

A better alternative to the Horseshoe Bay/Langdale Ferry

There are many good and obvious reasons why bridges are built to replace ferries. Looking around the planet, one can see that some nations (in Europe and the Far East) are building phenomenal bridges to streamline their transportation systems, and these projects reflect positively on their societies. These beautiful structures are, to many people, destinations in themselves. Advances in technology and construction materials are making possible longer bridge spans than ever before.

The usual mode of transportation to and from the Sunshine Coast is by BC Ferries. This ferry service comes at a high cost to our environment, not to mention the ever-increasing fares and the inconvenience factor for people who need to use this service. Following are some points to highlight why this particular ferry run should be replaced with a fixed link.

Reducing carbon emissions is a principle we can agree on... Here we have an opportunity to not only reduce pollution, but vastly improve transportation to Vancouver Island and the Sunshine Coast, and make better use of the Sea to Sky Highway, that has recently undergone an costly upgrade just to facilitate a two week event in 2010.

Ferries vs. Road Access, a Comparison addressing Pollution

Let's look at the numbers:

The Queen of Surrey Ferry burns approx. 1300 liters of diesel fuel for each one-way trip between Langdale and Horseshoe Bay. At maximum capacity (362 vehicles onboard) that amounts to 3.6 liters per vehicle. 3.6 liters of fuel is equal to 40 kilometers of road travel for the average vehicle. (average midsize car burns 9 liters per 100 km). If a road connection was made across Anvil Island (see attached illustrations) the approximate distance would be 40 kilometers by road between Langdale and Horseshoe Bay. The numbers would indicate that, when running at **100%** capacity the ferry fuel use is equal to what 362 vehicles would use traveling 40 KM.

But the Sunshine Coast Ferry runs on average at **44%** of vehicle capacity: In 2007 the Ferries that service the Sunshine Coast made a total of 6600 trips and carried 1,062,900 vehicles and 2,516,000 passengers. That is an average of **161** vehicles per trip...which equals 8 liters per vehicle transported by ferry. And that's more than twice the fuel a car would consume traveling by road.

And what's worse, marine engines have significantly higher rates of pollution than auto engines (as there have been significant improvements made to automobile engine emissions over the past decades, while marine engines have not kept pace)

By implementing a fixed link we conserve over **4.5** million liters of fuel each year (not counting fuel used at the terminals) and better still: we reduce carbon emission and improve the health of the Planet.

Extending the **Trans Canada Highway** to the Sunshine Coast and linking to the **Sea to Sky Highway** is one possibility. Anvil Island could be the cross-over point with two bridges. Each span would be about 1.7 km in length. The Sunshine Coast ferry can then be used for

Vancouver Island service (Langdale to Nanaimo). Travelers from the north and east would then have a choice between Fraser Valley Trans-Canada route or the shorter Highway 99 (Sea to Sky) route through Cache Creek, Lilloette and Whistler. Travelers can choose between a 100 minute ferry run to Nanaimo from the **over-crowded Horseshoe Bay** terminal or an 80 minute ferry run from the Langdale terminal.

In summary some of the advantages of a road connection are:

1. Much less carbon and sulfur emission than ferries, a positive measure towards a cleaner environment with less global warming
2. Reduction in fuel consumption (at today's prices that's a savings of about \$6 million/year)
3. Less crowding at Horseshoe Bay Terminal
4. Shorter ferry route to Vancouver Island from Langdale (and with a shorter crossing, less pollution and less fuel expense)
5. No wasted time waiting at ferry terminals (this can amount to say one-half hour wait per vehicle multiplied by 1,050,000 vehicles carried last year = 502,500 hours, and that is 57 years of wasted time every year sitting in a ferry parking lot.
6. Fewer large scale accidents (BC Ferries do not have a good record here)
7. Emergency Vehicles and others will have 24-7 access to the Lower Mainland.
8. Employment opportunity for local construction crews to build the new route.(as the Sea to Sky project nears completion, that labor force will have something to look forward to)
9. Bridges require less maintenance, do not pollute, and unlike ferry boats, rarely need to do be replaced.
10. Bridges are usually attractive, a delight to both residents and visitors.

Disadvantages?

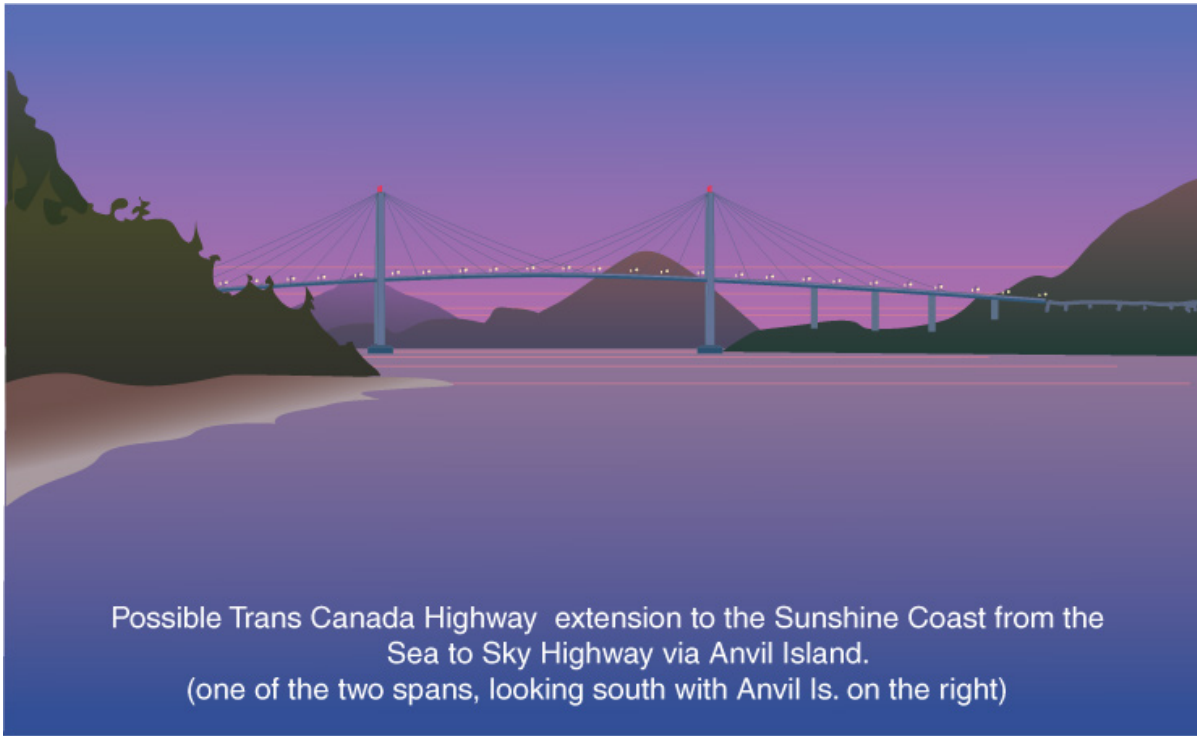
1. **None** apparent

This is obviously not meant to be an engineering analysis, rather a simple observation. Much of this information has been extracted from public sources.

Sincerely,

Hal Lindhagen

lindhagen@dccnet.com



Possible Trans Canada Highway extension to the Sunshine Coast from the Sea to Sky Highway via Anvil Island.
(one of the two spans, looking south with Anvil Is. on the right)

