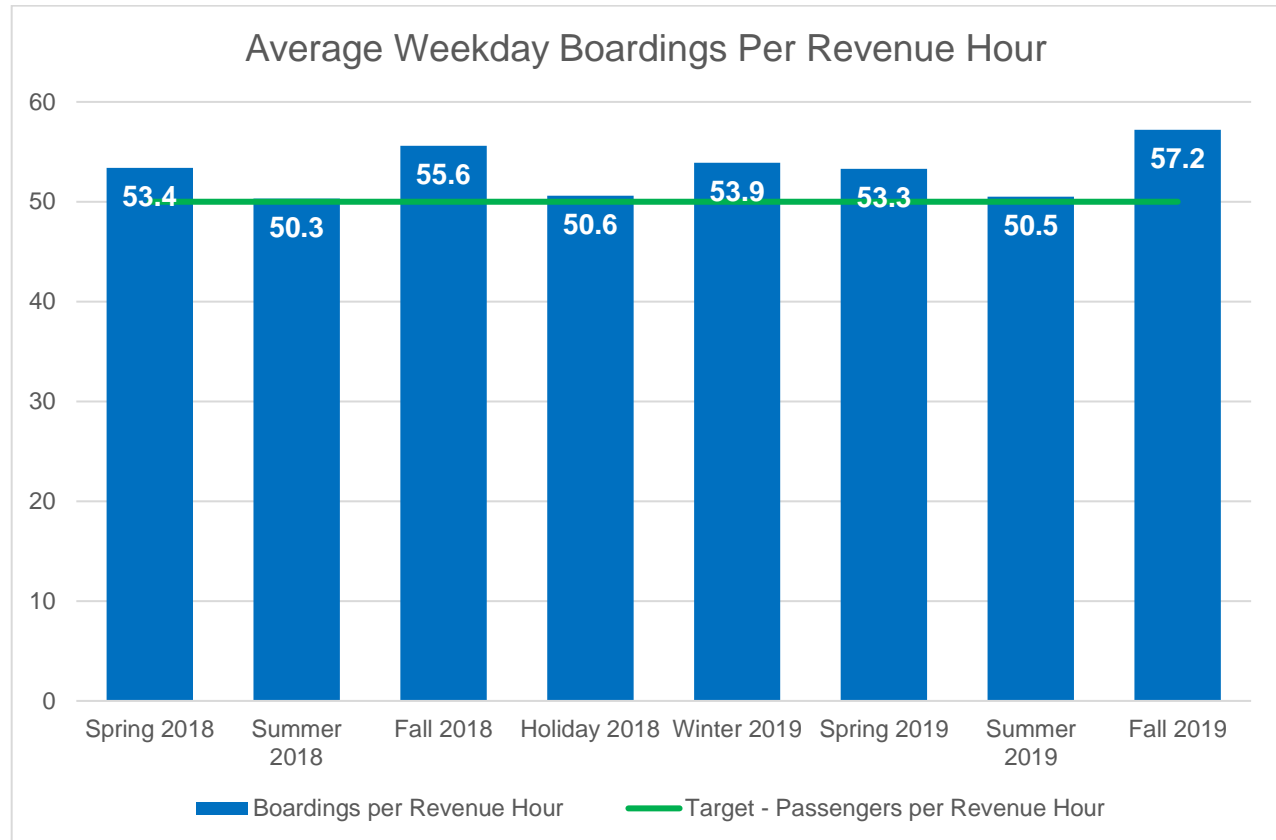
Table 2: Route Level Performance Guidelines

Route Type	Boardings per Trip	Boardings per Revenue Hour
Rapid Transit	40	55
Frequent Transit	40	55
Local Transit (High Demand)	25	40
Local Transit (Coverage)	10	20
Targeted Transit	40	60

Transit System Performance Results

Chart 1 displays boardings per revenue hour performance for the transit system by service period for the last year. The target of 50 boardings per revenue hour is indicated in orange.

Chart 1



System Performance

The table below display average daily system performance for passenger boardings, boardings per route kilometre, and boardings per revenue hour for the Fall 2019 service periods.

Table 3: Fall 2019 Average Weekday Total System Performance

System Level	Trips Operated	Boardings	Route km	Revenue Hours	Boardings / Route km	Boardings / Rev. Hour
Core	2,466	93,402	30,130	1,487	3.10	62.8
Peninsula	310	10,047	8,016	250	1.25	40.2
Westshore	516	16,302	9,332	349	1.75	46.8
Total	3,291	119,751	47,478	2,086	2.52	57.2

Route Performance Results – Fall 2019 Weekday Route Performance (Daily)


Rapid Transit		Trips Operated	Service Hours	Revenue Hours	Projected Boardings	Boardings per Trip	Boardings/ Rev. Hr.
Target						40.0	55.0
15	Esquimalt / UVic	174	155.1	112.7	8,276	47.6	73.4
16	Uptown / UVic	72	36.8	25.6	1,566	21.8	61.1
50	Langford / Downtown	171	163.8	126.0	9,754	57.0	77.4
70	Swartz Bay / Downtown	37	49.6	33.9	1,965	53.1	58.0
Total		454	405.3	298.3	21,561	47.5	72.3


Frequent Transit		Trips Operated	Service Hours	Revenue Hours	Projected Boardings	Boardings per Trip	Boardings/ Rev. Hr.
Target						40.0	55.0
4	UVic / Downtown	199	139.6	101.9	8,044	40.4	78.9
6	Royal Oak Exch / Downtown	205	145.0	105.5	8,125	39.6	77.0
11	Tillicum Centre / UVic	145	165.7	128.8	7,630	52.6	59.2
14	Vic General / UVic	179	203.7	153.0	9,855	55.1	64.4
26	Dockyard / UVic	143	133.9	101.6	8,189	57.3	80.6
27	Gordon Head / Downtown	121	86.0	67.2	5,341	44.1	79.5
28	Majestic / Downtown	121	84.7	67.6	5,213	43.1	77.1
30	Royal Oak Exch / Downtown	90	75.7	51.0	2,617	29.1	51.4
31	Royal Oak Exch / Downtown	92	76.0	51.4	2,884	31.4	56.1
Total		1,295	1,110.2	828.0	57,898	44.7	69.9

Local Transit - High Demand		Trips Operated	Service Hours	Revenue Hours	Projected Boardings	Boardings per Trip	Boardings/ Rev. Hr.
Target						25.0	40.0
2	James Bay / South Oak Bay / Willows	141	109.4	81.5	4,936	35.0	60.5
3	James Bay / Royal Jubilee	58	44.3	35.7	1,153	19.9	32.3
7	UVic / Downtown	119	71.9	55.7	3,179	26.7	57.0
8	Interurban / Tillicum Centre / Oak Bay	56	55.4	40.3	1,805	32.2	44.8
9	Royal Oak / UVic	26	28.2	21.8	947	36.4	43.6
21	Interurban / Downtown	114	69.4	51.7	3,077	27.0	59.5
22	Vic General / Hillside Centre	68	75.7	57.5	2,499	36.7	43.5
24	Cedar Hill / Admirals Walk	39	35.9	24.7	915	23.5	37.1
25	Maplewood / Admirals Walk	37	37.3	27.8	1,124	30.4	40.5
39	Westhills / Interurban / Royal Oak / UVic	92	95.0	72.1	4,127	44.9	57.2
61	Sooke / Langford / Downtown	60	66.6	51.2	2,163	36.1	42.2
72	Swartz Bay / Downtown	78	126.1	90.4	4,628	59.3	51.2
75	Saanichton / Royal Oak / Downtown	74	81.2	61.3	2,188	29.6	35.7
Total		962	896.2	671.6	32,741	34.0	48.7

Local Transit - Coverage		Trips Operated	Service Hours	Revenue Hours	Projected Boardings	Boardings per Trip	Boardings/ Rev. Hr.
Target						10.0	20.0
1	South Oak Bay / Downtown	11	5.4	3.2	55	5.0	16.9
10	James Bay / Royal Jubilee	56	33.4	26.4	407	7.3	15.4
12	University Heights / UVic	41	17.7	10.4	854	20.8	81.9
13	Ten Mile Point / UVic	6	1.3	0.7	11	1.8	15.4
32	Cordova Bay / Royal Oak Exch	31	14.3	10.3	230	7.4	22.4
35	Ridge	16	7.5	4.5	270	16.8	59.5
43	Royal Roads via Belmont Park	5	2.3	1.1	12	2.4	11.1
46	Dockyard / Westhills	16	15.7	12.1	300	18.8	24.8
52	Colwood Exch / Bear Mountain	72	72.2	57.1	1,520	21.1	26.6
53	Colwood Exch / Langford via Atkins	25	14.7	10.5	125	5.0	11.9
54	Metchosin	10	12.8	10.8	246	24.6	22.9
55	Happy Valley	7	9.1	7.4	137	19.5	18.4
56	Thetis Heights / Langford Exch	32	12.4	9.4	197	6.2	20.9
57	Thetis Heights / Langford Exch	31	9.6	7.5	170	5.5	22.8
58	Goldstream Meadows	16	9.2	7.5	141	8.8	18.8
59	Triangle Mountain	11	8.1	6.1	141	12.8	23.0
60	Wishart	12	8.2	6.7	119	9.9	17.8
63	Otter Point	4	2.9	2.3	30	7.4	12.7
64	East Sooke / Sooke	16	10.8	9.0	50	3.1	5.6
81	Brentwood / Saanichton / Sidney / Swartz Bay	29	25.9	18.0	328	11.3	18.2
82	Sidney / Saanichton via Stautw	5	4.7	2.9	33	6.7	11.4
83	Sidney / Brentwood / Royal Oak	16	18.0	13.0	218	13.7	16.8
85	North Saanich	8	8.2	5.9	83	10.4	14.2
87	Saanichton / Sidney via Dean Park	11	9.0	6.3	75	6.9	12.1
88	Airport / Sidney	42	21.9	10.6	166	4.0	15.7
Total		529	355.1	259.7	5,916	11.2	22.8

Targeted Transit		Trips Operated	Service Hours	Revenue Hours	Projected Boardings	Boardings per Trip	Boardings/ Rev. Hr.
Target						40.0	60.0
17	Cedar Hill	2	1.3	0.9	74	37.0	87.0
47	Goldstream Meadows / Downtown	4	6.4	4.7	192	48.0	41.3
48	Happy Valley / Downtown	4	5.9	4.5	200	50.0	44.5
51	Langford / UVic	13	14.2	9.4	498	38.3	53.2
65	Sooke / Downtown via Westhills	4	9.3	6.2	309	77.2	49.6
71	Swartz Bay / Downtown	7	11.4	7.2	332	47.5	46.5
76	Swartz Bay / UVic	2	3.9	1.5	30	15.0	20.0
Total		36	52.4	34.2	1,635	45.4	47.8

 Underperforming
– may require corrective action

 Overcapacity
– may require additional service

Weekday Fall 2019 Boardings and Service Hours as a Portion of Service by Route Type

