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Executive Summary

The E&N Railway is a standard gauge railway that runs along the eastern coast of Vancouver Island, BC, from Courtenay in the north to Victoria in the south. Historically influential to the island's development, the railway serves to connect key urban centres and resource communities. Furthermore, the railway was paramount to Vancouver Island's entry into confederation, making it an important historic asset of resident's identity.

However, the original construction of the railway failed to consider the rights of First Nations along the line and is now considered one of the greatest acts of colonial land theft in Canada's history. This presents a troublesome perception of the railway as an affront to reconciliation efforts despite its value as a sustainable transportation asset.

This debate is further complicated by the fact that the corridor has been almost entirely disused since 2011. The increasing prevalence of the automobile compounded by a lack of political will to fund the corridor resulted in a severely compromised track that is officially expected to cost up to a billion dollars to refurbish (though these figures are highly contested). What's more, given the corridor's persistent disuse, First Nations groups along the railway have begun to challenge the railway's existence on their lands in court. The most recent ruling, reached in September 2021, stipulated that the government prove that the use of the corridor as a railway be deemed in the public interest by March 2023.

Defining what is in the public interest however is proving challenging. In the time period of the corridor's disuse, NGOs and members of the public have raised dissenting voices concerning the future of the corridor, with one vocal group calling for a replacement of the tracks with a rail trail. Although the court ruling implies that this would jeopardize the corridor's unbroken status, and recent environmental and supply chain crises have led to an increasing recognition of the value of rail, there still remains considerable disagreement visible in the media and public discourse.

In addition to interviews and background research undertaken to ascertain the various views on this debate, the value of the railway is contextualized in land use and

transportation planning theory. By examining land use and development policy around the Greater Victoria region, the potential of the corridor's value as commuter, intercity, freight and passenger rail is ascertained, and corroborated by interview findings with Victoria residents and public officials. Results indicate that the corridor has very significant value to Vancouver Island's land use policy objectives, and many residents favour a return of rail service. A prevailing sentiment of frustration seems apparent, implying that any use would be better than none at all.

Yet so long as upper levels of government fail to make definitive commitments to the railway, there seems little chance that such a reinstatement will occur. Previous decisions regarding the Johnson Street Bridge replacement in downtown Victoria reveal that without strong regional or provincial government jurisdiction over transport infrastructure, the continued unbroken future of the corridor remains tenuous.

This results in an identified series of policy recommendations and avenues of future research. Key recommendations include strengthening the role of regional and provincial government in transport projects and clearer federal government funding criteria, as well as enhanced reconciliatory concessions made to First Nations. Key future research avenues include studies into the potential for E&N freight operations, strategies to overcome the lack of rail on the Johnson Street Bridge, and considerations of how the railway can best be adapted to the interests of First Nations.

Lastly, a reflection on the role of the planner is surmised. The importance of producing multiple planning options for consideration by elected officials is emphasized, but so is the idea that the consequences of these options remain dependent upon our spatial definition of the public we serve. As a final suggestion, a diversity of open-minded views should be encouraged in land use and transportation planning practice to best address the wicked problems such as the E&N railway case study presents.

Résumé Exécutif

L'E&N Railway est un chemin de fer à voie normale qui longe la côte est de l'île de Vancouver, en Colombie-Britannique, de Courtenay au nord à Victoria au sud. Historiquement influent sur le développement de l'île, le chemin de fer sert à relier les principaux centres urbains et les communautés de ressources. De plus, le chemin de fer a joué un rôle primordial dans l'entrée de l'île de Vancouver dans la confédération, ce qui en fait un atout historique important de l'identité des résidents.

Cependant, la construction originale du chemin de fer n'a pas tenu compte des droits des Premières nations le long de la ligne, et est maintenant considérée comme l'un des plus grands actes de vol de terres coloniales de l'histoire du Canada. Le chemin de fer est donc perçu comme un affront aux efforts de réconciliation, malgré sa valeur en tant que moyen de transport durable.

Ce débat est encore compliqué par le fait que le corridor est presque entièrement désaffecté depuis 2011. La prévalence croissante de l'automobile, conjuguée à l'absence de volonté politique de financer le corridor, a entraîné une voie ferrée gravement compromise dont la remise en état devrait officiellement coûter jusqu'à un milliard de dollars (bien que ces chiffres soient très contestés). De plus, compte tenu de la désaffectation persistante du corridor, des groupes des Premières nations situés le long de la voie ferrée ont commencé à contester devant les tribunaux l'existence de la voie ferrée sur leurs terres. Le jugement le plus récent, rendu en septembre 2021, stipule que le gouvernement doit prouver que l'utilisation du corridor comme voie ferrée est jugée d'intérêt public d'ici mars 2023.

Définir ce qui est dans l'intérêt public s'avère toutefois difficile. Au cours de la période de désaffectation du corridor, des ONG et des membres du public ont fait entendre des voix dissidentes concernant l'avenir du corridor, l'un d'entre eux réclamant le remplacement des voies par un sentier ferroviaire. Bien que la décision du tribunal implique que cela mettrait en péril le statut ininterrompu du corridor, et que les récentes crises environnementales et de la chaîne d'approvisionnement aient conduit à une

reconnaissance croissante de la valeur du rail, il reste encore un désaccord considérable visible dans les médias et le discours public.

Outre les entretiens et les recherches de fond entrepris pour connaître les différents points de vue sur ce débat, la valeur du chemin de fer est replacée dans le contexte de la théorie de l'aménagement du territoire et de la planification des transports. L'examen de la politique d'aménagement du territoire et de développement de la région du Grand Victoria permet de déterminer le potentiel du corridor en tant que chemin de fer de banlieue, interurbain, de marchandises et de passagers, et de le corroborer par les résultats d'entretiens avec des résidents et des fonctionnaires de Victoria. Les résultats indiquent que le corridor a une valeur très importante pour les objectifs de la politique d'aménagement du territoire de l'île de Vancouver, et que de nombreux résidents sont favorables à un retour du service ferroviaire. Un sentiment dominant de frustration semble apparent, impliquant que n'importe quelle utilisation serait mieux que rien du tout.

Pourtant, tant que les échelons supérieurs du gouvernement ne prendront pas d'engagements définitifs à l'égard du chemin de fer, il y a peu de chances qu'un tel rétablissement ait lieu. Les décisions antérieures concernant le remplacement du pont de la rue Johnson dans le centre-ville de Victoria révèlent que, sans une solide compétence du gouvernement régional ou provincial en matière d'infrastructure de transport, l'avenir ininterrompu du corridor demeure, au mieux, ténu.

Cela implique l'identification d'une série de recommandations politiques et de pistes de recherches futures. Les recommandations clés comprennent le renforcement du rôle des gouvernements régionaux et provinciaux dans les projets de transport, des critères de financement plus clairs de la part du gouvernement fédéral, ainsi que des concessions réconciliatrices plus importantes faites aux Premières Nations. Les principales pistes de recherche futures comprennent des études sur le potentiel des opérations de fret de l'E&N, des stratégies pour surmonter l'absence de rail sur le pont de la rue Johnson, et des considérations sur la meilleure façon de considérer le chemin de fer dans l'intérêt des Premières nations.

Enfin, une réflexion sur le rôle du planificateur est supposée. L'importance de produire de multiples options de planification à soumettre aux élus est soulignée, mais aussi l'idée que les conséquences de ces options restent dépendantes de notre définition spatiale du public que nous servons. Enfin, nous recommandons d'encourager une diversité de points de vue ouverts, diplomatiques et créatifs dans la pratique de l'aménagement du territoire et de la planification des transports afin de mieux résoudre les problèmes difficiles tels que l'étude de cas du chemin de fer E&N.

Introduction and Overview

There is a standard-gauge railway that runs along the eastern coast of Vancouver Island, BC, from Courtney in the north to Victoria in the south. Known most commonly as the Esquimalt and Nanaimo (E&N) Railway, it passes through rural farming communities, natural woodland, Indigenous reserves, industrial and commercial centres, and suburban growth. Being on an island, these areas are connected culturally, economically, and ecologically, and the confining geography of the region means that the primary vectors of transportation follow the path of this railway closely. Most of the island's development has occurred along these areas, in particular near Victoria, where the suburban community of Langford earned the title of 'BC's fastest-growing municipality' between 2016 and 2020. From this rapidly developing suburb to downtown Victoria, the E&N railway is the only alternative contiguous high-capacity land-based connection to the Trans-Canada highway.

It is noteworthy then that this railway is currently disused. Although still designated as an active railway and managed by an organization on the government's behalf, only a small section of track near Nanaimo is currently operated for freight purposes. A passenger train service known as the Dayliner used to run a 4.5 hour journey the length of the line, and tourist and freight trains have also operated in the past, but service was cut in 2011 due to deterioration of the tracks. The railway was then given to a charity organization known as the Island Corridor Foundation (ICF) which was tasked with restoring the condition of the tracks and re-implementing passenger rail service. Yet, ten years later, service remains discontinued. Why?

The de-facto reason given is cost. Provincial government studies into the full restoration of train services have produced daunting estimates, and implied limited utility. Additionally, there are legal challenges, as the Snaw-Naw-As First Nation filed a claim asserting title over the lands; a claim which was only recently (and conditionally) rejected. More generally, actors from several institutions with varying perspectives, motivations, and opinions as to what should be done with the land have appeared, spurred by (but also contributing to) the

heavily delayed restoration. The resulting debate has only grown more divisive, as the tracks themselves become more and more overgrown. Meanwhile, travellers between Langford, Victoria, and the rest of the island remain stuck in their cars.

On the one hand, these reasons may be sound. Disused railways are by no means unique to British Columbia: passenger services across North America have been gradually phased-out since the introduction of the automobile and air travel. Groups advocating for the conversion of tracks to a trail or paved busway might indeed be presenting a viable, affordable alternative use of the Right of Way (ROW). Additionally, if perceived as a legacy of colonialism by the affected First Nations, then the tracks represent an affront to reconciliation efforts and an amenable solution should be sought.

On the other hand, the line represents a valuable asset in terms of alternative transport infrastructure and land connectivity between the communities of Vancouver Island. As population centres continue to grow, the need for high-capacity transport such as commuter or light rail increases in the region. Langford's recent high-density development in particular is arguably transit-oriented, with many newly constructed apartments near the tracks. Municipalities throughout the region have expressed their formal support for the restoration of rail service, and many residents remain firmly attached to a train-based resolution. This position is reinforced by the often-cited fact that the railway was a condition of Vancouver Island's entry into confederation, and thus represents an important part of island heritage. In summary, opinions are divided and increasingly incompatible.

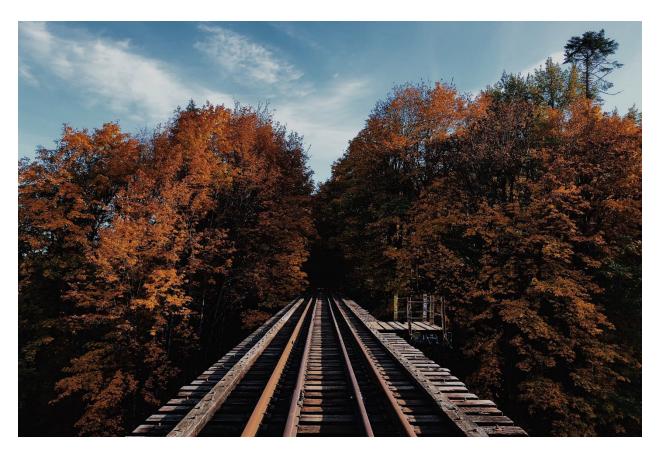


Figure 1: A trestle typical of the E&N, affording the photographer peace of mind in its dormancy (https://www.mycomoxvalleynow.com/48005/news/assessment-project-set-to-begin-for-en-railway/)

This Supervised Research Project (SRP) will *not* attempt to answer the question of what should be done with the E&N railway. What it will instead do is investigate the reasons why precisely nothing has been. It will examine how involved actors have continued to interact, debate, conflict, and negotiate. It will describe the conditions surrounding the politics and governance of the railway, and in so doing tell a story that planners can learn from. Through background research and interviews, this project aims to achieve an understanding of the E&N railway corridor conditions as both a case study of Canadian transport infrastructure issues generally and a useful perspective on the corridor problem specifically. It is hoped that the lessons learned can both inform future planners generally and decision makers involved with the E&N challenge specifically.

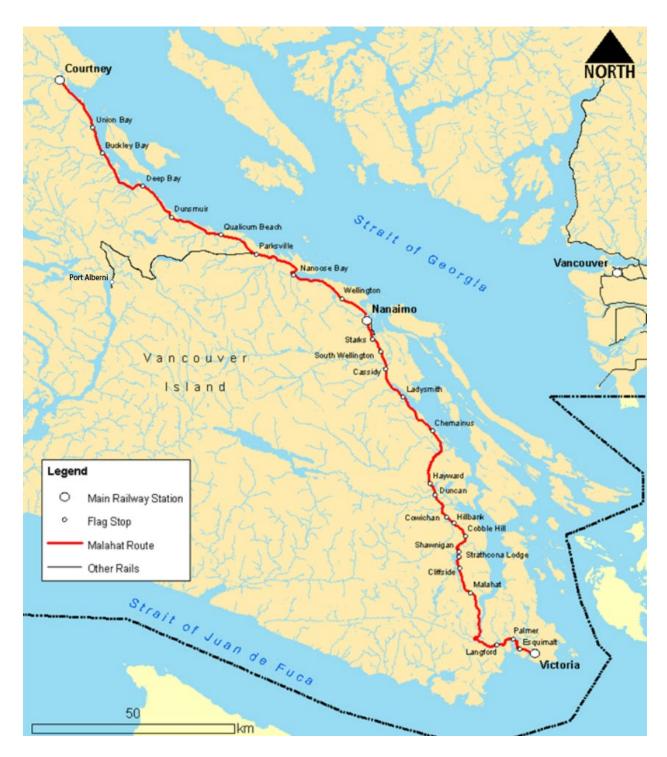


Figure 2: The E&N Alignment with intersected settlements shown (https://bc.transportaction.ca/learning/technology/passenger-rail/vancouver-island-rail/)

To examine this question, the contents of this project are structured by chapters that parallel the different themes of the different segments of the railway. At 289 km long, and traversing 5 regional districts, 25 towns, 13 First Nations reserves, (and the traditional territory of many more,) different sections of the corridor face different issues. The physical presence of the railway therefore presents a useful basis from which to analyze this multi-faceted piece of transport infrastructure.

Starting in the north, we can discover why the line was built to terminate in Courtenay, BC, and the governmental and settler-colonial thinking that motivated this. As we begin our journey southward, we encounter a branch in the railway leading to Port Alberni, where a prominent First Nations leader has become involved in the railway, espousing a different perspective. Shortly thereafter though, we find the diversity of First Nations views as espoused by the Snaw-Naw-As, who are currently challenging the railway in court. These observations afford us a historic understanding of the railway and form the foundation from which the rest of the corridor can be understood.

From there, we encounter the first sizeable city intersected by the railway: Nanaimo. As a major island transportation hub, this location offers an opportunity to discuss the E&N as the freight-intercity rail role it was intended for in Island transit. We then contrast this with a differing perspective to the south of Nanaimo, where activist NGOs contend that a more viable use of the corridor is as a contiguous rail trail similar to the one used in the nearby Cowichan Valley. This brings us to the Malahat, and the greater Victoria region.

The Malahat represents a critical bottleneck of Vancouver Island's geography and one worth discussing in the impending climate-human change context. This human change and growth can be further elaborated-on and situated in the realm of planning when we reach the periphery of greater Victoria urban development at West Hills. Langford, the municipality in which West Hills resides, will then be used as a more focused discussion of land-use and transportation planning principles such as zoning, value capture, TODs, and the municipal political discourse that may result from these issues. This municipal view is then contrasted with the regional context at an intersection of transit infrastructures in

View Royal, where constraints of the region's geography highlight the need for regional cooperation.

In contrast, the next chapters on our journey highlight how this is so much easier said than done. The Municipality of Esquimalt, Esquimalt Naval Base, and Esquimalt First Nation show variable levels of support and objectives for the railway. The Dockyard makes a strong case for commuter travel, but the Esquimalt Nation presents a conflicting viewpoint, and the municipality of Esquimalt emphasizes the value of the corridor itself.

Lastly, this journey terminates in Victoria-West. Here the Johnson Street Bridge was rebuilt in 2018 without the inclusion of rail. The story of why this happened and what it means for the project is in many ways an embodiment of the political, economic, social, and environmental considerations that exemplify why this railway corridor is so challenging to make use of. This section reinforces the importance of local decisions and planning in the role of local government.

Finally, this SRP concludes with a summation of lessons learned generally. It also provides recommendations specific to the problem. Areas suitable for future academic research or political effort are identified. Concluding thoughts on the role of the planner in such situations are explored, serving as a conclusion and advice to future planners.



Figure 3: Esquimalt and Nanaimo historic rail car (https://www.islandrail.ca/rail/history-of-the-en-railway/)

Methodology and Ethics

The methodology used for the creation of this report was a two-part process. The first was a literature review, the second an interview assemblage. Given that this project is a localized case study lacking in formal literature, this demanded greater emphasis on the second portion. The literature review was done primarily as a means to inform the interview questions – a basic level of understanding had to be reached to ensure the interviews would yield the most pertinent information. Thus, the literature review is perhaps better characterized as preliminary research, though given the complex nature of this topic, that research was fairly extensive.

The vast majority of literature consulted was grey literature. News articles in particular accounted for a vast majority of available works on the subject. Some of these were informed takes by journalists, though many others were op-eds. In some cases, directly involved professionals would publish their own editorials through newspapers or their personal/organizational websites. These websites were also heavily consulted, especially those most influential in the direction of public opinion or those most in-control of the corridor itself. The views espoused from these sources were taken as informed opinion – they appear in this report when corroborated via interviews or other supporting evidence.

The areas in which formal, peer-reviewed literature is employed in this report is in those sections which consider the E&N from a theoretical, urban planning perspective. For instance, land use and transportation theory, TOD best-practices, or automotive dependency vs public transit's environmental and societal benefits. In many cases, this research was already undertaken as a requirement of other courses taken by the author at McGill, though there were instances in which that research was pursued further or refined for the purposes of this project. Appendices A and B exemplify this, as they are complementary papers drawn directly from other courses that nonetheless serve to centre this project within an important theoretical understanding of urban and transportation planning.

Dissimilar to other urban planning analysis however, the interview methods required to gain an understanding of this issue are necessarily more akin to investigative journalism rather than traditional planning practice. With such a diversity of opinion and perspective varying between different actors (whether they be governmental bodies, non-profit organizations, interested members of the public, media outlets, or involved public officials) it was necessary to undertake interviews of various persons who represent those organizations in order to realize a full picture of the E&N corridor's history, status, and future potential. Of course, the high stakes for Vancouver Island only compounds the already political nature of the topic, so the approach taken to these interviews sought to strike a balance between a casual conversation innocent to any underlying personal or organizational motives, while simultaneously seeking to understand any such motives by way of comparison amongst interviewees. Although obviously impossible to understand the will and thought process of every actor, it was hoped that by cross-referencing responses and considering comparative disposition of the interviewees a better understanding of both the relationship between actors and the actors themselves could be achieved.

Thus, for the benefit of comparison and consistency, an interview template was universally applied to all interviewees. This template begins with questions about why the corridor remains disused (the history of the railway), then seeks to understand the relationship between the different actors and forces (the current situation) and concludes by asking what can/is being done (a speculative discussion of the corridors' future). Exact questions were tweaked minorly from interview to interview, but the overall structure remained the same regardless of the positionality of the interview. The logic of this was to allow even those uninformed of an aspect of the issue to speculate, because this speculation demonstrates how the issue is perceived from an outside perspective. (For example, members of the public were still asked why they thought the corridor was disused despite no expectation that they be informed on the historic reasons for this. Their speculative reasoning was used to help inform the public's perception of the issue.) The sample interview questions template is attached in Appendix C.

Given the political nature of the issue, imperative to interview members of the public, and desire to understand Indigenous perspectives, an ethics approval was sought through the Research Ethics Board (REB) of McGill University. This was done to ensure the bounds of the interview process be well understood by both the interviewer and the interviewee. Interviewees were made aware of their rights to waive questions, remain anonymous, and have their raw data disseminated back to them, while the interviewer refined questions so as not to cause ethical dilemmas or unprofessional relationships. In the end, no interviewee requested anonymity, so the occasionally this report does attribute quotes directly to a name, though only when it is considered useful to understand the topic as a whole. In most cases, interviewees are referred to by their title or positionality.

Although attempts were made to converse with First Nations members, these requests did not result in any responses. Although unfortunate to the goal of comprehensive understanding, it may have been that these parties lacked the capacity to engage with a curious student whom can offer little in return for their time, and it was understood that respectful engagement discounts persistent, repetitive contact attempts. Thus, in no case was a member of a First Nation contacted more than two times regarding an interview request, and in no case were multiple members of the same First Nation contacted. Though perhaps a more persistent approach would have yielded a greater understanding, it was felt that both the limitations of this project and the spirit of that understanding precluded such an approach. In any event, this lack of results is a lesson in and of itself, and is identified as a gap for longer-term future research.

Additionally, given this lack of First Nations responses, the ethics process was considerably simplified. Certain REB approvals were made redundant by this, though the process was valuable in its own right. Revisions to the REB submission required only minor changes concerning data storage and dissemination, and voluntary participation form modifications. Full REB approval was granted, and is attached as Appendix D.

Overall, the many interviews undertaken for this project resulted in a more holistic and nuanced understanding of the issue, complimenting the literature review. Critically, given that so much of that literature review was news articles, these interviews served to

counterbalance any pre-constructed narratives existing in the media space surrounding the topic. Of course, it is ironic to note that this very project is in many ways one such narrative. However, it is believed that the academic, student-authored nature of this project, with an underlying motive focused on learning rather than influencing, has led to a report that offers some consensus and understanding of the topic that may not have been achievable had the position of the author demanded a less objective methodology. This report does not offer any definitive conclusion regarding the future of the E&N railway, but it does provide data helpful to the formation of such a conclusion.

Causta HS

Chapter One: Terminus

Location: Courtenay

A Brief Colonial History of Rail on Vancouver Island

Vancouver Island was promised a railway. At five-and-a-half times the size of Prince Edward Island, and geographically distinct from the rest of British Columbia, a unique Island (capitalized 'island' refers to Vancouver Island from now on) identity was emergent prior even to British Columbia's entry into confederation (Pass, 2013). Islanders were isolated from the rest of Canada and as such, many felt there should be some sort of incentive/recompense for entry into confederation (Pass, 2013). Thus, when a route for the Trans-Continental railway was being studied, great effort was undertaken to ensure the western terminus of the railway be somewhere on Vancouver Island. From 1872 to 1882 many different routes were discussed, politics flared, and speculation was high (Baird, 2021). Local interests wanted a route to serve them best, and thus routes terminating in seven different locations were considered, from Bute Inlet to Port Alberni to Esquimalt. Esquimalt was hastily chosen as the terminus by Sir John A MacDonald (likely for political reasons) shortly before the Pacific Scandal led to his resignation (Baird, 2021). Fierce land speculation followed in Southern Vancouver Island, as fortune seekers sought to profit from the promise. However, a change in government reversed this decision, leading some disgruntled proprietors to threaten Vancouver Island's departure from confederation (Baird, 2021). A compromise was later reached to prevent this: the transcontinental railway would terminate at Burrard Inlet, but Vancouver Island would still get a railway. This is the origin of the E&N, and it only gets more political from here.

E&N as an acronym refers to the two original termini of the rail line: Esquimalt in the south, and Nanaimo in the north. However, it wasn't long before the line was extended in both directions: extending into Downtown Victoria in the south, and up to the coal-rich lands surrounding Courtenay in the North. Additionally, branches to Port Alberni and Lake Cowichan were constructed in 1911 and 1912 respectively, traversing the island to provide

freight access for the interior and west coast timber ports. The name E&N stuck better than V&C&LC&PA though, and although the official name of the railway has since changed to 'Southern Railway of Vancouver Island', its still colloquially and commonly called the E&N.

At the time of construction, the railway served a dual purpose of freight transport and intercity passenger service. The main branch of the line served as the major passenger rail corridor: an artery connecting the communities of Vancouver Island in a swift and direct medium that predated the popularization of the automobile. The branches leading to Port Alberni and Cowichan meanwhile were more freight dedicated as these were logging towns whose company executives profited significantly from the railway (Morales, 2007). However, the whole line was multi-use, and served as a critical artery of Vancouver Island's economy in the decades surrounding the turn of the 20th century. Following World War II however, the automobile began to take precedence, and motorways such as the #1 Highway from Victoria to Nanaimo and the #19 up the remainder of the island started to take traffic from the route (Winter, 2020).

By the mid 20th century, the line was losing ridership and the operating structure was changed. Canadian Pacific (CP) sequestered the intercity passenger service to VIA Rail, who began to operate a subsidized service with reduced scheduling. This service started in Victoria and ran the line to Courtenay and back once daily. It was therefore given the imaginative name 'Dayliner'. Presumably the idea with this service was to provide the heavily populated region of Victoria with a getaway destination service, allowing for daytrips to destinations such as Mount Tzouhalem near Duncan, Rathtrevor Beach by Parksville, or Mount Washington Alpine Resort next to Courtenay. There-and-back service could be provided, though the daunting 4.5-hour journey to Courtenay meant that any daytrip was a lot of travel for a short visit.

By the early 2000's, it was clear that the railway service was struggling, and critics began to question how the VIA service could be improved. One emergent narrative was that it 'ran in the wrong direction' (Winter, 2020). This alludes to the there-and-back schedule that served Victoria residents seeking a country getaway up-island, rather than up-island residents seeking services in Victoria (Willcocks, 2016). Many believed the latter would

have commanded greater demand, as Victoria is the greatest population centre on the island, and therefore affords many important services to upper-island rural residents (Winter, 2020). With the possible exception of Nanaimo, the only apparent advantage of a northbound service is to facilitate up-island tourism originating from Victoria. There are some merits to this reasoning: Victoria is popular among tourists and by providing what was effectively an up-island excursion service VIA could have been attempting to both increase the tourism appeal of Victoria while fostering economic diversity in rural upisland communities. However, given that the railway affords minimal views for most of its length while newer car infrastructure afforded similar vistas with dedicated viewpoints, the viability of maintaining the service for this sole purpose would prove untenable. Furthermore, investments into highway infrastructure resulted in travel time savings of 90 minutes between Victoria and Courtenay when taking the car rather than the train, not to mention the last-mile travel freedom that cars provided. In general, the increasing prevalence of the automobile in everyday life, spurred on by government subsidization of car infrastructure, influence of auto companies in North American markets, increasingly affordable air travel, and a mix of geographic vastness with North American idealism were all factors steadily detracted from the Dayliner's appeal not only as a tourist train, but as a mode of transport itself. (Francaviglia, 1971) (Keeler, 1971) (Thompson, 1987).

With that said, critics of VIA rail will contend that the organization never made any attempt to adapt the railway to these changing factors, and indeed, no refutation or justification of the 'wrong direction' argument was ever publicized by the crown corporation. This has led some to speculate that VIA –already a financially stressed organization— simply wanted out of the project, as it was costing them a daunting 1.4 million dollars annually by 2011 (Winter, 2020). Low usage of the tracks in general meant that the line had seen minimal reinvestment in the preceding decades, resulting in a vicious circle of low usage, to lowered maintenance, to poorer service, to lower usage, etc. By 2010, it was estimated that 70 million dollars was needed just keep the service running as currently provided (Winter, 2020). As a national company beholden to a national mandate, VIA's priorities may have simply been elsewhere, leaving the E&N largely neglected.

Whatever the case, service was terminated in 2011. Although originally thought of as a temporary measure awaiting funding acquisition, passenger service has yet to return to the tracks in any capacity as of 2022, and the deterioration of the tracks has continued. The 2020 Ministry of Transportation and Infrastructure Island Rail Corridor Condition Assessment estimated up to a billion dollars is required to restore the tracks and implement commuter and intercity options. While it is beyond the scope of this paper to challenge these figures, some contest them for including a near 50% contingency (practically unheard of in most engineering projects), as well as unnecessarily luxurious service options. Such hefty numbers have scared away political will to restore rail since, and so the corridor continues to decay to an even further state of disrepair. Vancouver Island, whose entry into Canada was predicated on the provision of a railway for the purposes of internal island connectivity and economy, is now without one.

Sometimes this is cited as a reason for the upper levels of government to invest in and reinstate passenger service on the corridor from Victoria to Courtenay. Enthusiastic proponents of passenger service claim it is a violation of an agreement akin to something like a charter: a binding document that lays the foundation for an agreement of nationhood. However, this curious example of a specific piece of infrastructure being used as such a binding document has been proven false by the courts (Stevenson, L., 2021). In any event, the #19 and #1 highways do a satisfactory job of connecting citizens North and South of Vancouver Island, and the idea that anyone was dependent on the E&N Dayliner service seems extremely unlikely considering its final ridership numbers and limited-service characteristics.

Nonetheless, the E&N line and its associated Dayliner passenger service remains a strong symbol in the eyes of Vancouver Islanders. Many can recount their last experience with or on the train, and some have specifically fond or romantic memories. A Greater Victoria resident interviewed described his last experience with his wife on the train as "a beautiful getaway to the country", with "great fondness". Various op-eds can be found espousing romantic memories or sentimental views of the rail's past as well, dating all the way back to the cessation of service in 2011 (Rose, 2016). Despite its flaws, the Dayliner had value to

residents of the island, and is the iconic image of what people remember or conjure to mind when they think of the E&N railway.



Figure 4:Picturesque Images like these may be what stay in people's minds when recalling the historic Dayliner service. (https://www.comoxvalleyrecord.com/news/vancouver-island-passenger-railway-return-clears-another-hurdle/)

Causta HS SRP

Chapter Two: Take and Give

Location: Port Alberni

Freight and Economic Origins of the E&N

Contrasting and underlying this romantic image of Victorian rail through the peaceful countryside is a much more utilitarian function. Freight hauling has always been a major component of operations on the corridor, and the primary raison-d'être for the branches constructed to the forestry towns of Lake Cowichan and especially Port Alberni (Gunderson, 2014). This is especially notable considering freight is the only currently functioning aspect of the railway: with a small section of the line near Nanaimo dedicated to propane and rail-truck-transfer hauling by Southern Railway of Vancouver Island (SVI) Rail Link: a subsidiary Southern Railway of British Columbia (SRY), (themselves a subsidiary of the Washington Marine Group). Freight is frequently discussed in the discourse surrounding reinstation of the rail service as well, as a cornerstone of both the SVI and ICF's vision. Certain local businesses are also poised to profit from the railway, with significant commercial and industrial land zoned along the line in destinations such as Esquimalt, Duncan, Chemainus, Nanaimo, and Port Alberni.

After completing the railway in 1886, Robert Dunsmuir would sell the line to Canadian Pacific (CP) in 1905. As the new owner of the tracks, CP was originally an operator of both passenger and freight rail services. However, their operations were always highly dependent on freight (Winter, 2020). In 1953, passenger service along the Port Alberni spur was terminated, and from 1979 VIA rail took over passenger service operations as the phenomenon of automobile usage ate into passenger train service throughout North America. CP continued to operate the E&N tracks for freight purposes until 1999, at which point RailAmerica bought the Port Alberni spur and leased the remainder. This did not last long however, and freight service continued to dwindle throughout the early 2000's. In 2003, the ICF was formed to prevent the railway from breaking up, in 2005 it took formal ownership from CP, and in 2011 passenger service was officially discontinued by VIA. The

timeline of these events implies that the profitability and functionality of the railway as a whole was highly dependent on freight service; as that service declined, so too did the overall utility and funding for the railway.

The primary cargo of freight on the E&N during its time were lumber, coal, and the occasional military equipment for the Esquimalt navy base (Winter, 2020). Shipments often originated in the remote northwest of the island and were bound for Vancouver, making Port Alberni and Nanaimo significant destinations (Winter, 2020). Port Alberni serves as a logging node for much of the coastal logging along the western Vancouver Island, while Nanaimo fulfills a role as the Island's transportation hub, as well as many forestry management offices. The importance of this section was likely recognized by RailAmerica when they bought it, and continues to be pushed for to this day by SVI. However, Nanaimo remains the only operated freight service at the moment. (For more on the current freight operations in Nanaimo refer to Chapter Four.)

Dependency on freight however means dependency on the industry that creates that freight. Given the cargo hauls of the railway, it should come as no surprise that this would prove problematic to the sustainable operation of rail as industrial trends shifted. Coal, for its part, is an increasingly unappealing natural resource as climate commitments are made and coal is 'phased down', though exports continue from other parts of the province. It is also a finite resource, and was mined beyond profitability in 2015, when the last remaining mine (the Quinsam Mine, located near Campbell River) shut down.

Lumber meanwhile is known for notorious boom-and-bust cycles and has been steadily decreasing in prominence throughout British Columbia for a variety of reasons. To a certain extent, much of the industry's former eminence will never be recaptured as far as is foreseeable: globalized markets make it uncompetitive to process timber in Canada, and the British Columbian pulp and paper mills have been steadily shuttering their doors since the early 2000's, with 44 (at the time of writing) closing since 2005. On the other hand, to a certain extent poor forest management in the past is partly to blame for the current shortcomings of the industry. Mismanaged slash practices pushed limits on ecological zones, improper working conditions for silviculture workers, and a generally unsustainable

rate of harvest has resulted in compounding forces of pine beetle infestations and wildfire that have put undue stress on the industry (Morrow, 2021). Climate change of course is increasingly to blame for these and other stresses as well but is often mis conceptualized as the only cause. Wildfire managers, silviculturists, and forestry government officials in BC alike agree that the mistakes of the past have resulted in an egregious mess, but that they are getting better (Morrow, 2021). The hope is that the industry can recover in a sustainable manner while weathering the brunt of increasingly present climate change. In this case, there is a certain case for a lumber as a freight haul on Vancouver Island at some point in the future, and one such promising place is in Port Alberni.

The Port Alberni spur is an interesting case study as it embodies the imperative of freight in the history of the island railway. An industrial, working-class town in the centre of Vancouver Island, the town has a history long intertwined with the lumber resources under question. Coal never played a significant role in this section, but lumber was and continues to be a massive source of employment for the town (Gordon et al., 2007). The geographically central location and proximity to the Vancouver-serving port of Nanaimo therefore made it a sensible location to build a railway branch to.

This branch, known colloquially as the East-End track, winds through the hilly interior of the island to reach Port Alberni from Nanaimo. The most notable section of the route passes along Cameron Lake, offering spectacular vistas that have conjured a particular fondness for the railway: a significant community exists to support this section of line. It also passes next to MacMillan Provincial Park, home to the spectacular Cathedral Grove: a perhaps ironic juxtaposition of the preciousness of the resources the railway was built to harvest. The 'East End Track Gang', a local group affiliated with the VITCC (more on them later), has long promoted the potential tourism benefits of this, and believes in a complementary freight service to revitalize Port Alberni. Because Port Alberni is a critical stop-over point for tourist seeking to access the very popular West Island destinations of Tofino and the Pacific Rim, it is foreseeable that a reinstatement of freight along this line could permit complementary tourist/excursion services along this branch to resume as well.

Port Alberni is also home to an influential ICF board member: Dr. Judith Sayers of the Hupacasath First Nation. Although Dr. Sayers was not able to comment on this report, she has spoken often in favour of freight and rail reinstation as a significant benefit to island communities, seeing the potential of the rail to revitalize local economies and provide roadbased alternatives (Sayers, 2012). Though Dr. Sayer's comments are not representative of all communities, she does make verifiable points, including how the railway intersects downtrodden communities in need of economic revitalization. Port Alberni in particular showed a population change of -0.5% in the 2021 census compared to the provincial average of +5.6%. The community has generally been in a state of economic decline as per the logging industry as well (Gordon et al., 2007). Historically, such areas were more profitable as they took advantage of the railway infrastructure: built legacies that still exists in places like Duncan and Chemainus. Now-derelict freight-loading infrastructure permeates these communities, serving as a reminder of the railway's role in the local economy. Not all island residents might imagine a romantic passenger service along the E&N line: such small or struggling communities may have a much more utilitarian dream of freight revitalization.

This idea of freight as a means to benefit future growth in small, underserved communities is also easily extended to include those 13 First Nations whose reserve lands are directly intersected by the line, and even those nearby ones. Dr. Judith Sayers by no means speaks for each of these groups, but she does represent one of them, and has in the past been a significant voice for and advocate of rail reinstation in the others (Sayers, 2012). However, these voices are complex and nuanced, their histories unique and storied. It is important to explore the historic relationship First Nations have had with this railway in order to understand why that relationship remains so contentious and uncertain.



 $\label{line:prop:sign} \emph{Figure 5: An SVI freight caboose traverses a trestle along the E\&N (https://fnbc.info/blogs/judith-sayers/we-saved-rail-vancouver-island)} \\$

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Chapter Three: An Unwritten Truth

Location: Snaw-Naw-As (Nanoose) First Nation

First Nations Historic Relationship with the Railway

First Nations have a complex relationship with British Columbia. This is both an understatement and a detractor from the atrocious injustice and inequity of the situation. To even address the subject as a beneficiary of the deliberate subjugation, assimilation, and robbery of these people feels wrong. However, the imperative of reconciliation trumps the temptation to avoid the subject altogether, and the intense involvement of First Nations in the fabric of both the British Columbia and Canadian governments generally, and the E&N railway specifically, negates such an option in the first place. First nations groups in BC have some of the most unique relationships with other levels of government in the world, and this spills over into their relationship to the E&N railway corridor in ways that are both surprising and disturbing. The following explanation of the situation is just as likely flawed as it is necessary though: British Columbia has a complex relationship with First Nations.

While the intercontinental railway represents a triumph of engineering and Canadian unity, it came with a great cost of human life and ways of living. Chinese immigrant workers bore the acute brunt of this, being subjected to dangerous and exploitative conditions that resulted in hundreds of deaths and extreme misery (CBC, 2001). Furthermore, rather than recognition, these workers were met with discriminatory policy and degradation by the colonial populace (BC Gov., 2022). Little was done to compensate the victims, and retroactive compensation is certainly inadequate. However, this failing has at least become commonly known in British Columbian social studies classrooms.

On the other hand, the disruption experienced by First Nations along the route is insufficiently discussed. The railway segregated communities, increased settler immigration (colonization), and undermined economic interdependency between colonists and First Nations (Lavallé, 2008). The railway would later be used as a means to transport children to and from residential schools, further eroding these once rich cultures tied to the land upon which the railway was built. Therefore, had the terminus of the CPR been constructed somewhere in Vancouver Island, it is likely that such effects would have been felt throughout Vancouver Island's First Nations as well. At a glance, it might therefore be construed as fortunate for them that it did not.

Perhaps nothing could be further from the truth. The E&N railway is mired by one of the most egregious acts of colonial land theft to have ever shaken Turtle Island. The instance is so infamous that it is known specifically as the "E&N Land Grab", or the "Great Land Grab", and accounted for approximately a third of Vancouver Island's territory being effectively gifted from the 'crown' to a baron by the name of Robert Dunsmuir (Morales, 2007).

The colonial thinking was that in compensation for the efforts to build a railway, (and one that would not connect to the mainland) Dunsmuir should be given land as compensation. Nevermind that this company stood to profit significantly from the railway itself, or that the amount of land given grossly outweighed the costs of construction, or that the land was never the government's to give in the first place. This last point is especially pertinent: most all of the First Nations within the gifted land did not consent to the cessation of these lands at any point (Morales, 2007). These lands were their home, their sustenance, their spiritual grounds, their transportation corridors. Furthermore, these lands were often used by multiple groups, organized by various bands or tribes. Thus, the potential for miscommunication (already very high) was reinforced by the failure to communicate with all affected parties. First Nations could not at all times understand what the settler colonials intended for or from this railway, what their conceptions of territory entailed, let alone how the landscape would drastically transform over the next 100 years to the point of uselessness to them: a gradual financialization and imperialization of their homeland that left little room or legitimacy to protest, renegotiate, or redefine (Thom, 2009) (Turner & Clifton, 2009).

Robert Dunsmuir got extremely rich from the deal (Horter, 2008). The settler colonial people of the island also benefitted substantially for a time, as the rail provided economic

and social connectivity. Yet the First Nations were uniformly sidelined. Despite the railway running through thirteen of their reserve lands (already an insult to divide the tiny amount of land that these people were jailed to with a classic symbol of colonial infrastructure), services to these communities were never given the same priority as the other colonial centres along the line. Furthermore, what connectivity the railway did bring to these people was marred by the fact that these trains were occasionally used to deport the children of these communities to residential schools, where they were deprived of their cultural ways of life and force-fed colonial ontologies (Hul'qumi'num Treaty Group v. Canada, 2011). In so many ways, this railway served to divide first peoples, rather than connect.



Figure 6: Land Granted to the E&N Railway Company resultant from 'The Great Land Grab' (https://wm-no.glb.shawcable.net/service/home/~/?auth=co&loc=en&id=131952&part=2.2)

It should come as no surprise then that an animosity is felt by some of the Indigenous people along the corridor towards it. Though many see the potential prosperity it could

bring to their community were it to be revived and brought into connection with their modern way of life, there are reservations. According to some interviewees, some such as the Esquimalt Nation regard the alignment of the railway as problematic. The track runs close to their longhouse, presenting noise and safety concerns. They also see it as a division upon their community generally, so much so that when a parallel rail trail was built, they asked that it be diverted around their lands. This is reminiscent of similar precedents in urban highway development through marginalized communities (often African American communities in the United States); a subject which is now increasingly widely recognized and seen as legitimate grounds to redesign or even demolish transport infrastructure (Archer, 2020). Once again though, manifestations of the Indigenous equivalent are far less discussed. The Nation itself does not have the capacity to widely express these views either, as evidenced by the lack of ability to do an interview for this project.

One group that has made their dissenting views public though is the Snaw-Naw-As, a First Nation, just north of Nanaimo. In 2015, they challenged the legitimacy of the corridor through their territory in provincial court (Snaw-Naw-As v. Canada & ICF, 2015). Their case is based on the flawed and divisive intrusion of the railway upon their lands and contests the colonial legacies that cordoned them to their position in the first place. Fundamentally though, they ask whether the preservation of a railway track (through their territory), that is no longer used for a railway (and has not been for some time) is just. In 2015, their case was brought to the provincial courts and was rejected. It was then brought forth again on appeal, and rejected, but with a key condition: the province has 18 months to A) demonstrate the railway corridor is in the public interest, and B) provide a financial funding plan for the northern section of the corridor. As of March 2022, this leaves one year to meet either condition (Snaw-Naw-As v. Canada & ICF, 2015).

This court decision is critical to understanding the E&N case and is therefore worth dissecting. First of all, it sets a deadline. After more than a decade of middling political will, upper levels of government now must make a decision regarding this piece of infrastructure, and whether to fund it. News articles have described this as "do or die time", "derailment ahead?", and "use it or lose it" for the E&N corridor (VanIsle.News, 2021) (Holmen, 2020) (Sayers & Kent, 2021).

Secondly, the ruling strongly implies that the corridor must be used for rail. If the use is not rail, then the historic reasoning for the corridor's existence in the first place is moot, and the First Nations have grounds to repossess their territory. Though this interpretation of the ruling has not been legally tested, this seems the predominant opinion according to multiple interviewees. This fact is important to recognize for future chapters.

However, from this point, revelations about the ruling become less clear, and produce more questions than answers. Never mind that 18 months is a curious, arbitrary amount of time or that the northern section of the corridor is not well defined, or what the consequences of failing to meet one or both of the deadlines might be ... what exactly is the public interest? As we have just seen, the classic "who benefits?" question has been a deep point of contention for this railway. The BC and federal governments have multiple mandates that conflict on this matter. On the one hand, the government has a duty to provide, safe, clean, efficient, timesaving commuting options that are socially accessible and fiscally responsible for its communities. It is also deemed to connect these communities, and the only way to do that is through unbroken transport infrastructure assets such as the E&N corridor. Yet, on the other hand, the reconciliation imperative, contrasted by BC's ongoing saga of colonial non-negotiation, creates a morally and legally convoluted definition of the public interest. To what extent can we justify the need to provide alternative forms of transit and environmentally beneficial alternatives in the face of an ongoing legacy of colonialism? This is not the first or the only time the social, environmental, and economic imperatives collide, but it is a complex one and a rare case in which the social and the environmental appear mostly at-odds. This is the primary fascination/preoccupation of this paper: what exactly are we to make of this?

However, as was just revealed, this question is no longer in the realm of academic speculation. A timer is in place, and it is now up to governments and stakeholders to answer this question. At this point then, it is time for this paper to move from the historical to the present-day context. We will now examine the actors that influence the railway today.

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Chapter Four: Operations

Location: Nanaimo

The ICF, SVI, and Related Bodies

At the centre of all things E&N is the Island Corridor Foundation (ICF). The ICF is a nonprofit organization tasked with the preservation and maintenance of the railway. Initially founded in 2004, the ICF gained ownership of the tracks from CP and RailAmerica in 2006. With the 2011 cessation of service by VIA Rail, their influence over the corridor and imperative of their mandate was significantly increased. Although the ICF manages the tracks for the public benefit it does not operate rail service. The only rail service is operated by SVI Rail Link, who run a short freight operation mostly within Nanaimo.

The ICF is made up of a council of six first nations and six community representatives from along this line. This structure is quite uncommon as it effectively grants 50% stake to Indigenous representatives. These representatives are often elected chiefs or other prominent leaders in their respective nations. The non-indigenous board meanwhile is made up of elected officials, one from each regional district along the corridor. The organization meets several times a year, with generalized minutes posted on their website.

In addition to this board, the ICF has two full time employees, a CEO and a Manager of Corridor Development. The Manager of Corridor Development acts to facilitate development of trails alongside the corridor, negotiate land management issues, identify tax exemptions, and communicate with the public. The CEO ensures good working relationships within and beyond the organization, oversees land management issues, and is in charge of ensuring infrastructure assets are in order.

Over the 16-year lifespan of the ICF, there have been four CEOs. In an organization of such few full-time staff, leadership is critical to achieving results. It is for this reason that at least one of the former CEOs faced significant criticism for failure to achieve these results, with some of those interviewed blaming this on "incompetence", "showmanship", "lies", and

"complicated politics". Other former CEOs were demonstrably busy with other projects, and stepped down after a few years, uncommitted to the cause (Willcocks, 2016). In 2018 however, Larry Stevenson took over from former CEO Graham Bruce. Seen as a marked improvement by many, Larry Stevenson is a former employee of CN Rail and has a background in business. Mr. Stevenson's former experience and commitment to the cause was seen as a hopeful and necessary renewal of leadership by many of those interviewed. There seems to be a renewed trust and optimism in the ICF under his leadership, with some related organization leaders stating they "support him 100%".

Mr. Stevenson will be the first person to tell you however that the failings of former CEO's may be more to do with the impossibility of the mandate given to the ICF, combined with inconsistent, unreliable funding, rather than CEO corruption or incompetence. The organization was never guaranteed consistent funding or pay for its employees or its operations. Funding promises have been made and pulled back on several occasions, often at the whim of a (newly) elected government or following a major court proceeding such as the Snaw-Naw-As case.

The ICF is therefore tasked with a centrally important mandate: manage these tracks that no one else wants to, bring together support from everyone despite the lack of funding for the tracks, and prove to those who would fund the tracks that it is worth doing. This curious little two-employee creature of the province is effectively tasked with fostering the future of perhaps the most important piece of uncertain Vancouver Island infrastructure to date, and they have less than 18 months to do it.

So, what is the ICF currently doing? In speaking with Larry Stevenson, it is clear that their priority (and what he sees as his core role) is getting the provincial government to understand the value of this railway and its potential. He also sees it as important to get federal support, but since the federal government has expressed a general support for infrastructure funding, it is expected to follow the province's lead. Achieving the support of the province is therefore the critical objective for the ICF. Though past political statements may make this seem unlikely (John Horgan, Premier of BC described the Johnson Street Bridge replacement in downtown Victoria which did not include rail as a "nail in the coffin"

for the corridor), Larry believes the case has since become more politically appealing. The recent heat records of summer 2021, the 'atmospheric river' that followed several months after, and ongoing supply chain issues causing intense gas price increases have all contributed to an increased awareness for transport alternatives. According to a survey run by the ICF in 2020, rail support was already high on Vancouver Island before these events. Additionally, the Fairy Creek logging protests on Vancouver Island harmed John Horgan's reputation as an environmentalist: commitment to green infrastructure such as rail could help him regain support from island residents. Add to this a general frustration among BC residents, resultant from railway inaction, environmental inaction, and Covid fatigue, and Larry Stevenson describes this series of political and environmental developments as "the perfect storm" to achieving provincial support for rail reinstatement. He sees the next year as critical, and despite a recognition of the many "bumps in the road" still to overcome, is "pretty pumped".

Perhaps the most obvious bump in the road however will be achieving consensus of the affected parties (be they first nations, municipalities, NGOs, or the public). This is often cited as a major deterrent to the railway's potential and is generally the excuse used by the provincial and federal governments to hold back funding. However, Mr. Stevenson sees achieving consensus about the corridor's *use* as secondary to a consensus on the corridor's *value*. His reasoning is that the Snaw-Naw-As court case effectively ruled that the railway is legitimate, but only if it is used. Therefore, a demonstration of the corridor's value to benefit all affected parties is the chief focus of the ICF's strategy at the moment.

However, this is not to say that the concerns of First Nations along the corridor are being sidelined by the ICF as they focus on provincial support. The 50% Indigenous representation on the ICF board makes this internally implausible anyway: a certain level of support, engagement, and consensus seeking is inherent in the organization's functioning. Thanks in part to this, the ICF has been floating the idea that the E&N could be an entirely First Nations owned and operated railway. There is precedent for this in Quebec, where a 12-hour train from Sept-Iles to Schefferville was sold to the local Indigenous groups as operators in 2005, and has succeeded in operating despite skepticism and remoteness of the community, providing significant local employment as well

(Ellingson, 2017). Such a structure applied to the E&N would satisfy a stated policy intention of many provincial government documents (SITP, BC Transit Regional Futures Plan) that reinforce the need to connect First Nations communities for their economic and social benefit. It would allow First Nations to create their own schedules and ensure their community would be appropriately served. It is also suggested that there would be significant windfall from such a development, as the quadruple-purpose of freight, commuter, intercity, and excursion train could prove very profitable. And, to manage this proposed operation, the current operator of the railroad: SVI RailLink, could be brought in as a transitionary operator to lay the foundations of implementing the service. SVI has allegedly agreed to this in talks with Mr. Stevenson and the ICF.

At this point, it is worth discussing the SRY Rail Link's Southern Railway of Vancouver Island (SVI) service, hereto referred to as simply SVI. They are the only currently operating company on the entire length of the railroad, running a short freight service from the Wellcox Yard at the Port of Nanaimo to a propane distribution centre some ~5km to the North, as well as other customers including lumber yards (SRY Rail Link, 2022). Beyond this, there is relatively little readily available information on their operations or governing structure. An interview request was sent but not granted.

This lack of information has led to a minor amount of distrust from certain organizations who oppose rail reinstatement, and the fact that SRY Rail Link is a subsidiary of highly influential US-based company Seaspan which has its own tumultuous relationship with British Columbia and the federal government (e.g., federal shipbuilding program, lumber shipping, etc.) does not help either. However, this distrust may be unfounded and only compelling when placed into a larger contextual narrative of corporate control over government. This paper does not make or support any claims of manipulation or wrongdoing by any involved company. To the contrary, the fact that SVI provides a significant amount of critical service to Vancouver Island in an efficient and environmentally friendly way should be seen as nothing but a positive – and the fact that they are well-positioned to benefit from any reinstatement of rail service simply makes good sense.

SVI is technically a short-line railroad, not affiliated with CP or CN or any of the big four American companies except to transfer goods for long-distance shipping. Additionally, their incorporation with Seaspan could be seen as a tremendously positive thing for an Island service, as it motivates better integration and efficiency rather than permitting the water carrier to gouge the island-based rail operator for exorbitant profit. Thus, SVI's claim that they are "well-positioned to operate any future or potential rail operations which may arise" can be taken at face value, though there may be a case for VIA or BC Transit to operate commuter, intercity, or excursion service. Regardless, what each of these agencies have in common is a desire to at least be perceived as friendly to the cause of reconciliation, so the idea of a First Nations owned and operated railroad, perhaps supported by these agencies to some extent for some period of time, does seem viable.



Figure 7: SVI and SRY Operational Capacity (https://www.pwrs.ca/archive/dyn.july_6_2006_sry_rail_link_news.php)

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Chapter Five: Organizations

Location: Cowichan Valley

NGOs (FORT-VI and VITCC), both For and Against

To this point, our discussion of the railway's context has revolved around the various upper levels of government itself, and its supporting organizations. It has not however, delved into the existence of other organizations that have sprung up in the absence of upper-level government results. These organizations are indicative of a growing frustration amongst the public (for further information on public opinion, read chapter six), something which the ICF is aware of, yet has limited power to fix. The ICF does have meetings with these groups on occasion though, with varying results aimed at aligning interests. There are effectively two ends to the spectrum of agreeableness on the issue of rail that have come to dominate the public discourse: the VITCC, who agree near-totally with the ICF and a return to rail, and FORT-VI, who disagree fundamentally on the intended use of the corridor.

The VITCC are a group that formed in 2020 from several non-unified pro-rail organizations to present a common front for rail reinstatement. Their leadership is formed of former ICF CEOs and passionate community advocates, and their membership ranges from disaffected commuters, to sentimental tourists, to prospective business owners, to historic rail enthusiasts. From an outside perspective the organization is curious in that it realistically appears to act as not much more than a "cheerleader" for the ICF, and in fact Aaron Lypkie, Vice President of the organization, described his organization in just such terms. The VITCC "seeks to develop public and political support for Island Rail"; a goal aligned perfectly with the ICF's current strategy.

However, this does not make the VITCC a pointless organization by any means. For starters, they demonstrate that public opinion is organized and in support of rail for the island. The ICF has limited resources, and so even a volunteer organization that affords the public a venue to express their desires and contribute is beneficial for both causes but couldn't be done in the ICF without interfering with the integrity of that organization as a government

body distanced from public opinion. This is the second role that the VITCC fulfills: it can provide a check and balance against any top-down political influence the ICF may encounter and is increasingly able to corroborate or refute the ICF's statements and opinions (though in most all cases, it corroborates them). Lastly, the VITCC plays a considerable role in unifying public opinion. Aaron Lypkie, Vice President of the VITCC stated "we are really about bringing people together". By reining-in fringe voices and realizing a common vision, the VITCC aims to show the provincial government that support for island rail is unified and realistic.

The weak point of organizations like the VITCC is a lack of oversight, mandate, or agency above that of the internal leadership. For this, it may be more vulnerable to the tyranny of the (vocal) majority. The rights of First Nations groups on the corridor for instance –though not discredited by the organization— may be given less priority than they otherwise would in government. This is not a criticism of the VITCC as a specific body, but rather a recognition that the VITCC is essentially a special interest group with an agenda, however admirable, intelligent, and popular agenda that may be. These types of groups are an important and valid part of our democracy, but it is worth recognizing their limitations.

This is important to keep in mind when considering the view of the biggest dissenting voice in the picture: Friend of Rails to Trails – Vancouver Island (FORT-VI). FORT-VI is an organization similar to that of the VITCC in that it was created to enable a viewpoint on the E&N corridor to organize and vocalize in the public discourse... only in this case to disagree with rather than support the ICF. The view of FORT-VI is that rail was barely ever viable on the Vancouver Island corridor and has only become less so over time. Track construction specifications, deteriorating conditions, disunity of opinion (i.e., First Nations), a lack of potential ridership, and middling funding will all work against the potential of this corridor to reinstate rail. This comes with a significant opportunity cost as well (the one identified at the start of this paper) that the corridor Right of Way (ROW) itself is so valuable that to see it lying around disused is a waste of its potential. The potential that FORT-VI sees is for the E&N as an active transit trail.

Rail-to-trail is not a new concept in North America. A huge number of former railroads have been converted to trails, be they for commuter, tourist, or inter-regional purpose (Lilly, 2012). The easy grades of the track, proximity of nature, and separation of roadway traffic make for a pleasant cycling and walking experience, and one that can be easily achieved by a relatively simple retrofit of the existing ROW. FORT-VI claims that a single km of trail can be constructed from rail for a cost of just 1 million dollars – far cheaper than a rail renovation, and a tenth of the cost of a rail-with-trail retrofit. There is little in the way of economic opposition to this either, as the assets are in almost all cases disused. This was the case for the Kettle Valley Rail Trail in interior BC, the Arbutus Greenway in Vancouver, and the Cowichan Valley Trail just outside of Duncan (Enright, 2016)(Trans Canada Trail, 2016)(Glover, 2021).

The Cowichan Valley Trail in particular is an inspiring example for groups like FORT-VI. This trail used to be part of the E&N network, primarily used as a freight corridor between the historic logging town of Lake Cowichan and the processing facilities located in nearby Duncan and Cowichan Bay harbour. However, as the logging industry declined and logging trains became less common, the railway was converted to a trail in 2010 to allow for connectivity and tourism (Trans Canada Trail, 2016). The town of Lake Cowichan has successfully pivoted to a tourist economy, and the Cowichan Valley Trail has helped in that process.

It is especially noteworthy that this corridor was converted into a trail, because it was the Cowichan First Nation who were most affected by the Dunsmuir Land Grab and instigated the formation of the ICF in the absence of other operators (Sayers, 2012). Clearly, the corridor, despite its history, was valuable enough to this nation for them to show focused activism efforts leading to a resolution of their portion of the railway. To them, it may seem that the use of the corridor was less important than whether the corridor be used at all or not. Notwithstanding the fact that this may have only been made possible by the isolation of this spur of the line, it is perhaps indicative of an important lesson for the rest of the line, its FN communities, and the provincial government decision: better that something be done with the corridor than nothing at all. (For a further exploration of this sentiment, Appendix A examines the mindset surrounding the rail-to-trail phenomenon).

Whether or not this argument supports the stance of FORT-VI seems debatable. On the one hand, if it proves true that there is no business case for the reinstatement of rail on the corridor, it would be a prolonged injustice to deny these communities of the right to use the E&N corridor. In such a case, a rail-trail does seem likely, at least for the northern portions of the railway. However, this could alternatively be seen as further reasoning for the provincial government to make the necessary investments to fast-track rail reinstatement. This is of course dependent on what the provincial government deems in the 'public interest'. But given the likelihood that the courts will interpret the law to mean that corridor must remain used for rail if it is to continue unbroken, and an increasing consensus that the greatest value of the corridor is as exactly that – unbroken – this seems to discredit the former argument (the FORT-VI one) and support the latter (VITCC). Nonetheless, FORT-VI brings up an important point in the discussion of the corridor of the future, albeit to the detriment of public consensus and the frustration of the ICF.



Figure 8: The rail vs trail debate (https://exploringwild.com/long-us-rail-trails-bicycle-touring/)

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Chapter Six: Change

Location: Malahat

Geography, Climate Change, and Public Opinion and the Media

This dissent is increasingly palpable within the public opinion as well. A review of media publications reveals a trend of increasing frustration and alternative outcomes proposed for the tracks. Whereas in the years following 2011 most articles were written on the premise that rail would be reinstated, increasingly alternative visions for the corridor emerged as time went on and rail remained inactive (Osmond, 2011) (Wu, 2014) (Gaudreau, 2017). The peak of this appears to have occurred after the March 2020 Island Rail Corridor Condition Assessment's daunting funding estimates, in the uncertainty leading up to the Snaw-Naw-As decision in September 2021 (FORT-VI, 2020) (Dauncey, 2020)(Sterrit, 2020)(Stanfield, 2021). In recent years, nearly every op-ed has had a responding one written in disagreement (Nanaimo News Bulletin, 2021). And although there appears to have been a degree of coalescence since the VITCC was founded, Larry Stevenson became CEO, and the implications of the Snaw-Naw-As decision were disseminated, there is still disagreement (Slade, 2022). This implies what many interviewees have stated: that there is an increasing frustration with the lack of progress of these tracks. That frustration leads to division, which leads to further inaction, feeding into more frustration. We can see this in a recent exchange of news op-eds regarding a critical segment of the line at a critical time: the Malahat during the atmospheric river event of November 2021.

The Malahat is a critical bottleneck of Vancouver Island's geography. Referring to the Western escarpment of the Saanich Inlet, it presents the most direct land route from Victoria to the rest of Vancouver Island. What's challenging is that effectively the entirety of the area is a steep slope, rising some 264 meters from sea level (and a further 234 meters to the sea floor of the notably deep inlet). The slope is too steep to build upon near sea level, so any transport infrastructure must rise to higher elevations while clinging to the

side of the hill. Remarkably, despite the island being some 30 km wide at this point, the provincial government's recently commissioned South Island Transportation Plan (SITP) concluded that alternative North-South routes were unviable. A major reason for this is that the area to the west of the Malahat is reserved for the Greater Victoria water supply and kept under extremely strict environmental lockdown (the result is that Victoria has some of the cleanest and cheapest water in the world). Further, the depth of the Saanich Inlet prevents the affordable engineering of a bridge to the Saanich Peninsula (Ministry of Transportation, 2007). Therefore, alternatives must either make an unpractically lengthy detour to the west, or simply run more or less parallel to the existing drive.



Figure 9: Pictures of Malahat construction convey the danger and economic costs of working in these areas. To this day the road remains notorious among Island residents. (https://www.tranbc.ca/2012/08/30/3-parts-of-b-c-s-trans-canada-that-would-knock-deifenbaker)

Unfortunately, this current route is subject to environmental disasters, and its lonesome position makes it vulnerable to human error as well. Closures resulting from traffic accidents are not uncommon, as was the case with an oil truck that spilled near Goldstream and caused a 24-hour closure in 2011. The elevation of this route also makes it more susceptible to winter weather and increasing attention has been drawn in recent years to the public's failure to use winter tires despite the legal requirement (Weston, 2021). However, most noteworthy and contemporary of all hazards present in the public discourse is the occurrence of water-management related disasters. Intersected by various creeks along much of its route and running parallel to the important salmon habitat Goldstream Park, the drive is subject to flooding and rainwater-induced mass wasting events along its hilly length. This is exactly what happened in November of 2021, when the so called 'atmospheric river' event occurred that wiped out critical highway infrastructure throughout BC. The Malahat experienced periodic closures between Nov 16th and 20th during this event, as well as single-lane traffic and limits to commercial vehicles only (Trudeau, M. 2021). Delays during this time were as great as several hours, and the result was a severely reduced supply of critical goods like gasoline and foodstuffs to the greater Victoria area. Victoria residents hold vivid memories of this time, recalling it as "chaotic" and "scary". Needless to say, the event and the Malahat's notorious reputation has only grown over the years.

During this event, a publicized debate once again emerged in the local newspapers. One week following the event, Todd Litman of the Victoria Transport Institute (a private policy group dedicated to the publicization of various transport articles and analyses) published a report on bus transport solutions for the Malahat, and wrote an article promoting it in the Times Colonist (Victoria's most prominent local newspaper) in conjunction with Alastair Craighead of FORT-VI. In it, it argued against the near-term practicality of the E&N as a viable commuter alternative to the Malahat, suggesting instead that buses were a more cost effective and realistic option (Litman & Craighead, 2021).

Larry Stevenson of the ICF then responded by doubling-down on the need for an alternative route to the Malahat (Stevenson, 2021). Larry Stevenson pointed out that not only were Litman's assumptions questionable, but they also failed to provide any viable

alternative thinking for the Malahat problem in the first place. The E&N, it was pointed out, experienced only a minor slide during the event that took just 4 hours to clean up, causing what would have been only a mild delay in disruptions. Although Mr. Stevenson was equally quick to point out that this does not imply the E&N route is any less prone to the same vulnerabilities as the highway, the point he was making is that it is an alternative *option*, whereas the buses and freight trucks that Litman espouses the utility and stability of are dependent upon the good state of the roadway. With atmospheric events such as these expected to increase thanks to climate change, the need for an alternative such that the E&N could provide is increasingly felt in Greater Victoria.

Todd Litman would then go on to respond that the article he wrote did not dissuade rail reinstatement, only promoted bus service as a more viable near-term alternative. However, he also stated that both himself and Alastair are 'not anti-rail', and "we support the most cost-effective and beneficial mobility options" (Litman, 2021). This seems dubious considering the public stance of FORT-VI, but may be true in the context of a perceived best option for the public interest. Both claim to seek a best option for Vancouver Islanders. It may simply come down to a difference of opinion in this case.

Based on limited interviews of Victoria residents, the case Larry Stevenson made seems to be considered more compelling. An interview with an Engineer at the City of Victoria asserted that such climate induced weather events and supply chain disruptions would be an increasingly prevalent issue in the future. A planner at the city of Saanich brought up the need for alternatives in the face of such disasters as well. And a local of WestHills, a community just south of the Malahat, told me of his sincere worry that one single weather event could bring down the economy of the whole greater Victoria area.

Meanwhile, a slew of newspaper articles were published in support of the E&N, or some sort of Malahat alternative in the wake of the disaster. Although the discourse has since returned to a rail-with-trail vs. rail-to-trail argument (the most recent such trail-side op-ed having been released on March 16th, 2022 at the time of writing), there is a sense at least within the ICF that the public opinion's momentum has shifted to see the value of the corridor for cargo and passenger rail to connect across the Malahat and into Greater

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Victoria. Larry Stevenson of the ICF even went so far as to tell me that the 'atmospheric river' was one of the best things that could have happened to his organizations cause; now that public opinion is increasingly recognizing the importance of the issue, and a legal case for rail seems to be the only allowable use, his quest to sway the provincial government now seems more possible than ever. In this case, it seems that climate change may have been the force needed to focus a societal one.

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Chapter Seven: Growth

Location: WestHills

Greater Victoria Development and the Importance of Land Use & Transportation

Planning

Now that we have an understanding of the broad forces interplaying upon the corridor, it is worth contextualizing the issue within urban development and land-use/transport planning theory, and the perspective/role of the planner in the E&N debate. Also from this point, our geographic case studies will be drawn from the Greater Victoria region, where the author grew up, and the majority of interview respondents are located.

Transportation is intrinsically linked to land use. If a highway off-ramp is made, a McDonalds is likely to pop up. If a new subway station is put in place, the property values above are likely to increase and be sold for increased density development. If a bus route increases in frequency, the occupation of parking nearby will decrease. This cause-effect relationship is not unidirectional either: missing middle housing increases the frequency of bus stops along a route compared to single-family housing, a retirement home becomes a key destination for paratransit, and an office building will demand quicker and highercapacity transport options than a depanneur (Giuliano & Agarwal, 2017). The two disciplines are both linked and co-dependent. You can't have buildings without roads, you can't have roads without buildings. Importantly (and fundamental) to planning, the higher the density, the greater the importance of transit.

As a regional whole, Greater Victoria is dominated by cars. The 2014 Capital Regional District (CRD) Regional Transportation Plan showed 70% of existing and projected trips by car. Preceding the publication date of that report, auto-dependent travel served the capital region adequately: numbering just under 400 000, commute times in the area rarely exceeded an hour, and traffic delays were historically limited to events, accidents, or ferry departures/arrivals. In recent years though, commute times have increased and become less predictable, predominantly between Victoria/Saanich, communities North of the

Malahat, and the 'West Shore' communities (South Island Transportation Plan, 2020). These communities combined have seen some of the region's highest growth in the last census, with the West Shore communities in particular seeing double-digit percentage growths (Statistics Canada, 2022). This growth is not particularly unusual in the Pacific Northwest or Canada more generally, as there is a genuine need for housing construction and the spillover effects of nearby Vancouver have made greater Victoria the natural second choice for those businesses and individuals displaced by home prices but still attached to a West-Coast Canadian lifestyle (Romphf, 2022). What is slightly unusual is the concentrated nature of this growth into these West-Shore communities, while Saanich peninsula communities show relatively modest rates (Statistics Canada, 2022). This can be partly attributed to geography, but largely to politics and policy, as West Shore governments tend to be far more favourable to development than their Saanich neighbours (Grossman, 2021). (The following chapter examines this phenomenon in further detail).

Whatever dominant reason, the result is an increasingly congested Trans-Canada highway. Though the upper levels of government recently stepped in with dedicated bus lanes and a revamped Mackenzie interchange, predictions for future growth continue to show daunting commute times of up to two and a half hours from some north-of-Malahat communities by 2038 (South Island Transportation Plan, 2020). Due to the effects of induced demand, drivers cannot expect continuous investment into this already over-burdened segment of car infrastructure to alleviate these figures. Alternatives are therefore the necessity.

Where the E&N re-enters this picture then is as a potential commuter rail. It is noteworthy that even FORT-VI is not demanding that the portion of track from WestHills be transformed into a trail, as the growth of greater Victoria makes the need for rapid transit so apparent. As well, the corridor within the CRD already has rail-with-trail under construction, and a high support for rail as determined by the ICF survey. Speaking from anecdotal experience, the idea of commuter rail on the E&N in greater Victoria is seen by many as a common-sense idea, and there is a general bewilderment as to how it has not happened yet (indeed, such is the motivation behind this very research).

There have been several studies done specifically on the viability of a commuter rail service starting in the Western Communities (BC Gov, 2020). Unfortunately, the most recent estimates showed prohibitive capital investments were required. These figures however are refuted by the ICF, stating that the frequency and luxury of the hypothesized system was unnecessary. Additionally, it is argued that when compared to investment in the Mackenzie Interchange (a recently constructed overpass on the Trans-Canada highway between the West Shore and Victoria) the figure is relatively low and would show comparatively more effective results. BC Transit, for its part, seems to take a cautious approach, placing transit exchanges nearby expected E&N stops, but not taking more than a courteous relationship to the E&N itself. This has led the ICF CEO to describe them as "neither a friend, nor an enemy". So, among greater Victoria governments at least, the consensus seems to be that the E&N is a valuable asset, but not one worth funding right now. The result of the 2010 Foundation Report study into its viability as a commuter rail corroborates this view, with the caveat that increased development/density alongside the tracks would greatly increase the viability of such a service in the future.



Figure 10: Viable and non-viable commuter rail stations in Greater Victoria as identified by the 2020 Assessment (https://www2.gov.bc.ca/gov/content/transportation/transportation-reports-and-reference/reports-studies/vancouver-island/island-rail)

Unfortunately, land use policies in the region continue to allow development of single-family suburbs further and further away from the Victoria and into the hills of Sooke and Langford. This is generally unhelpful for several reasons. First of all, living further away increases commute times, destroys natural environments, and necessitates municipal infrastructure expansion. Second, when this peripheral development is of the low-density single family suburban homes, the provision of public transit becomes unviable in cost, and the motive to have (and therefor use) a car is increased. The result is a vicious circle whereby public transit investments are not made because ridership is too low, but ridership remains low because public transit investments are not made. The seemingly simple solution would be to increase public transit investment while enacting transit-conducive land-use policies. However, finding the political-public will to do so is tough because car-users (of which >70% of Victorians are) do not see the rationale in subsidizing public transit. They'd rather we kept subsidizing what they use: cars.

To illustrate this, it is worth taking a look at WestHills: the Western-most ongoing development of Langford/Greater Victoria. WestHills is particularly relevant to this paper because the E&N line goes right alongside it, and all commuter rail studies identify WestHills as a likely viable station location. This idea seems to have been incorporated into the design of the community itself: the ROW is respected, community services are along it, and there is a transit exchange positioned right next to the track, which ICF CEO Larry Stevenson confirms is by intentional design. Focus Equities, the developer responsible for the WestHills development at the time (as well as Bayview place, near the Victoria terminus of the line) was consulted in the ICF's 2017 strategic report concerning a commuter rail option. The implication is that this community stands to benefit tremendously from commuter rail. One such resident confirmed this to me, stating "it's a no-brainer".

Property owners and developers alike were to some extent speculating that this railway would be reinstated for such a purpose. Of course, such an investment has yet to be made, despite the development of WestHills starting some 14 years ago. Since then, (and perhaps due to this lack of investment), Focus Equities has sequestered the project to WestHills Land Corp, and the community's development plans have been modified. Most recently, the

developer requested that council consider 'parking lots and medians' towards its commitment to gift 40% of the land as 'greenspace' to the municipality (Kloster, 2021). Although not unique to such project by any means, planned density has decreased and the single-family home phases of the project seem to have been prioritized over the creation of a central hub near the E&N. Consequently, new owners come to occupy homes that encroach on the natural environment, are less fiscally efficient for the municipality, and do not provide readily available public transport. Textbook to form, development of residential areas prior to the provision of public transit in these areas has resulted in the vast majority of WestHills residents owning a car. The roads leading from WestHills to the Trans Canada highway are now consistently clogged (including the buses), while the parallel, adjacent E&N sits empty. The WestHills resident I interviewed described this as "infuriating". As a planner dedicated to principles of sustainability, efficiency, affordability, and accessibility, I can confirm this is the correct sentiment to feel.



Figure 11: WestHills development master plan (https://www.pinterest.ca/westhillsbc/_saved/)

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Chapter Eight: Development

Location: Langford

Zoning, Density, TODs, and Local Government

Characterizing all of the West Shore in the manner of the WestHills development model would be unjust and incorrect though. Nor would it draw attention to the some of the actual implementations of the development portion of the transport-land-use solutions that can lead to better transit like E&N commuter rail. So, to balance out this argument, we must discuss TOD, central Langford, and the elected officials of the municipal government.

The solution to the conundrum described as in the case of WestHills and countless other similar developments is something known as Transit Oriented Development (TOD). Though increasingly bandied about as an attractive seller term like 'affordable housing' or 'vibrant spaces' within the realm of development planning, the core of TOD principles remains sound. The idea of developing a compact, walkable community that is well served by transit affording residents a pleasant walk to nearby residences is entirely aligned with principles of New Urbanism, the 15-minute city, and generally desirable urban experiences. TOD handbooks describe a principled approach based on an elusive number of Ds (originally 4, then 5, then 6, and sometimes more), those being Density, Diversity, Design, Distance, Destinations, and Demand. How many Ds and what each refers to is unimportant: the principles of a community oriented around transit is the key constant.

Why this fundamentally sound idea has become so problematic however is due to considerations not encapsulated in the catchy D-based playbook. For instance, not all Ds are of equal importance, as good design can reduce the perceived importance of distance (Stojanovski, 2020). Perhaps most critically missing however is a temporal dimension: phasing. Simply put, if a residential area is built (no matter how well designed) before public transit is put in place, those residents will move in with a car (as was seen to occur in the WestHills development) (Loukaitou-Sideris, 2010). Of course, assuming the transit infrastructure becomes operational as planned these residents will eventually use it for

some purposes, but the fact that they own a car already results in a sunk-cost fallacy, lower transit ridership, and resultingly lower service levels or an increased need for transit subsidies... until the meaning of TOD is eroded entirely, and becomes merely a marketing label akin to LEED certified buildings or Angus beef. So whether a TOD is actually realized as such is critically dependent on this temporal factor: the phasing consideration.

So, is development that we see along the E&N in other parts of the West Shore TOD? Central Langford certainly seems to have considered the Ds. Stew Young, the prodevelopment visionary of Langford has long stated his enthusiasm for commuter rail along the line (Bell, 2022), and the concentration of missing middle apartment housing nearby the tracks heavily implies that transit was at least a consideration in the zoning of this land. The fact that the zoning map of Langford is heavily spot-zoned in this area makes it harder to confirm this than a map of the Blue-Line Metro expansion in Montreal and the resulting TOD zoning around the proposed stations for instance... but according to ICF CEO Langford's developments were intended to take advantage of any potential rail transit. There have also been recent investments into a public market nearby the track, in the historic location of the Langford station. Stew Young and the Langford planning department seem to have taken to heart the 2010 Foundation Report's recommendation that development along the track would increase the viability of commuter service.

However, for the reasons we just learned, these apartment buildings do not currently see the transit mode share that they otherwise would, and most have a parking minimum of 1 or more (Pachal, 2013). Whilst BC Transit does provide good service to this general area with frequent bus service, both developers, planners, and elected city officials are reluctant to decrease the parking minimums or commit to more explicit TOD-like design developments, partly due to the lack of appeal of the bus, partly due to its sustained dependence on overloaded road infrastructure, but especially because the route is seen as flexible and therefore subject to change. Rail on the other hand is known as a dedicated, fixed asset, and it is for this reason that rail investments in other cities have such a greater impact on car-freeness, not to mention land value and development potential. The Kitchener-Waterloo LRT is an example of this working in a Canadian city of comparable size.

In addition to Langford's pattern of development, its political leadership has been demonstrating public support for this idea as well. Stew Young has been fighting for this vision since rail was discontinued from the E&N in 2011. Since then, he has appeared in a number of announcements, events, and articles to express his support (and increasing frustration) concerning the lack of development along the E&N. At one point, this frustration resulted in a shift to support for a paved-over track functioning as a busway. This idea gained mild traction for a time including from NDP leader John Horgan shortly after (Leyne, 2018), though it has not been mentioned in the time since 2018. BC Transit considered the idea, but found it unviable based on one-way service limitations, the construction of the sidelong rail trail, and alignment that didn't serve Saanich and Douglas Street employment centres. They have since unveiled Uptown-based rapid bus model for the region: an entirely different alignment model. Based on emails exchanged with representatives from BC Transit, commuter rail is seen as a complementary service to the region but not one that most efficiently serves the region's needs at this time. It is however recognized as a valuable asset which will have increasing importance in the future, especially as rapid bus services reach capacity. Conjoined investment with other transitoriented policy along the corridor is also expected to increase the likelihood of commuter rail service, especially as mixed mobility trends increase in prevalence.

Chapter Nine: Connections

Location: View Royal

Regional Control over Public and Active Transit

Between the WestShore and Victoria is View Royal: a bizarrely defined community that is partly Colwood, partly Langford, partly Highlands, partly Saanich, and partly Esquimalt. View Royal contains very little if any defining features: what View Royal basically amounts to is an in-between for all the afore-mentioned communities, and one that prides itself on low-density homes that sprawl right up to its borders on all sides (presumably any high rises would interfere with the *royal* view of Esquimalt harbour and its shipyards for its distinctly wealthier-than average residents (Townfolio, 2017).

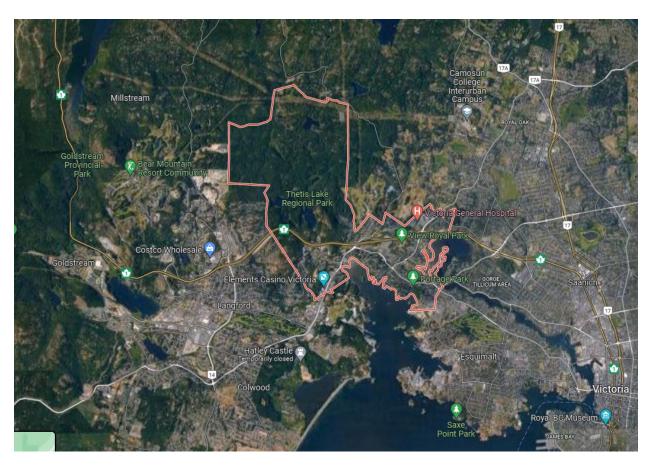


Figure 12: View Royal's Unorthodox Boundaries (Google Maps)

In any case, what's important to note about View Royal is it occupies a critical bottleneck of Greater Victoria's geography: the isthmus of occupiable land between Esquimalt harbour and Thetis Regional Park. At its narrowest point this land bridge is a mere 400m across, and in that 400m lies two highways, the E&N railway, and two active transport corridors. These corridors exist here because they have to: access up island via the Malahat is dependent on it, and five of the CRD's fourteen municipalities lie to the west of it. Water/ferry alternatives are not easily run due to the lack of a natural harbour on the Westshore near any density (though studies continue to be done into the viability of a commuter ferry, most all dictate much higher densities and in less developable locations than commuter rail would need to be viable). A small passenger boat operated by the navy once traversed Esquimalt harbour specifically to serve Dockyard commuters, but service was discontinued in 2012 due to staffing challenges. A private replacement service then operated for a time, but seems to have been quietly cancelled in the years since (Wells, 2012). Therefore, this isthmus is an important case study for both a confluence of transit modes (specifically active and public transit), but also the importance of regional planning for transit.

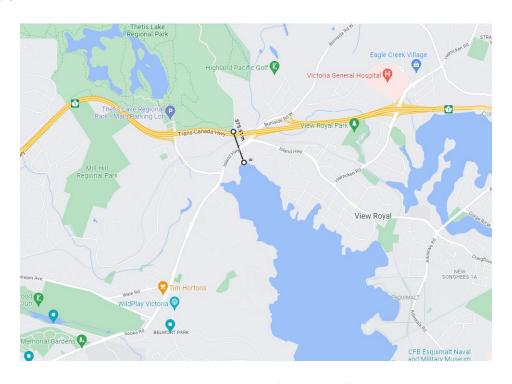


Figure 13: The Isthmus (Google Maps)

At this isthmus, just as we find the confluence of three modes of travel, so too can we examine the interplay between them. Conspicuously, it is the road space that dominates the land use as seen from satellite view. An entwinement of over and underpasses, on and off ramps, leader and feeder lanes is eye-catching and curiously appealing to the sky-based eye. However, not pictured in the satellite image is the human-scale impression of this space, which is fast-moving, unnavigable, and distanced. Those houses appearing to the south are significantly isolated from those near the park to the north despite only one/two stretch of roadway between them. The nearest safe walk is over 5 minutes between them, and involves multiple hazardous, lengthy crossings, not to mention a sustained unpleasant traversal below the overpass infrastructure. Almost laughably, both sides of this belong to View Royal, adding a layer of human-caused separation to the geographic one.

On the one hand, we could consider this fine. As just described, this area is a nexus for regional transportation: it can't realistically hope to be a quiet village centre. We do need roads, and this overt dedication of space to transport infrastructure at this critical isthmus may actually be good forward-thinking planning. Over-designing an overpass that is destined to serve more and more vehicles regardless of planning alternatives might actually be prudent, in spite of some general contemporary planning theory to the contrary.



Figure 14: A satellite close-up of the isthmus (Google Maps)

But on the other hand, the presence of other two/three pieces of infrastructure (two trails and a railway) provide an interesting thought experiment. We already know the railway well: there is little elaborate about it in this location other than it is a viable identified commuter railway station which would probably exist somewhere near the current trail parking lot. Rather, it is the trails that warrant further discussion.

The first is the Galloping Goose. This trail was once a railway in fact, and was converted in 1989. Since then, it has grown to become an iconic, popular route for CRD residents, linking the West Shore to Downtown and the Saanich Peninsula via the Lochside route (another rail-to-trail). According to the CRD's Regional Trails Management Plan, the Galloping Goose receives 2 million visitors per year, a very large portion of them through this nexus. The Galloping Goose is key to all of the region's transportation planning, and for good reason. As planners and policy makers around the world have come to recognize the need for good-quality cycling and active transit infrastructure, efforts to preserve, link, and expand these networks have received increasing attention as a way to reach sustainability and equity targets. Active transport is healthy, environmentally friendly, and absent of the severe land use problems inhibiting car infrastructure dedication. This case study illustrates that well: the Galloping Goose takes up a fraction of the space as the nearby roadways, while still allowing for millions of commuters, who get an affordable, and healthy lifestyle option to get to work.

The other trail in this vicinity is the E&N rail trail, which to the West of this portion is sequestered into the Galloping Goose for a few hundred meters, though the rest of it parallels directly beside the E&N railway on its right of way. This trail is relatively recent, and segments are still under construction: it was achieved through joint planning between the CRD and ICF, as the CRD was keen for a transport option linking Langford and Esquimalt to downtown and an alternative to the Galloping Goose, while the ICF states they have "always supported trails" and believe the rail vs. trail debate unfounded.

Based on the success of this trail, it would appear they are correct. Active transport provides excellent synergy with public transit. Commuters can take a pleasant, safe walk, or speedy, direct bike ride to a public transit option that then takes them to most of the rest

of their journey. On pleasant days, a greater proportion of their commute may be active transit, while on darker ones, the transit can provide much needed respite. The problems associated with last-mile transit are also greatly reduced by this synergy, as a cyclist can expand the catchment for a given station dramatically. This is especially effective when the public transit infrastructure is rail-based, because trains afford greater space, a smoother ride, and faster boarding for cyclists. Additionally, pedestrian-transit conflicts are largely overblown: many trails exist alongside rails throughout the world, with minimal accidents and only basic safety constructions required (Pack & Tomes, 2013).

This isthmus in View Royal then is pertinent as it demonstrates how and where active and public transit can coalesce, and how traditional road infrastructure is in many ways a barrier to that. It also shows a minor case study of how regional planning is so critically important when it comes to transport infrastructure. The highways on this land are provincial jurisdiction, as is the railway, while the trails are regionally managed. Had the municipality of View Royal held total control over the use of this land, it is entirely plausible that they would have chosen to build it out as valuable waterfront property to maximize the land value of their jurisdiction rather than dedicate it to transportation needs that best serve the region. This is not because View Royal is bad, but rather because a commitment to the public interest in a democratic government is only so encompassing as the geographic boundaries of that government's responsibility. The public interest is a modifiable area unit problem: it depends how we spatially define it. This is exactly why assets like the E&N railway – (inter)regional transportation assets – need to be preserved, protected, funded, and planned (in unison, between modes) by regional and provincial levels of government.

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Chapter Ten: Forces

Location: Esquimalt

Differing Governmental Perspectives

Cooperation between levels of government is by no means a given however, let alone when additional non-state actors are involved (such is the core fascination of this paper). As we have seen by now too, involved players are basically always overlapping and interconnected. This chapter will start by examining one underdiscussed player in the game: the federal government – via the Esquimalt Dockyards property – before discussing how the interplay of the Esquimalt First Nation and non-indigenous Esquimalt residents results in conflicts and re-conceptualizations of the public interest.

The federal government may have been the organization largely responsible for and conducive to the creation of the railway, but they have taken a distinctly back-seat role in the reinstatement of service decision. Despite an initial election promise to fund infrastructure projects from Prime Minister Trudeau in the 2016 campaign, as well as subsequent infrastructure boost funding programs in the wake of Covid, none of the money has at this point been committed to the revamping of the E&N railway. It is perhaps as much in the nature of these programs as it is in the reluctance to overstep the bounds of federalism. This funding generally requires an application from the project manager, with a detailed costing study (Government of Canada, 2022). Currently the E&N does not have this, because the province does not have this. So, in keeping with their programs policy stance, the federal government's position seems effectively to be to let the province take the lead.

This immense power but lack of will or capability to apply that power is to an extent physically present in Esquimalt at the 'Dockyard' naval base. Literally a symbol of the federal government's power (but of arguable utility), the navy base occupies the vast majority of Esquimalt Harbour's coastline. This has the dual effect of both attracting workers and limiting their access routes. DND property is too high security to run a bridge across, a boat through, or a gondola over (Wells, 2012). Yet the navy base employs over 6500 military and civilian personnel, representing the greater Victoria region's third largest employer after the provincial government and UVic. Of these base workers, slightly more than half work at the tip of the base, where the fleet is stationed, and deployments occasionally occur. This area is currently serviced by multiple high-frequency bus routes. The remainder work at 'Naden': the administrative hub of the base, and home to the graving dock. This area is less-well served by transit but is directly next to the E&N railway. The potential for a commuter train to service this institution is thus very significant.



Figure 15: Esquimalt Naval Base from the air. The E&N line is visible at the bottom left. (https://orcaspirit.com/the-captains-blog/navy-town-the-military-importance-of-victoria/)

In speaking with a worker of the Dockyards, Robert Cameron described the lack of a commuter service on the E&N as "shocking". As someone who chose to live along the line in Langford back in 2010, the continued disuse of the railway seems confusing and senseless. "I get the cost – almost a billion dollars for a train – but we just stopped pooping in the ocean for the same amount", referring to the recently completed Greater Victoria sewage treatment plant in Esquimalt at a cost of \$775 million. "We like to talk about being environmentally and socially progressive, but at the end of the day we're not leading as a

green community... when I drive to work, I might as well be on a train: they could just hook our cars up bumper to bumper...it breaks my heart".

These statements by Robert Cameron make apparent the frustrations of dockyard workers living in the growing western communities. (It is worth noting that the interview with Rob lasted a full two and a half hours, and he came prepared with printed-out newspaper articles and prepared notes. Clearly the issue is important to him.) This also relates back to the common sense and public opinion component of the problem, and how political decisions that affect such major infrastructure projects are made. The reference to the Esquimalt sewage treatment plant is a thought-provoking one, as it was made largely in the face of public demonstration and pressure from other levels of government rather than scientific evidence (Stewart, 2019). But in spite of this, the money was committed, the plant was built, and public opinion was quelled. Most Victoria residents now have a relieved conscience, even though the initial stress was unfounded.

It is curious to consider the E&N dilemma from this framework of irrationality: perhaps the perception of the problem is greater than the problem itself, or at least misdirected. If the corridor did not exist in the first place, would Dockyard workers be clamoring for a commuter rail? Or would they be wondering how to get a boat across the harbour running again, or negotiating with BC Transit to increase bus service to the Naden portion of the base? This is not to suggest that the E&N is not a viable rail corridor, but only to remind us that the problem should not be framed around the solution: doing so can instigate pressure directed at governments to implement a project not optimally suited for the problem it allegedly addresses, resulting in irrational outcomes.

On the other hand, similar to definitions of the public interest, the optimization of a solution is dependent on the definition of the problem. If we define the problem as 'Dockyard workers need a commuting alternative from the WestShore', then the optimal solution might appear to be a passenger ferry across the harbour, or better bus service. However, if we define the problem as 'Vancouver Island residents need alternative means of commuting, travelling, and freight distribution', then the optimal solution may be investments in the E&N railway. Framed that way, the preservation and re-investment into

rail along the corridor despite non-optimal application to address specific issues might be worth it in the affordances it grants to alleviate broader ones... especially when given the positive externalities investments into green and socially sustainable transport infrastructure is known to have.

In that sense, the comparison to a sewage treatment plant is unfair. The \$775 million investment into a single piece of infrastructure that will have next to no return on societal investment should not be considered in numeric terms against one that will have positive societal externalities along its 289 km length. That and the invaluable quality of being spatially defined. The federal government cannot pick and choose which portions of the corridor to fund or neglect, nor can they pick and choose which jurisdiction is willing to host the line like a sewage treatment plant. Transport infrastructure is in many ways all or nothing, and all the more valuable for it.

In talking with Esquimalt Mayor Barb Desjardins, this parallels her prevailing sentiment. Because of the immense value of the corridor, whatever use maximizes the utility of it is the paramount course of action. In her mind that is unquestionably rail. She also believes this position highly supported by members of the community – a sentiment echoed by all of the public officials spoken to for the purposes of this project. Given that all thirteen mayors of the CRD have signed in support of rail, it is safe to assume there is regional support at this time as well (Coles, 2019). This seems even further reason for the province to make the investments into rail now, while support is broadly distributed.

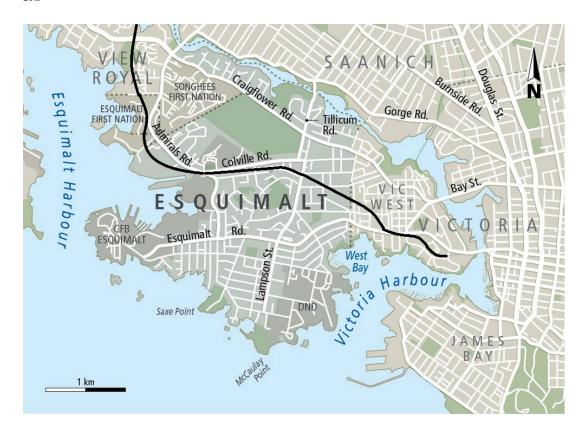


Figure 16: Esquimalt Map with E&N Line Emboldened (https://www.timescolonist.com/federal-election-2019-archive/esquimalt-candidates-and-voting-information-4665292)

In contrast to the municipality of Esquimalt, the Esquimalt First Nation from which the area derives its namesake is more hesitant about the idea. According to external sources, the Nation has noise and safety concerns about potential reinstatement. Their longhouse is in direct proximity to the line, and access to their community requires an at-grade crossing that is not currently signalized. Likely similar concerns were enough to require a diversion of the E&N rail trail around their reserve lands: it now makes two sharp angle turns to skirt the boundaries of the Nation. This would be untenable for rail, and so serves as an important reminder of both the importance of the Snaw-Naw-As legal ruling, and the duty of the ICF to consult with First Nations along the line.

At the same time however, those very consultations take time and resources from both the E&N project, and the First Nations. A request for an interview with the Esquimalt Nation was rejected on this very basis: the Nation is consistently engaged in consultations from various parties; they lack the resources to engage in all prospective discussions. In the case of the rail trail that now runs alongside the reserve, it is apparent that both First Nations

and the CRD were engaged in a lengthy consultation process which ultimately ended in a compromise of active mobility to rights of the First Nation to choose what exists on their land. This implies two lessons.

First, given that the consultation process is resource intensive, it may be very much so in the interest of all parties (First Nations and others) to get the E&N corridor matter resolved. That is, a resolution has value in itself, regardless of the outcome.

Second, the imperative of reconciliation conflicts with the importance of public transportation in this case to present a conundrum. Rail transportation infrastructure is the most efficient, high-capacity, environmentally friendly, and direct mode of land transport, but it is also the most uncompromising. The solution found to the E&N rail trail around the Esquimalt Nation could not be applied to rail: it would compromise the integrity of the entirety of the corridor. This puts major constraints on any reconciliation efforts. The role of an ICF official or planner in this scenario is an uncomfortable one: essentially, they must appeal to a broader conceptualization of the public interest knowing full well the extent to which that public ignored the needs of Indigenous peoples in the past and may indeed continue to do so.

What this means to me is that the railway must be prepared to make concessions of other kinds should they wish to be taken seriously in the realm of reconciliation. A re-alignment may be out of the question, but other amends should be made. That could mean a private station for the First Nation despite unviability by traditional transport planning metrics. That could mean transfer of lands elsewhere to make up for it. Or it could mean ownership and operation of the railway as the ICF is currently suggesting. This is all to say that there is no clear solution at this stage, but there is a clear need for one, and that colonial parties should be prepared to make real, affecting concessions in the process following a promise to reinstate service.

Causta HS SRP

Chapter Eleven: Breaking Point

Location: Victoria

The Tangible Result of The Interplay of Actors

Whereas the divided priorities of the Esquimalt First Nation and the municipality/dockyard of Esquimalt signify a warning to the future of the corridor, the tangible consequences of a conflict between such an interplay of actors is already realized at the final terminus of the E&N railway in Victoria West. Here, the Johnson Street Bridge -a distinct landmark connecting VicWest to downtown Victoria—was replaced in 2018. Once accompanied by a parallel rail bridge that brought the E&N to a terminus downtown, this rail crossing is now a relic of the past. In pursuit of a federal infrastructure grant aimed to stimulate the economy in the wake of the 2008 financial crisis, Victoria's municipal council procured a rushed project proposal for a new bridge (Cleverley, 2018). This rush resulted in a failure to negotiate a funding agreement with the rest of the region to include a rail lane on the crossing. The Victoria council at the time felt that Victoria taxpayers should not bear the estimated \$12 million dollar burden of a rail accommodation, as they considered the line a regional/provincial responsibility.

Shortly after, in 2011, newly elected councillor Ben Isitt attempted to reopen a design discussion to allow for a retrofitting option. But the majority view of the council remained against such an investment, with some questioning the cost-benefit utility of a terminus just across the bridge, unsure of the railway's future, and failing to see the lost 350 meters as consequential. Ben Isitt continues to rebut this logic, believing it "short-sighted" and asserting "there were creative ways to make it happen". Sarah Webb, an engineer for the city, acknowledges both these views, asserting that a station just across the harbour is indeed not an optimal terminus for commuter rail, but that the city was open to an LRT option up Pandora Street and possibly further into downtown employment centres (Douglas Street was mentioned as a street "well suited to transit investment"). Talking with these two implies that, had a decision on the Johnson Street Bridge been made in less of a

rush, with consultations that included the public, involved professionals, and other jurisdictions, that a rail crossing and potentially greater investment may have been made into a centrally located E&N terminus.



Figure 17: The Johnson Street Bridge Replacement (Google Maps)

Alas the proposal, absent of a rail provision, was granted \$37.5 million of federal government funding in 2012 (Holmen, 2012). The rail line would now terminate in VicWest, and although a ROW is theoretically preserved just to the South of the new bridge for any future addition (the only indication of such is a spatial layer on the city's GIS portal), investments have since been made into parkland, Indigenous interpretive artworks, and active transit infrastructure upon this ROW. The construction of a parallel bridge would now not only require greater funding than an inclusionary option at the time

would have, it would now come with placemaking, reconciliation, aesthetic, and active transit trade-offs. Pam Hartling, a VicWest resident and local planner agrees with this. She remarks on her fondness for the new bridge, believing that an absence of rail crossing was "not so terrible", and feeling that people would "love a station in VicWest" despite (or perhaps because of) the distance to Downtown. Whatever controversy the new bridge instigated at the time seems to be have been forgotten or forgiven, as the end result is a beautiful bridge that facilitates memorable experiences of downtown Victoria. Anecdotally, I can confirm that her views are shared by many.

However, the success and engineering feasibility of a station on the VicWest side of the bridge has been questioned by some. Sarah Webb, an engineer for the City of Victoria, stated her concern that there is not enough space at the current terminus of the line, due to a nearby car dealership and adjacent multi-use pathway. It is therefore possible that the station would need to be even further from the bridge, increasing the necessity of integration with other transit modes. Pam Hartling also indicated the importance of the nearby Roundhouse development (in Vic West, one block from the terminus, and encompassing the historic track ROW), stating "how they treat the tracks will be crucial to the future of the E&N". Although the website and previous interviews indicate that the developer does seem accommodating to the E&N's usage as a transport mode, the needs of a new station in this area are not well understood, and friction may result in anticipated negotiations.

Thus, this problem of a terminus station is not easily ignored. Creative solutions are possible (for a deeper look into theorized alignment solutions, see Appendix B), but the situation is clearly not optimal. Whether the solution is a new bridge built into the city, continuing or not continuing as a streetside LRT, a Vic West station proximate to the bridge, or one further away but linked to transit connections, this predicament necessitates significant trade-offs. And as previously stated, the all-or-nothing nature of transit means that a line is only as good as its weakest point. For commuter rail at least, and to a lesser extent intercity, the Victoria terminus may well prove that limiting factor.



Figure 18: The new Johnson Street Bridge being lifted at Twilight (https://vancouverisland.ctvnews.ca/75-fee-to-lift-johnson-street-bridge-raises-eyebrows-1.4312622)

To me, a major lesson of the Johnson Street Bridge debacle and the E&N more generally is that rather than making a decision that would have benefitted the entire region, they instead made a decision in their own constituents' interest. This is exactly the reason why regional/provincial transport infrastructure should not be put in place at the discretion of local municipalities. These are decisions that affect people region and province wide. Nobody wants to bear the brunt of these costs, yet we all require it. This is the definition of a collective action problem. As previously discussed, how we define our collective is dependent upon this question of boundaries. This begs a fundamental question of spatial reasoning: at what scale do we examine such problems?

To me, the E&N makes a case for broader and stronger regional and provincial government responsibility and control over transport infrastructure. Highways fall under provincial jurisdiction. Railways are typically under federal control, though in this case the ICF is a provincial creation. Yet as our study of the Johnson Street Bridge makes clear, local governments can make decisions that compromise the integrity of these assets. How such an infringement of upper-tier government's jurisdiction by a level of government whose

powers are entirely delegated to it by the very level of government it is infringing upon is shocking, but the consequences of this infringement clearly demonstrate how problematic that is and how steps should be taken to prevent it happening in other contexts. Certainly First Nations jurisdiction can and should be considered separately in this regard, with due respect and compromises made as a matter of course. Certainly consultations that bring marginalized voices to the table and actualize difficult questions about who benefits and at what cost need to be given due process. And certainly that process needs mechanisms to establish fact, maintain focus, avoid politicization, foster creativity, and frame appropriately the issue at hand. Yes, all this may be easier identified than actioned. But insofar as a municipal council is able to make rushed decisions absent of proper consultation that result in compromised environmental and social benefits for the region(s) it affects, the apparency of that problem should make clear the case for stronger regional and/or provincial powers over transportation infrastructure. When an interplay of actors results in an impasse for the many, a higher level of authority is needed to make definitive commitments for the benefit of the collective.

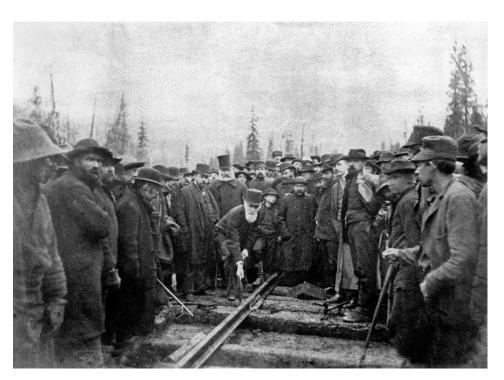


Figure 19: The last spike: an instance of committed high-level government effort resulting in the completion of transit infrastructure for the benefit of a collective (https://www.nationalobserver.com/2020/12/21/opinion/bloody-legacy-canadas-railways-indigenous-peoples)

Recommendations

As stated at the outset of this SRP, this project does not seek to determine what should be done with the E&N railway. Instead, we have examined the reasons why nothing has been. This is chiefly because the author was and is not fully convinced of any one specific course of action for the corridor – that is not to say that I, the author, am free from bias, or that over the course of this project I have not developed one. Only that I do not wish this project to be seen as an opinion piece. As such, I leave it to the reader to form their own opinion from the narrative given and invite them to do their own research into this complex and dynamic topic.

With that said, there is one thing that all agree on. Everyone wants the corridor to be used for something at some point. Victoria commuters want a commuter train, up-island residents might prefer a cycling trail, while certain First Nations simply want the agency to decide on their own terms. Yet as we have seen, the history and multi-faceted effects of the corridor have resulted in a state of stagnation that no one is happy with. With that in mind, the following recommendations are meant to advise governments how they might avoid such an impasse.

- No matter what level of government, clearly define the public interest based on the appropriate scale of the issue at hand.
- Hold municipal councils accountable to the future and supra-jurisdictional impacts of the decisions they make.
- Strengthen the role of regional government in governing transportation programs and infrastructure projects.
- Organize provincial human capital resources to allow for deliberate, timely decision
 making in the realm of transport and transport policy. The provincial government
 recently announced changes in legislation enabling it to purchase land for TOD
 projects. Similar such initiatives should be pursued further.

- Have the federal government provide clear funding criteria for transport infrastructure projects to minimize uncertainty.
- Give First Nations the first say in matters pertaining to land use in and around their territories, so as to avoid continued injustices causing lasting complications for land use policy in the face of reconciliation efforts.



Figure 20: Wet'suwet'en rail blockade in 2020 (https://www.cbc.ca/news/politics/indigenous-aboriginal-rail-blockade-douglas-bland-1.5469252)

Future Research

While this project did not determine what should be done with the E&N railway, it did determine the need for such a decision to be made. It also revealed the objectives, perspectives, concerns, and interests of affected groups, the potential conflicts and tradeoffs that might arise, and possible approaches for resolving them. Notably and perhaps unsurprisingly though, in many ways this revealed more questions than answers. As such, recommended future research is suggested, the intended hope of which is to inform the recognized necessity of making a decision on the corridor's future.

- Procure a business case for the railway based on the triple bottom line: identify the social and environmental benefits of the railway in addition to the economic ones.
 Take into account as many externalities as possible, with particular emphasis on land use and transportation planning effects.
- Study creative options and considerations for the VicWest terminus station of the line. Determine modal integrations, station requirements, ridership impacts, placemaking trade-offs, and future expansion possibilities. This is critical to the corridor's commuter and inter-city utility.
- Determine the full potential for freight operations on the railway, especially given geographic and climate-induced supply constraints.
- Pursue further research into urban governance strategies aimed at dealing with cross-jurisdictional infrastructure assets such as railways. Explore and emphasize the importance of metropolitan/regional governments.
- Consider how best First Nations along the line might be served by passenger rail service and connect these observations to synergetic policy goals of reconciliation.
- Where concerned, identify possible alternatives, compromises, or compensations as
 may be needed to rectify or at least ameliorate the unfair effects of the railway upon
 Indigenous lands to the point that First Nations consider the corridor a useful and
 helpful asset to their community.

Concluding Thoughts on the Role of the Planner

If there were a definitive role for the planner in a professional context it might be that inherent in the title: to create plans. Not to create plans with the expectation of certainty, not to implement them exactly, and (perhaps most easily overlooked) not to create a singular, definitive plan. Rather, perhaps the most useful employment of the planner is to provide decision makers with informed predictions of the consequences of a given set of policy actions or agendas under consideration. Ideally, the planner's analysis of scenario x and/or y and/or z affords decision makers the leeway to pick an agenda based on what is predicted to be in the interest of the public they are elected to serve. However, beyond the inherent and unavoidable uncertainty of this effort, this process is subject to a fault of spatial reasoning that this paper has revealed. The public interest is modifiable area-unit problem. We must spatially-define our public in order to determine its interest.

Yet as we have seen, this is much easier said than done. What happens when there is no clearly defined border for a jurisdiction? When the rights of a nation overlap with the responsibilities of another? What happens when our very conceptions of such a spatial definition are incompatible or insolvably different? How then should a definitive decision be made? The implication and necessity of such scenarios is that these questions cannot be answered through strict means of interpretation and prescription. The role of public officials, especially planners in this case, is to be open to the deliberative process and cultural norms of others. Too often we train planners, engineers, and analysts to work within the confines of a system (of government). Yet in the spirit of modern reconciliatory government, we are not working within one system. We are bridging two or more. The role of the public official in this case, whatever their title, is one of a diplomat.

We would love to cordon transport infrastructure into a special sandbox of legislative power that is systematically workable with established rules. But the reality is that both past projects with a complex history, and future ones which no matter how solidified they may seem, are always destined to be subject to the level of uncertainty inherent in the

procession of time. There will never be neat boxes. What we need in transportation planning therefore is the ability of planners to work messily, to get down and dirty with their lines, to make adjustments, compromises, rearrangements and reconceptualizations. To think beyond the realm of numeric analysis that aims for spatio-temporal optimums. What transportation planning needs, for project such as this, is vision, creativity, and collective imagination.

We as a society or as planners or as individuals may not be able to change the collective culture of decision-making processes or norms or power boundaries. But one actionable thing that we can do as employers and employees is diversify the thinking in our working teams. The value of people to bring new ideas to bear upon wicked problems is the only way we are going to solve them.

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Appendix A: Rail-to-Trail. The Optimal Use of Disused Railways? (Originally written for URBP 619 – Land Use and Transport Planning)

Rail to Trail is an increasingly common initiative, but is it always the best use of disused rail infrastructure from a land use and transport planning perspective? Benefits and considerations of rail trails are detailed and discussed to inform this question. Health, social, economic, transport, land use, and political factors are considered. Who these factors benefit and how they relate to each other is emphasized. Conflicted results imply the issue is case specific. Furthermore, discussion of the socio-political factors challenges the validity of the question itself. It may be up to planners to emphasize a more pertinent question of what to do with disused road space.

Introduction

'Rail-to-trail' is a phrase used to describe the increasingly common conversion of disused railways to active transport trails. Initiatives such as the Rails to Trails Conservancy in the US, and parts of The Great Trail in Canada, combined with high-profile projects such as the HighLine in New York City and the BeltLine in Atlanta have raised awareness of the idea in recent years, with increasing public and political support. But with this momentum, it is possible that rail trails are being constructed without other options considered. Disused rail infrastructure — whilst potentially perceived as unsightly, conducive to crime, or wasteful (Weber et. al, 2017) — is of great potential value. The corridors and tracks themselves may be amenable to future transportation options such as LRT or even BRT when the city grows to a certain size. Given the high costs associated with acquiring new right-of-way for these projects, (which only increases with city growth,) might it not be better to preserve the disused lines?

Comprehensively detailing the specific, definitive decision criteria dictating optimal use of disused rail track is beyond the scope of this appendix. Instead, our aim is to provide an overview of rail trail benefits, and the factors that enhance or diminish those benefits. In other words, what transportation, land use, and other criteria contribute to the success of a rail-to-trail initiative?

Overview of Benefits

Rail to trail has several benefits, ranging from economics to health, transportation to climate change.

From a health perspective, the benefits are readily apparent. Receding physical activity is a growing concern in North America, and rail trails provide an accessible means of countering that trend. This may lead to increased physical and mental health benefits of users, which has a positive impact on government finances. One study saw a three-to-one return on investment from saved health care costs for a trail (Berolzheimer, 2020). Physical activity has been shown to improve mental health as well, and even productivity (Trubka, 2010). Trails that lead from residences to workplaces are thus especially beneficial to both the individual and the society. In a transport-specific context, trails are a viable way of reducing traffic congestion. A significant portion of cyclists fall under the category of "interested but concerned" (Berolzeihmer, 2020), looking for a safer option than street-side cycling, which is unfortunately common in North America. Street-side cycling is not only unsafe, it can also slow down vehicle traffic hesitant to pass the cyclist. Lastly, induced demand – a concept often used to describe traditional transport infrastructure – is also applicable to active transport infrastructure, as many cyclists will use the infrastructure when it is built who otherwise would not have cycled at all (Litman, 2015). From a land use perspective, the most apparent benefit of rail trail is the pre-existing right of way. This can save municipalities from reducing available road space from car users, which is often politically difficult. Additionally, rail trails benefit neighbouring real estate values and are some of the most desirable amenities sought by home buyers (Berolzheimer, 2020). Similarly, businesses profit from nearby rail trail usage, with a well-connected trail yielding a 154% increase on trip-related expenditures (Berolzheimer, 2020). Furthermore, old railways often lead to obsolete historic commercial centres, which can be rejuvenated by the presence of a

new rail trail (FORT-VI, 2021). All of these benefits result in positive municipal revenue loops as taxation can be increased when local economies expand.

Lastly, trails are of social and environmental benefit. Some studies found them to increase social cohesion and inclusiveness, as they provide opportunities for the neighbourhood to recreate together (Scherer et al., 2020). Their multi-usage function also provides opportunities for all members of society to traverse them together (though inter-user conflict is sometimes a concern) (Roberts, 2019). Similarly, certain marginalized communities like First Nations tend to benefit considerably from rail trails, especially when they link cultural and natural heritage sites (Globe and Mail, 2021). Finally, rail trails present a low-carbon form of tourism, and their construction does not consume valuable pristine parkland or natural space.

Considerations

The regional benefits of a well-built rail trail are broad and substantial. However, many factors that enhance or diminish those benefits should be considered.

Firstly, the health benefits of rail trails imply that a trail built next to low-income communities would have a greater impact on public health benefits, as these communities tend to rate lower in public health measures. Conversely though, Berolzheimer (2020) identifies an already physically-active population as a key to rail trail usage. In this case, the priority determines the measurement of a trail's success: it is dependent on whether the intent is to maximize usage, or to maximize public health returns.

Health implications also relate to connectivity. A trail that connects residences to offices may enable active commuting and provide a means of physical activity for otherwise inactive office

workers. In fact, connectivity between mixed land use was one of the four key usage factors identified by Berolzheimer (2020), confirming that alignment is still a concern despite the trail's attraction itself. Another such factor was accessibility, based on distance to destinations. These destinations include commercial and office spaces but – given the surprising importance of tourism identified by Scherer et al. (2020) – should also include tourist attractions. Lastly, each of these connectivity factors should be enhanced by connections to the rest of the active transit network, along with the public transit network via nodes of exchange, as the two are complementary when properly designed.

Connectivity is related to land use, and the considerations from this perspective are similar. Density is essential to a trail's usage, as one study in China found 92% of trail users lived within just 0.5 miles of the track (Berolzheimer, 2020). However, this figure would be lessened were the trail designed primarily as a tourist attraction. The other two usage factors identified by Berolzheimer (2020) were also land-use related, with proximity to trail and density in general being highly important. However, it is noteworthy that increasing density also disproportionately increases the appropriateness of public transit usage on the railway. This paradox is amplified further by a finding that cyclists are more attracted by a rural trip than an urban one (Scherer et al., 2020), implying that low density rural areas are better suited to rail to trail. This makes assessment of optimal repurposing difficult in certain cases.

Such social factors of preferences add complexity to the issue in a manner not always intuitive or obvious. For example, the nostalgia of historic rail transport can pose an obstacle to rail trail development, as community groups of varying interests are formed to champion conflicting interests, some seeking a modern, high speed commuter train, and others envisioning a

refurbished steam locomotive to attract tourists (Scherer et al., 2020). These interests are then reflected within government, as political support can venture in various directions. This becomes even more complicated when the right of way passes through multiple jurisdictions (which is often the case). Certain jurisdictions may be seen to benefit more or less from the project, and in different ways. This is especially the case with First Nations communities, who, although sometimes poised to gain the most from a rail to trail initiative, may oppose it on legal grounds (FORT-VI, 2021). To an extent this is indicative of a lack of awareness of the benefits of rail trails, and the minimal cost at which one may be constructed (Cano, 2014). The resulting paradox — in which the political will for a project is not sufficient to commence a feasibility study because they lack any such study to justify pursuing further information— is not easily solved. It may be up to planners, academics, or aspiring students to raise awareness of the issue.

Discussion

The oftentimes conflicting considerations concerning the benefits of rail to trail confirm the difficulty of producing a definitive framework of optimal use for a disused railway. They imply that the answer is case specific, and the result may often be socially rather than scientifically driven. The literature supports this, claiming "there is no one model of an urban rail trail" (Roberts, 2019). But with that said, an understanding of the array of benefits and considerations should help planners to advocate for as optimal a usage of land as possible.

More pointedly however, an analysis of the benefits and considerations has revealed that the question of "what to do with disused railways" (Ferretti, 2017) may not be the optimal question

to ask. Public and active transit are shown to be complementary yet underused in the North American context. Assets for both should be cherished and a conflict among them should be secondary to a conflict between them and the automobile. Scherer et al. (2020)'s suggested avenues for future research in Land Use and Demand vs Supply imply that there is a distinct demand for both rail and trail within North American communities. The answer some municipalities have taken to this is to implement 'rail with trail' — a complete analysis of which is beyond the scope of this paper but a preliminary analysis of which reveals similarly sitespecific considerations resulting from substantially increased costs relative to single-purpose option (FORT-VI, 2020)(Berolzheimer, 2020).

However, we believe that this misses the crucial point of what to do with underused *road* space. Given that North American roadways have been over-designed for the car for decades, disused railways actually represent a far smaller waste of space than streets. At times the rail to trail initiative seems like an admission of weak political will, resultant from the fear of disgruntled drivers unhappy that their road space is being repurposed for more sustainable alternatives. Disused rails can be a seductively convenient scapegoat for governments to create cheap, harmless active transport infrastructure with questionable benefits resulting from suboptimal alignment. The real underlying issue is not a small-scale question or rail to trail or rail to light rail, but rather a pathetic commitment to active (and public) transport infrastructure across North America. Before we answer the question of what to do with disused railways, let us first answer the question of what to do with disused streets. Once the latter is answered, the former may be more obvious.

Conclusion

If this re-framing of the question cannot be realized though, it must be conceded that rail-to-trail is a well-intended initiative that seeks to increase the health and social wellbeing of neighbourhood residents while addressing issues of land use, environment, and safety. These benefits should be considered against local conditions when determining the viability of a proposal. The role of the planner in such a context may be to consult and inform members of the public to those considerations, though ideally it would also be to redirect attention away from disused rail towards disused road space, especially should a proposal become bogged down in the divisiveness of conflicting interests. Determining the optimal use of disused railways ultimately relies on broader, informed perspectives in order to determine how best the land use and transport planner can make people's lives better.

Appendix B: A Design Strategy to Accommodate a Commuter Rail Terminus in VicWest or Downtown Victoria, BC (Originally written for URBP 651 – Redesigning Suburban Space)

For nearly ten years, a rail line that runs from Victoria to Langford and up Vancouver Island has been dormant. Safety concerns due to track conditions forced the closure of the Esquimalt and Nanaimo (E&N) railway in 2013, and a lack of political will to re-open the line has since prevented any progress. Because Langford is one of the fastest growing suburbs in British Columbia, this has been criticized as a wasted opportunity to provide an alternative means of connectivity between Langford and Victoria. It also misses an opportunity to encourage densification through transit-oriented development, and thereby additionally fails to counter-suburbanize the peri-urban frontier of Langford (a community on the rail line to the West), which has been rapidly encroaching on Vancouver Island's spectacular wilderness. Despite widespread support, the high costs associated with refurbishing the tracks have scared government away from providing the funds. This is especially shameful considering studies done on the corridor have revealed that intensification along its length would make the corridor more cost-viable for commuter rail, representing a classic chicken-or-the-egg problem common to TOD. The resulting lack of commitment has been used as a political excuse to develop around the corridor in ways that ignore its long-term potential. No where is this clearer than in VicWest.



Figure 21: Location of Johnson Street Bridge in Victoria



Figure 22: Existing and Past Right of Way for E&N Rail Track

The Johnson Street Bridge (JSB) is a bridge that connects Victoria West to Downtown Victoria. It has existed since 1855, though it has undergone four iterations since that time. The most recent iteration was completed in 2018, to heavy controversy. Broken promises, faulty infrastructure, top-down decision making, and extreme cost overruns (the bridge is the most expensive per meter in the history of the world) dampened the bridge's popularity, and questions were raised as to whether or not the project was even necessary to begin with. Most relevant to this paper however, the bridge did not accommodate the E&N railway along its length due to an unavailable funding partner. This has resulted in the terminus of the E&N across the water in Vic West, creating a severe connectivity barrier and problematic future for the entire E&N. Although apparently the bridge was designed to accommodate the potential addition of this component (City of Victoria, 2021), the popularity of the new bridge has now created a structure of permanence that may handicap such an undertaking, especially given the fragmented governance structure of the Victoria area (which is divided into 13 smaller municipalities, each beholden to local interests, resulting in a lack of coordination and cooperation on regional issues, like transportation). All that without even mentioning the re-construction of newly constructed public space, or the increased cost of undertaking this after the bridge was constructed (originally estimated at 12 million, now expected to be much higher), or the aesthetic design conflicts that might arise from this.



Figure 23: Johnson Street Bridge Upgrade



Figure 24: City of Victoria Database showing future rail ROW consideration (Dark Green)

A surface-level analysis might suggest a rail bridge not be built at all in this case, and an alternative terminus for the E&N in Vic West be developed. Travel time, accessibility, and connectivity problems aside, what would this look like? Where would a transfer station fit into the landscape? How would the adjacent land use be affected? The nearby Dockside Green and Roundhouse developments are well-poised to act as TODs, but a terminus in Vic West would provide little in the way of accessibility, and far less beneficial to residents of Victoria as a whole. The localized political system of the CRD might prevent Victoria City planners and councillors from being accommodating to this in the first place, as happened with the removal of rail from the JSB design. How might we design such a transit connection?

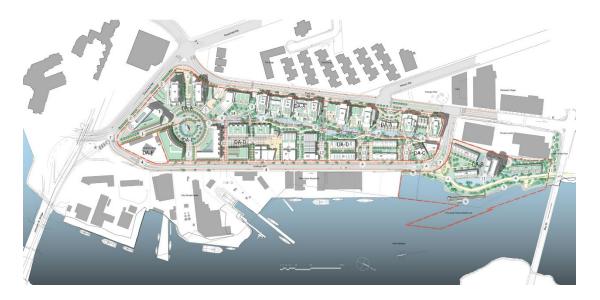


Figure 25: Dockside Green Built Form. Note proximity of Johnson Street Bridge to the bottom-left.



Figure 26: Roundhouse Location and Typology in Surrounding Neighbourhood Context. Note Location of Dockside Green to North-East

This report considers the following design options:

- 1. A dedicated bridge with at-grade light rail continuing into downtown Victoria.
- 2. Termination of the rail line on the VicWest side of the bridge, in four possible locations.
- 3. The possibility of shared light rail/motor vehicle space on the bridge, or other alignment options in the immediately critical vicinity.

Option 1: Rail into Downtown Victoria

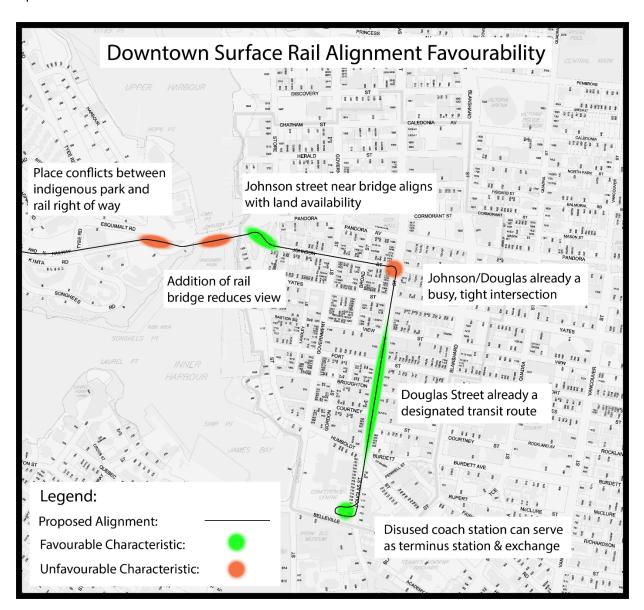


Figure 27:Likely Downtown Surface Light Rail Alignment Pros and Cons

The first option is the most optimistic from a costing perspective, and the most beneficial from a transport economics perspective. True to the wishes of Victoria city council and rail enthusiasts, a rail

bridge adjacent to the new Johnson Street bridge is built. It is assumed that this bridge will be of a similar design and character to the Johnson Street bridge adjacent so that aesthetics are minimally disrupted, and the bridges serve to complement rather than detract from one another's status' as landmarks for the city. Proper architecture can be used to accomplish this, and it is granted that experts in this field can accomplish this properly. Nonetheless, this would likely be controversial among many, not only because of the reduced southern views from the pedestrian ways along the main bridge, but because the primary bridge was so costly that another, dedicated to a single use, would raise significant cost concerns. There would also be place conflicts created in the immediate vicinity of the VicWest entry to the new bridge, as the current right of way (ROW) in this area is undergoing conversion to an Indigenous park. Although the openness of this space gives room for this ROW to be built, the cultural significance of this site, and the legitimacy it grants to a diversity of activity would be compromised by rail infrastructure terminating in it (Rishbeth, Ganii, & Vodicka, 2018). Just because a space is open, does not mean it is underused or need be re-purposed.

Once in downtown, the rail would run on Johnson Street, at-grade up to Douglas, before making a southward turn. Johnson street is well suited to this as the current intended ROW as designated by the city aligns directly with the street. The street itself is uni-directional, double laned, with all traffic heading East. It is busy in the morning rush hour, so trains would have to contend with traffic or be given a dedicated lane. This could be uni-directional, or bi-directional, though a uni-directional option is preferred to match the street traffic. (In this case, reverse direction trains could route down Yates Street, which is well suited to his purpose for similar reasons to Johnson is.) If space affords, a bike lane could be added alongside the tracks for better East-West connectivity. One potential problem with this is the southward turn that must be made on Douglas Street. Although at 25m wide, the street has plenty of room in theory, but the busyness of the intersection (and the street generally) by cars, public transit, bicycles, and especially pedestrians means that space is already at a premium and a train turn may coopt more public space than is acceptable.

Once on Douglas Street however, the route is straightforward. Douglas is already a well-used transit corridor, with buses given significant leeway if not priority. Additionally, at the south end of Douglas is a disused coach terminal that could be converted to a terminus station. Conversion of greyfields is nothing new, and its proximity to the legislature, Royal BC Museum, and Empress Hotel would likely make this a walkable station even by new, more critical metrics (Dovey & Pafka, 2020), popular among commuters and recreationists alike.

Option 2: Terminus Station in VicWest

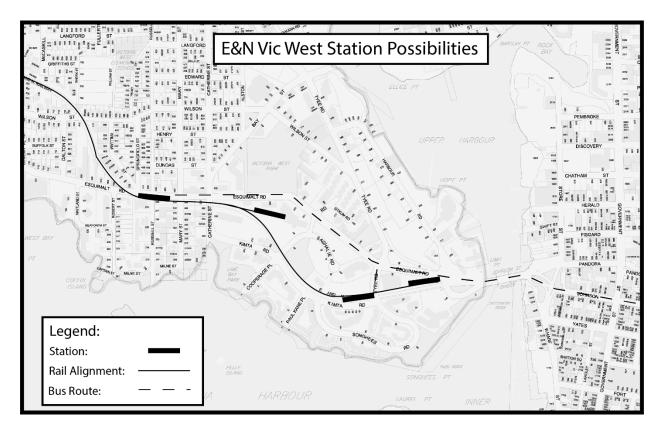


Figure 28: VicWest Terminus Station Possibilities with Bus Route

The second option is more fiscally conservative, though less beneficial from a transport economics perspective. By terminating somewhere in VicWest, infrastructure costs and logistical complications for the trains could be avoided. Bus service would accomplish the last mile of travel, which (while not ideal,) is ameliorated by the fact that a high-frequency bus already runs the length of Esquimalt Road to serve the nearby Department of National Defense 'Dockyard' base. In this case, a more frequent Downtown-Dockyard bus would enable efficient transfers and minimal wait times.

Four locations for such a station are explored. Obviously, the more eastern stations are preferrable from a last mile travelled perspective. The two are just 250 and 550 meters from the downtown shoreline. Although this quickly outlies many downtown businesses from the minimum distance people walk in a commute, it should be noted that viewsheds, visual proximity, and the general pleasantness of the bridge can greatly ameliorate this fact (Stojanovski, 2020) (Qvistrom, Luka, & De Block, 2019).

The two locations to the west however do not afford this possibility and are thus more reliant on a bus connection. Of the two, the westernmost location is most apt for this, being directly on Esquimalt Road.

The middle-west, at just over 50m from the road, is less suitable for this, but it does have the advantage of being directly in the newly proposed Roundhouse development. This could be a boon for both transit users and the developers, which could stand to gain a vibrant transfer station and local business customers respectively, and the developer in question is well aware and thus supportive of this idea (Cleverley, 2017).

If transferring from the mid-east station, it is recommended that the bus service be re-routed south from Esquimalt to Kinta Road. An additional service route could be added to travel up Tyee and/or Broad Street and across the Broad Street bridge to the industrial sector of Rock Bay, affording very good commuter ridership opportunities, and reducing space conflicts while simultaneously easing potential concerns about density increases from the Roundhouse development (McLeod & Curtis, 2019). Kinta Rd is well suited to act as a transit exchange for these volumes, as it is very wide with underused parking, so re-zoning to further compliment the TOD features of the area would be simple to implement (Schuetz, Giuliano, & Shin, 2017). Meanwhile, furthest to the east, a transfer at the most proximate of stations to the bridge would be equally simple, requiring a less than 35m walk to the bus regardless of which side the street one is on. The only difficulty in this case would be constructing a platform and infrastructure with the limited space of this area: a problem which is somewhat addressed by our third explored option.

Option 3: Shared Johnson Street Bridge



Figure 29: Johnson Street Bridge Considered Rail Alignment Options

Given the remarkable challenge of encouraging ridership involving transfers, and the understated importance of last-mile accessibility, the third option focuses on current bridge infrastructure which prevents a downtown or near-downtown rail terminus. The five colours shown in the figure above demarcate five potential alignment options permitting rail to span the harbour. The intent being an avoidance of the problems present in the second option while negating some of the unfavourable aspects of the first. (Note that the green line shown above represents the transit-ideal option of a new bridge built as presented in the scenario one.)

Firstly, cost can be minimized by using the same bridge for rail and vehicle traffic. If trains must share the streets with cars once in downtown anyway, there is little point in avoiding that traffic at excess cost for a short, 150-meter crossing of the harbour. This decision would simultaneously negate viewshed woes and place conflicts with the park. Thus, the four non-green colours denote an alignment along the existing bridge.

Of the two, yellow and red begin on Esquimalt Road already to the West. The advantage of this is that it would save bridge building costs and landscaping reconstruction at the South-West section of the bridge, as this tight hill presents a challenge to builders and presents user conflicts. It would also enable center-lane, bidirectional travel in line with traffic because it would have already crossed to the center of the road at a less busy point to the West. (The others meanwhile would have to skirt the south edge of the bridge to avoid this problem.) To the east, this section could go either up Johnson Street (Yellow) or Pandora (Red), providing greater flexibility for transport planners in town.

Meanwhile, the two blue options attempt to make better use of the exiting infrastructure by diverting only at the last minute. This has the dual advantage of less traffic disruption and potentially further cost savings. However this comes at the cost of construction, place-conflict, and south lane limitation issues afore-mentioned. Of the two, the lighter blue seeks to minimize construction cost, while the darker blue eliminates place conflict. Because of the conjoined cultural importance and user conflict/demand in the Southeast bridge greenspace however, the dark blue alignment is generally considered preferable.

If cost were a priority, either could terminate at the public space where the blue alignment re-joins the green alignment rather than continuing downtown. This would eliminate traffic conflict concerns further in, at the expense of last-mile, single-trip travel to key tourism and employment sites though, so this option is considered unfavourable.

In conclusion, despite claims by government that the construction of the Johnson Street Bridge without considerations for rail on it doomed the future of the E&N railway, there are creative alternative that effectively disprove this claim (Cleverley, 2018). Although those most cost sensitive designs are problematic, there are ways to accommodate budgetary necessities while still providing a pleasant, environmentally friendly, and unique transit service for the City of Victoria and surrounding region. Decision makers, provided with this list of design options, can pick and choose aspects of this design that suit the needs of the businesses, commuters, and communities they represent. Given the consistently pressing need to get people out of their cars and into a safe, efficient, and accessible transit option, all that is needed is the political will to redesign this space.

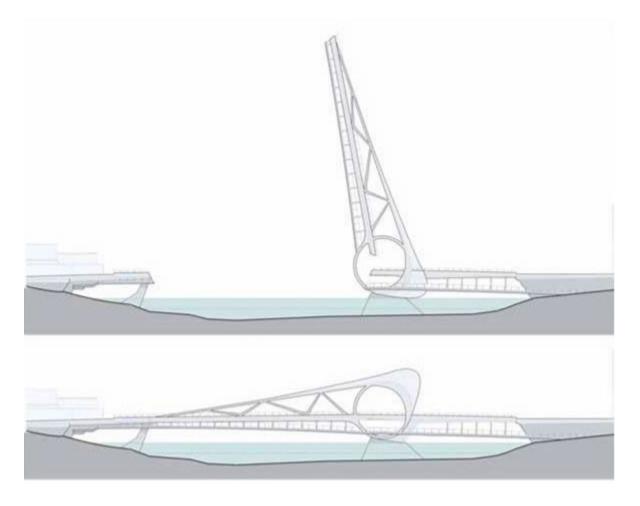


Figure 30: Johnson Street Bridge Side-Profile: Inspiration for Future Design Strategies

Appendix C: Interview Question Template

Introduction

Present Situation

Can you describe your understanding of the current status of the E&N railway corridor?

What is your professional relationship to the E&N railway corridor?

What is your personal relationship to the E&N railway corridor?

Historic Context

How familiar are you with the history of the E&N railway corridor?

Can you describe your understanding of the history of the corridor?

What role did politicians, planners, and government officials play in the history of the corridor?

What role did average citizens play in the history of the corridor?

What role did Indigenous peoples play concerning the history of the corridor?

In your opinion, does the railway corridor represent a significant legacy of colonialism?

How important is the corridor as a part of British Columbia's heritage?

What is the importance of the history of the corridor in affecting the present and future use?

Future Options

Who are the key actors involved in the future of the corridor in your opinion?

Can you describe the various ideas as to what should be done with the E&N railway corridor?

As a professional, what would you like to see done with the railway corridor and why?

What are some of the trade-offs with this proposed use of the corridor?

What do you see as the biggest technical challenges facing the implementation of a new use for the corridor?

What do you see as the biggest political/governance challenges facing the implementation of a new use for the corridor?

What would you personally like to see done with the railway corridor and why?

Do you feel you yourself are capable of affecting change along the corridor and to what extent?

What role do politicians have in the future of the corridor?

What role do planners and government officials have in the future of the corridor?

What role do average citizens have in the future of the corridor?

What role do Indigenous peoples have in the future of the corridor?

What do you think the most likely outcome for the corridor is?

Appendix D: Research Ethics Board Certificate of Approval



Research Ethics Board Office James Administration Bldg. 845 Sherbrooke Street West. Rm 325 Montreal, QC H3A 0G4

Website: www.mcgill.ca/research/research/compliance/human/

Research Ethics Board 1 Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 22-04-020

Project Title: Urban Planning Understanding the Interplay of Actors Surrounding the Proposed Use of the

E&N Rail Corridor on Vancouver Island

Principal Investigator: Causta Habedus-Sorensen

Status: Master's Student

Dept: School of Urban Planning

Supervisor: Prof. Madhav Badami

Approval Period: 13 April 2022 to 12 April 2023

The REB-1 reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans.

Deanna Collin Research Ethics Officer

^{*} Approval is granted only for the research and purposes described.

^{*} Modifications to the approved research must be reviewed and approved by the REB before they can be implemented.

^{*} A Request for Renewal form must be submitted before the above expiry date. Research cannot be conducted without a current ethics approval. Submit 2-3 weeks ahead of the expiry date.

* When a project has been completed or terminated, a Study Closure form must be submitted.

^{*} Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.

^{*} The REB must be promptly notified of any new information that may affect the welfare or consent of participants.

^{*} The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this study.

^{*} The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.