
SUBJECT: VICINITY BUS OPPORTUNITY

The purpose of this report is to provide the Victoria Regional Transit Commission an opportunity to place into service 5 Vicinity Community Shuttle buses for **APPROVAL**.

BC Transit is acquiring 15 new community bus vehicles (Vicinity buses) to trial in community and rural service throughout the Province. These are new buses and offer opportunities to address service challenges with existing vehicles. A prototype bus has been piloted across the Province for 18 months with positive results. BC Transit is offering the opportunity to participate in this fleet trial to select municipalities around the Province in order to get a full range of experience with the bus prior to any additional orders.

Vehicle Replacement Recommendation

- **Background** –BC Transit has used van style vehicles for community and rural transit services since the introduction of “community” bus service. These vehicles present some operational challenges: accessibility is limited (rear lifts are not compatible with on-street operations, buses are not low floor) and capacity is constrained (no ability to accommodate standees for the rare heavy volume trips).
- There are no existing buses offered and built in North America that are ideal to meet the functional requirements of community and rural transit services. In an attempt to address this North American market shortfall, BC Transit teamed with TransLink and OC Transpo (Ottawa) and posted a joint expression of interest for a 28 foot, low floor, and medium duty community buses in 2008. No feasible North American options were proposed.
- BC Transit then undertook a project in 2009 with the intent of testing a new class of bus with characteristics more suitable to the community bus profile needs. BC Transit has been working closely with Grande West Transportation and Yangzhou Yaxing Motor Coach Co. Ltd in the design and development of the 23 passenger seat Vicinity bus. The goal has been to source a cost effective, reliable, low floor accessible vehicle that was smaller than the existing aging fleet of low floor 30’ and 35’ Dennis Dart buses and larger than the discontinued Ford Polar buses. This bus needed to commercially sustain the appearance, performance and heavier duty service profile of a larger bus.
- **Prototype Testing** - Over the last year and a half, a prototype Vicinity bus has travelled more than 60,000 kilometres of vigorous testing by BC Transit across various communities in the province. In each of these communities, the response to the bus was very positive. Based on these results, BC Transit expects that the vehicle will provide the reliability, flexibility and performance expected for community transit operations.
- **Service Application** – BC Transit plans to introduce 15 Vicinity buses to the overall provincial fleet. Upon approval, 5 have been identified for service in the Victoria Regional Transit System. This will allow BC Transit to use the buses in more efficient delivery of existing community bus service (for example, the Vicinity bus will be able to accommodate the school trip demands experienced on some routes). Furthermore, the Vicinity bus will enable accessibility issues to be addressed (for example evening service on route 8 – Finlayson). The Vicinity bus will also enable very low volume conventional transit routes to be considered for conversion to community bus service (for example Route 1 – Richardson)

reducing the costs and neighbourhood impact of this service. Any conversion would also free up larger buses for more efficient and cost effective application on higher capacity routes.

Vehicle Cost, Life Cycle and Specifications

- **Specifications** – The Vicinity bus has 23 passenger seats with a gross vehicle weight rating that allows for up to 16 additional standees. The propulsion system is a Cummins 6.7 Liter ISB EPA 2010 engine connected to a ZF Transmission. The airbrake system is disc all around and mounted on Voith axles. .

	<i>Vicinity</i>
Number of Vehicles	5
Length	8.4m
Weight (GVWR)	14,000 kg
Seated capacity	23
Standee Capacity	16
Wheelchair capacity	1
Maximum capacity	39
Life expectancy (Amortization)	10 yrs
Total annual monthly lease fee per vehicle	\$4,150
Estimated Fuel consumption per 100 km	33-36 L

- **Cost** – The Vicinity bus price is \$253,000 with a total delivered cost of \$305,000. The commercial service life is 10 years. This is supported with a 2 year bumper to bumper, 10 year chassis structure warranty and a 10 year parts obsolescence protection plan. The Vicinity buses will replace Polar buses now used in community service and reaching the end of their economic life. If some conventional routes are converted, the Vicinity bus will reduce the requirements for 40 foot conventional vehicles. The lease fee and operations budget can accommodate the addition of the Vicinity vehicles.
- **Fuel Consumption** – Based on the experience of the prototype operations, the Vicinity bus should offer fuel cost benefits. The fuel consumption is expected to be in the range of 33 to 36 litres per 100km, approximately 20% below the fuel consumption of BC Transit's Dennis DART buses and 33% more efficient than a 40 foot vehicle..

RECOMMENDATION

It is recommended that the Victoria Regional Transit Commission **APPROVE** the introduction of 5 Vicinity buses into the Victoria Fleet.

Respectfully,



Manuel Achadinha
President and Chief Executive Officer