

Vancouver Island Rail Project – The Last Opportunity

Prepared by Warren Skaalrud, Restore Island Rail Petitioner September 20th, 2024.



FIG 1: SHAWNIGAN LAKE RAIL WITH TRAIL

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Executive Summary

August 13, 2024, marks 138 years since the last spike was driven in the E&N railway that has heavy ties to the creation of British Columbia and the region joining Canada. Utilizing the Vancouver Island Railway for passengers, freight, excursion trains, and trails is the only real path to "Better Island Transit," Transportation Security, and Social Equity. The case for rail gets stronger every year that passes, but the costs rise every year we delay. While the economic and environmental benefits of rail are well known, the potential for passenger service gets lost in arguments like "people love their cars" without taking in the full picture. In the paragraphs below you will surely see there would be a high demand for passenger services and connections to cycling and walking paths. With the cost of living so high and personal vehicle ownership so expensive, the restoration of rail, more than any other option, will meet every climate, social equity, and transportation target. To date, over 20,600 people have signed the petition in support of the Island Corridor being used for rail and trails. This corridor is our last opportunity to enjoy and benefit from passengers and freight moving on a dedicated rail right of way for the foreseeable future.



Introduction

The Vancouver Island Rail Corridor sits on Vancouver Island, the traditional ceded and unceded territories of the Coast Salish, Nuu chah nulth, and Kwakiutl first peoples comprising 50 First Nations in total. 14 First Nations are members of the Island Corridor Foundation, a non-profit registered charity, and govern it in a 50-50 relationship with the 5 Regional Districts the railway passes through, effectively making it publicly owned and governed. Colonial history is beyond the scope of this document to address, but I acknowledge it is a significant factor needing to be reconciled to bring the Nations onboard with any future for the corridor.

Before the Island Corridor Foundation obtained ownership of the line in 2006, the previous owners CPR and RA were looking at significant repair costs after decades of deferred maintenance that they would have to pass on to rail customers, so they left. Private ownership failed the line, but I and many others believe public ownership will save it and provide an operational environment to make it successful.

Today's population and growth expectations

The Island's population is set to go through another huge increase. As expressed by MOTI, the Island is expected to have 1 million people by 2030. That constitutes an increase of 15,015 per year based on the established population count of 864,864 in 2021, bringing us to approximately 910,000 in 2024. Those numbers were proposed before the housing crisis saw the government greatly expand housing density with the stroke of a pen and insist that any community over 8000 people "must grow." It's arguable that 1 million citizens may come before 2030.

The Vancouver Economic Alliance reports that 26.2% of Vancouver Islanders are 65 years or older, many of whom would love to travel to visit family and friends on trains that are accessible and comfortable to travel in. It's estimated that in any population 20-40% of people either don't want to drive, shouldn't drive, can't afford to drive, or can't drive due to their physical or mental health, driving anxiety included. Rail, an attractive means of travel, would get many people off the highways completely, making the roads safer for everyone. Private bus services will not take children under 9 years of age, meaning families cannot utilize them and BC Transit service up and down the island is infrequent and less attractive than travel by rail. With no intercity connections between Port Alberni or Courtenay to Parksville, it just makes sense to address that shortcoming by utilizing the existing railway.

The CRD and the RDN are the two fastest growing regions on Vancouver Island. Nanaimo, Langford, Victoria, Sooke and Saanich have all been identified as growing disproportionately faster than other regions in BC and Canada. We are seeing the impact of that as commuting times rise rapidly; the South Island Transportation study predicts a 2.5 hour commute from Mill Bay to Victoria by 2035. Expanding highways will never keep up. The \$100 million McKenzie interchange and the \$86.7 million Sooke double lane projects only increased capacity enough to maintain the same level of congestion by the time they were completed. Focusing on highways as the only means of transportation is a zero-sum game.

Vancouver Island in-service Transportation Infrastructure

Our single set of highways are well into the upward arc of the congestion curve that will see commuting times rise rapidly year after year and come with costs to mitigate that would be many times higher than the cost to restore the railway. It would also cause years of roadwork delays in many places with no way around it in the meantime. That not only means citizens moving slower, but also the goods and services delivered by highways via trucks and vans too, as they are stuck in the same congestion as everyone else.

Without dedicated bus and queue jumper lanes, intercity bus services will suffer the fate of closures and high congestion periods like long weekends. That makes the services less desirable. This is also true of trucking, but they get no queue jumping or dedicated trucking lanes as buses do, even though they deliver the world's economic offerings to our doorstep. Travel by personal vehicle needs to be reduced.

The Vancouver Island Rail Corridor is still a declared and active rail network that has already been initially blasted and ballasted and has many reusable components. It would be a travesty to abandon it or convert it to a trail that only addresses only one small segment of our population's transportation needs.

Transportation Network Vulnerabilities

The Cameron Lake fires that cut Port Alberni off from it's supply lines in 2023 costed an estimated \$44 million in local damages and the Malahat washout that blocked the Malahat for a week and took 2 years and \$24 million to repair, are both very clear examples of the fragility of our transportation network. Secondary and even tertiary routes for moving people and freight are critical to ensure the safety of people, the economy, and the personal, medical, and therapeutic connections we all make.

Vancouver Island is in an earthquake zone and rail is faster to repair than roads and highways due to their simplicity of design and aren't nearly as susceptible to washouts as they don't pool water on the surface as roads do.

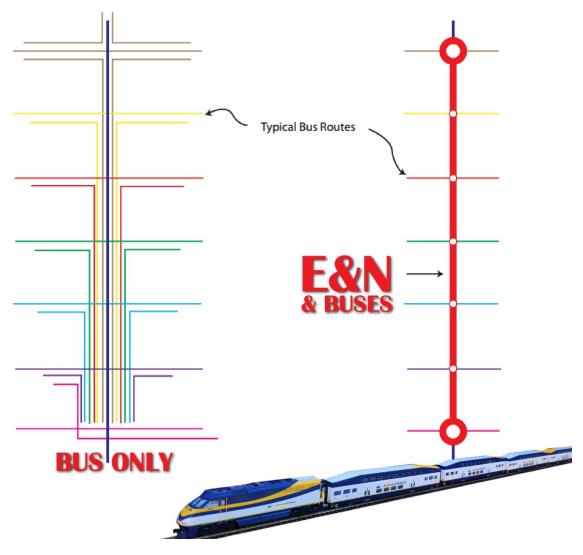
Potential Ridership of the Vancouver Island Rail Corridor.

Pictured below in the left pane is the 2021 census information overlaid with Canadian Railways. Using GIS analysis confirms the assertion that 80%, or over 720,000 people live within 5km of the corridor. The bulk of whom are much closer than 5km. The catchment for Vancouver Island Rail will be closer to 820,000 by the year 2030. In the right pane of the diagram, you can see that the catchment for rail envelopes the intercity highway infrastructure from Courtenay and Port Alberni all the way into Victoria.

In addition, according to Destination BC, the island gets 5 million annual visitors that stay an average of 3.6 days. Many of these visitors would ride the trains just to see the sights and visit our amazing communities. Many would use rail to visit with friends, family, or colleagues.



Buses alone won't move people out of cars on-mass



There are those on the Island like Todd Litman, President of Better Island Transit, that would push buses as the sole solution saying they are less expensive, but the problem is they are still vehicles on the same congested highways as regular travelers and will be blocked all the same in the case of closures. Buses require replacement about every 12 years and require significant expense to adjust highways and roads to allow faster transit with dedicated bus and queue jump lanes and signaling. In example, a \$95 Million project was just announced to add 3.8km of "bus on shoulder" lanes from McKenzie to Colwood. Trains are capable of carrying over 5 times as many passengers as a bus, for example, the Stadler FLIRT train employed by GO transit in Ottawa can carry up to 420 passengers each.

The railway is already a declared right-of-way and gets priority at all intersections, meaning it only stops at stations. This creates an environment where travel times can be predicted with precision. If BC Transit is realigned to meet at train stations, they would no longer be required to traverse the North-South route between cities. This means they could remain within the cities they serve, offer more frequent service, and carry travelers the last mile instead of the entire commute.

The Value Proposition of the rail corridor as a trail

Friends of Rails to Trails Vancouver Island, a nonprofit focused exclusively on conversion of the Right of Way for walking and cycling, used Federal Active transportation funding to have a Class-D estimate created for conversion of the Right of Way to a trail without the tracks. That estimate came in at \$172 Million but did not include removal and disposal of the tracks and ties (see "The Cost of Decommissioning"), the environmental study required by environmental, railway, and change-of-use policy and law, or engagement with First Nations. The costs for that soar well beyond that of the entire trail project. Installation of such a trail could only begin once that work is completed, adding years of delays at taxpayer expense. The National Active transportation fund is \$400 million over 5 years, and the maximum amount for any single project is \$50 million. The maximum in BC is \$500,000. To expect that Canada will invest 43% of it's entire active transportation budget on Vancouver Island is naïve considering that we have only seen \$2.5 million toward the new pedestrian bridge in Comox in recent years.

Should the corridor be converted to a trail, it will remain a trail for the foreseeable future, it is not a preservation activity. If it were, the Galloping Goose and Lochside trails would be looked at for LRT considering they are the Sooke and Saanich rail connections from the past. The facts are that conversion of the corridor to a trail, if even possible, would only serve a minority of the population while ensuring our continued reliance on Highways into the foreseeable future.

Adding up the lengths of the Lochside, Cowichan, Galloping Goose, and E&N rail trails, Vancouver Island already has over 250km of rail grade trails. Most of the trails are gravel, but much of it is also paved where they are within close proximity to heavily populated areas. The value proposition that a new exclusive paved trail would bring millions in revenue to the tourism sector gets quickly deflated by our existing hiking/cycling trail network, the ongoing maintenance and policing costs it would incur, and the fact that cycling tourists of all kinds already come to our beautiful active and vibrant cycle-tourism market.

Past Dayliner ridership should not be used to measure potential ridership in 2024

The VIA Day Liner that ran up until 2011 should not be used in calculating potential ridership. It is well known that it ran in the reverse direction to the primary flow of commuter traffic, ran up and down the island once per day, and didn't provide any of the comforts that modern trains do such as level boarding, accessible washrooms, and comfortable seating. While the 50-year-old Budd Car train experience is well remembered by those that rode it, it fell short on every "best practice" for successful rail despite multiple attempts to change it. That said, there is one moment in time in 1978 when the dollar went much farther at the grocery store, buying a home was easier, and gas was much cheaper, when CP Rail introduced a drastically reduced fare from Victoria to Courtenay just to match buses. As a result "Train crews were forced to carry large numbers of passengers in the baggage compartment, not to mention the hundreds who simply could not be accommodated and therefore turned away and denied rail transportation." This is documented in a 1978 court case initiated by the Vancouver Island E&N Steering Committee ⁽⁴⁾ The population of the island's cities has grown by 25-47% since then ⁽⁵⁾.

The cost of Decommissioning

Stantec recently assessed the Vancouver Island Rail corridor for costs ⁽⁷⁾ related to Decommissioning and Remediation and the results are shocking. Extrapolating the cost from the document to cover the entire corridor, the price comes in at \$300-750 million. That puts the cost of removal in the same range as restoration, except that with decommissioning, all the benefits of having Rails with Trails vanish.

How did I come up with \$300-750 million? The Stantec Remediation document shows a cost of \$75.6 to \$187.2 million for the 72km's that pass through the Cowichan Valley Regional District (CVRD). The CVRD only has 25% of the corridor under its purview. Extrapolating that cost over the entire 289km corridor quadruples it to a staggering \$302.4 to \$748.8 million just to remove and dispose of the tracks, ties, and ballast. Over and above that, the document also indicates that should the corridor be used for non-industrial purposes after that, those costs are predicted to jump by another 10-25% reaching close to \$1 billion.

Any change of use will kick that decommissioning process off, however, if we were to instead use those tax dollars for good, we could have a functional, comfortable, accessible, revenue generating way to move people and freight up and down the island.

The Cost of Restoring

The process and costs involved with restoring the railway are well known to Southern Rail of British Columbia. They are the contracted operator currently moving freight on Vancouver Island, and operator of the Dayliner passenger service on behalf of VIA prior to 2011. SVI/SRY Rail Link built and own the new Annacis Island Barge slip in Vancouver that connects to their 65 miles of mainline track and 4 class 1 railroads.

This is not a net-new railroad, there is no land to procure as it's already owned. The First Nations and Regional Districts ensured that back in 2003 when they formed the Island Corridor Foundation, a Non-Profit Charity, and obtained the entire railway from Courtenay to Victoria and Parksville to Port Alberni from Rail America and Canadian Pacific Railway in 2006. The railway is still considered an active railway and Right-of-Way throughout the island. The cost to restore the railway is the cost of regular maintenance applied over 289km of railway, plus train procurement and station adjustments to make them accessible at a minimum. It's not rocket science; it's a commonsense solution being used the world-over.

As for the cost of restoring the railway, estimates have put the cost to restore the tracks and procure rolling stock at ~\$2 million per km. The Island Corridor Foundation's business case, a culmination of BC Government railway and bridge condition assessments and costing (2020), puts the tracks from Courtenay to Victoria back in use for \$431 million including rolling stock and bridge/trestle repair. Repairing the Parksville to Port Alberni line would be another 30% which would connect East Vancouver Island with West Vancouver Island People, businesses, and Ports and vice versa.

Additional Benefits of the Island Rail Corridor

In addition to the benefits to citizens and visitors travelling by rail, the following are important factors to consider:

- 1. Social Equity and a path out of poverty to Paraphrase Councillor John Jack from the ACRD on the 8th of August 2022 when the Island Corridor Presented to them, "From an economic standpoint, access to reliable transportation is the most important factor in people escaping poverty. If you can't get to work, if you can't get to your appointments to heal your body or your mind or your soul, you can't escape the poverty track. This is going to free up space for people to actually be able to do that. There are knock-on effects for the entire Island. If we create alternatives in a period of high energy, food and shelter costs, people will use them and people will benefit from them. The people most vulnerable to the high cost of living are people who live in poverty and those at risk of being in poverty.
- 2. **Redundancy / Alternate Route** having alternate routes for moving people and supplies on the island is an extremely important factor. The Malahat atmospheric river washout and Cameron Lake fires are great indicators of how important it is as it cost people their connections and businesses in lost revenues. The Island Rail Corridor provides that alternate route but not while it sits in a state of disuse, continuing to deteriorate over time. MOTI has already dismissed an alternate route to Port Alberni and Duncan's request for a bypass has been turned down as well. The Malahat is a point of traffic congestion with little to no chance of ever being widened. Hwy 4 and the Malahat are serious concerns for the island's people and economy.
- 3. Getting heavy Freight off the highways The BC Freight analysis⁽⁶⁾ shows that within the first 5 years of operation there is the potential for \$3-9 Million in annual revenue. Given that the Island Corridor Foundation is a non-profit registered charity, that money would be used to maintain the tracks into the future, develop out additional business along the corridor, and give back to the communities on Vancouver Island. Additionally, moving freight off the highways reduces the costs to maintain them as increased axle weight causes damage which can be calculated using the form of the 4th Power Law that shows a heavy truck will do over 600 times the damage to a road when compared to a typical sedan.
- 4. **Keeping eyes on the utility and trail corridor** One largely overlooked benefit of having regularly scheduled trains running on the tracks is having eyes on the corridor for any developing problems that may threaten the utility corridor. They would also have eyes on the most remote sections of the corridor should a cycling path be installed next to it. Bicycles break and people can have medical issues or incur injury while hiking and biking. There is a story of Ernest Willey who worked on the E&N for 49 years who was known as "Watchman of towns, guardian of rivers and forests, overseer of a whole island" and that is indeed what train engineers, conductors, and their passengers become.

Conclusion

With over 900,000 people living on the island and over 720,000 people living directly within the railway catchment, a well-designed and commuter synchronized passenger rail system would be heavily used. Private bus services are failing families with children under 9 and BC Transit inter-city services are infrequent, particularly as one travels on the island North of Langford, and even non-existent between Parksville and the entire North Island and Port Alberni. That means families are bound to own at least one car, and often multiple vehicles where they could otherwise have gotten away with one. An automobile costs an average of \$10,000 per year that could be spent at local businesses invigorating the economy, or saved towards rent, utilities, food, or other essentials.

The island has a high demographic of people at or over age 65 and using the well-known statistic that 20-40% of any population either doesn't want to drive, can't drive, or shouldn't drive so providing citizens and visitors with a dignified, accessible, and attractive means of travel would make our highways safer and less congested during peak commuting times.

The high cost of food, shelter, energy, clothing and childcare means people would use it, providing a corridor that represents social equity and a path for people to escape poverty. Add the 5 million overnight visitors who stay an average of 3.6 days, and we have a recipe for success.

With the additional capabilities of moving freight, providing an alternate route for personal travel and supplies, with affordable housing built along its length and reconciliation with First Nations, restoring the railway should be of paramount importance.

About the writer

I am Warren Skaalrud, the petitioner behind Restore Island Rail that saw a 120-day House of Commons petition read with 7610 signatures on 7 Feb 2024 ⁽¹⁾, and creator of the change petition that is now over 20,600 signatures and growing in under 1 year ⁽²⁾. I'm aware of the CVRD Island Rail Project, and the ACRD Rail Corridor Study ⁽³⁾. As a lifetime Island resident, my goal is to provide you with a "critical eye" when viewing the ridership potential of rail travel as presented by consultants.

Why listen to me? For the last 35 years I've worked for the Department of National Defence until my recent retirement. I was a 14-year Gulf-War veteran Navy Communications Technician, then transferred into IT as a public servant. I was responsible for delivering DND's Pacific Coast IT program including Service Level Management, Business Intelligence, Capacity Management, Compliance Management, Availability Management, Service Catalog Management, Problem Management, all Reporting, Asset Tracking, Capacity Analysis, Contract Management, Configuration Management, Change Management and Continual Service Improvement since 2009. For more information I invite you to review my LinkedIn https://www.linkedin.com/in/warren-skaalrud. Suffice it to say that in those roles I have come to appreciate, and learn to address, the complexities involved in achieving positive results. I've also developed a keen eye for misinformation.

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