



# Fraser Valley Interurban tram-train

During the past 12 months **Leewood Projects Ltd** has been preparing a detailed report for the Lower Fraser Valley Community Rail Groups in British Columbia Canada on reintroducing the interurban railway service in the Fraser Valley between Chilliwack & Surrey (Vancouver). **DAVID COCKLE** explains further

**C**ommunity Rail Partnership and Commuter Rail exist to bring together widely varied partners in order to bring social, economic and environmental benefits to the communities served by rural and secondary rail services. This is achieved by improving community links with rail operators and initiating projects that make rail services more attractive to residents and visitors alike.

Commuter rail has come to dominate the US urban rail market in recent years, with projects finding a receptive audience amongst politicians, the business community and the public as their costs are significantly lower than those for metros and some light rail schemes. The use of existing heavy rail freight line rights-of-way avoids expensive tunnelling or other grade separation, and completion is quicker, which is always attractive to elected officials. Undeniably, the latest schemes have been quite limited in scope but many systems have plans to expand.

Commuter rail is being considered south of the Fraser River, where the communities of

Langley, Aldergrove, Abbotsford, Sumas and Chilliwack have been lobbying to reintroduce the old BCER Lower Fraser Valley Interurban, which is celebrating its centenary this October.

The scope of the proposal involves conversion and upgrading of the former interurban line which closed in the 1950s to a modern commuter line. The line of the old BCER (British Columbia Electric Railway) Lower Fraser Valley Interurban runs an overall distance of 98km from the Fraser River and Surrey to Chilliwack.

The primary and immediate focus of the report is the upgrade of the existing railway line and the early reintroduction of an 80-100kph service between Chilliwack and Scott Road in Surrey. The proposed Chilliwack to Surrey Light Rail/Interurban will share the right-of-way with the existing freight operations of CP Rail, CNR and the Southern Railway of BC, a 'Short line' railway under a mixed-fleet operation, track-sharing agreement.

Leewood Projects has been working with the South of Fraser Rail Task Force, headed

by Langley Township Mayor Rick Green, community rail advocacy group Rail for the Valley, local businesses and the Fraser Valley Chambers of Commerce.

### Interurban & community rail strategy background

The BCER interurban rail corridor was built in 1910, as a major passenger transit corridor. When the line was first built, it served a Fraser Valley population of 18,000. When the Fraser Valley passenger service was suspended in 1950 there were less than 80,000 people living throughout the Valley; today one million people live in Valley communities, with 1.5 million projected by 2031. The route is still intact and operating for freight. The freight rights are held by Southern Railway of BC along the entire route and a 13km stretch through Langley is also leased to heavy freight serving Deltaport. To reintroduce passenger transit to the line would therefore once again serve to connect the Fraser Valley communities to promote both the economy and the liveability of the region.

There has long been a sentiment among the populace of the Fraser Valley to bring back the interurban passenger rail service that was suspended in 1950. In August 2007, a valley-wide movement initially emerging out of Chilliwack, Rail for the Valley was formed. RfTV resonated with residents along the Fraser Valley, and was very active, putting on many public forums, community and valley-wide actions, and acting as a vocal advocate in the media for interurban passenger rail ([www.railforthevalley.com](http://www.railforthevalley.com)). In the following years, politicians took note, and the South of Fraser Rail Task Force was formed by Langley Township Mayor Rick Green in 2009.

### Existing infrastructure

The proposed Light Rail/Interurban route from Chilliwack runs for 98km along the line of the old BCER to Surrey and the Fraser River. 65 km of the existing rail infrastructure from Chilliwack to Langley is owned by the Southern Railway of BC (SRY); the right-of-way (ROW) is owned by BC Hydro. The 13km section of rail, known as the Pratt-Livingstone Corridor, runs from Cloverdale to Langley; it is part of a longer interurban rail line that runs from the New Westminster bridge, through Surrey, Cloverdale and Langley, and then on to Abbotsford and Chilliwack. The existing SRY rail infrastructure is single track for the majority of its length from Chilliwack to the Sumas, Huntingdon area, running mostly at grade or on a low embankment in a westerly direction.

### Stage 1 proposal: Chilliwack to Scott Road

The Stage 1.0, Phase 1 option proposes the upgrading of the SRY/BC Hydro railway between Chilliwack & Scott Road Surrey, to an 80-100kph Interurban/community rail corridor, with diesel or LPG/diesel-electric tram-trains, light rail vehicles (LRV) or multiple units (MU). The scheme proposal will include:

- Retention of existing single track ROW
- Upgrading of permanent way ROW; embankment stability, drainage and corridor enhancement for minimum 80kph running
- Improvement of structures on route; culverts and bridges including enhancement of rail over bridges for minimum 80kph running
- Renewal & replacement of track rails, track ballast, ties & switches, upgraded for minimum 80kph running
- Retention of existing passing loops

- Laying a 1km switched spur, off the SRY Interurban between Old Yale Road and 110th Avenue, with a new grade crossing of 110th Avenue near the intersection of 126A Street, to a new terminus at the Scott Road Sky Train station car park at 120th Street. The land corridor that connects the Sky Train station with the Interurban track is in the ownership of the City of Surrey
- Provision of ten stations, with signalled double-track passing loop, two platforms with one serviced station building and one weatherproof shelter
- Provision of a minimum of eight tram stops with signalled double-track passing loop, two platforms, with one weatherproof shelter per platform
- Depot, maintenance shop & control centre
- Enhancement of signalling control system
- Installation of enhanced communication systems

- Installation of passenger-operated ticket machines and assistance points
- Upgrading & replacement of at-grade road crossings, where applicable.

A subsequent overhead upgrade of the 98km Phase 1 Interurban/community rail line between Chilliwack & Scott Road Surrey, with a 750V DC supply for 80-100kph electric tram-trains, light rail vehicles or multiple units is proposed in the Phase 2 option.

### Conclusion

This report concludes that the conversion of 21st century community rail/light rail of the BCER Lower Fraser Valley Interurban will bring positive benefits to the communities that it serves: economic & inward investment, town environment, health & social cohesion.

The early implementation of Phase 1, from Chilliwack to Scott Road in Surrey, will be the beginning of the benefits. ■



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