British Columbia Ferry Services Inc.

Supplemental Information for the
British Columbia Ferries Commissioner

For the Application of December 13, 2024

Pursuant to
Section 55 (2) of the *Coastal Ferry Act*

For the
New Major Vessels Project

February 21, 2025

Note: In this copy of the Application information of a confidential and commercially sensitive nature has been redacted.

Table of Contents

Section 1 Introduction

On December 13, 2024, British Columbia Ferry Services Inc. ("BC Ferries" or the "Company") applied (the "Original Application") under section 55(2) of the *Coastal Ferry Act* (the "Act") seeking the British Columbia Ferries Commissioner's (the "Commissioner") approval of a proposed major capital expenditure for the procurement of five new major vessels ("NMVs"). These vessels are needed on BC Ferries' busiest routes between the Lower Mainland and Vancouver Island.

In the Original Application, BC Ferries proposed to build five new major vessels. BC Ferries intended to retire four legacy vessels (ALB, COQ, COW and NW) and extend the life of two legacy vessels (SUR and OAK) (Option 2).[1] The fifth NMV would contribute additional capacity and overall resiliency to the major vessel fleet, becoming the twelfth major vessel in the fleet in Fiscal 2030. The additional major vessel would address growth in demand, reduce sailing waits in peak periods and provide resiliency to the system in cases where a vessel elsewhere in the fleet was out of service.

While this remains the preferred option, since submitting the Original Application, BC Ferries has continued with the procurement process as described in the Original Application. The Request for Proposals process closed on January 17, 2025, and BC Ferries' teams have since completed their fulsome review. As part of BC Ferries' strategy to continually revitalize the fleet and ensure capacity exists to meet current and future demand, a new option has been identified that is prudent, affordable and in the public interest: replacing five legacy vessels and life-extending only one vessel. This option is referred to as Option 5.

Option 5 maintains the major vessel fleet at 11 vessels in total, while further de-risking legacy vessel reliability concerns by replacing an additional over-50-year-old legacy vessel with a NMV. This is an affordable option and provides significant benefit to customers and the public in terms of reliability.

BC Ferries requests that the Commissioner consider this supplemental information in conjunction with the Original Application. BC Ferries continues to believe that as outlined in the Original Application, the NMVs are essential for system resiliency, and that fleet renewal is required to continue to support the evolving needs of communities and provide reliable service for decades to come.

It is in the best financial interests of the ferry system and in the public interest to proceed with the purchase of five vessels now. Together, the five new vessels would contribute to greater system reliability – newer vessels are less likely to have mechanical and operational problems – and they would operate more sustainably and add passenger and vehicle capacity, making for a more resilient ferry system overall. The Company supports this approach either through the continued inclusion of a twelfth

[1] Respectively, *Queen of Alberni*, *Queen of Coquitlam*, *Queen of Cowichan*, *Queen of New Westminster*, *Queen of Surrey* and *Queen of Oak Bay*.

vessel (Option 2 – Build 5, Life Extend 2), or by accelerating the replacement of one legacy vessel, (Option 5 – Build 5, Life Extend 1).

Section 2 The Case for Five New Major Vessels

BC Ferries, as an essential public service, believes that building five NMVs now is in the public interest. When BC Ferries refers to the public interest, it means having the necessary capacity and resiliency to support people's livelihoods, coastal economies and local tourism industries with a responsible and affordable plan that readies the ferry system for the future and projected growth in the population of the Lower Mainland and Vancouver Island. It refers to addressing challenges in the system in the next few years and for decades to come, including:

a) Improving capacity and reliability;
b) Keeping fares affordable;
c) Reducing environmental impacts;
d) Contributing to the BC economy; and
e) Future-proofing the ferry system.

2.1 Improving Capacity and Reliability

BC Ferries' latest traffic figures for the three months ending December 31, 2024, showcase rising demand, with nearly 22,000 round trips and increases of 39,000 vehicle equivalents and 17,000 passengers over the previous year. And Fall is not BC Ferries' busiest season.

Over the same timeframe, BC Ferries was forced to cancel 149 sailings on the major routes[2] due to mechanical issues, unsurprising given the age of the legacy vessels. With no relief or replacement vessels in the ferry system, every cancelled sailing adversely impacts hundreds of people and many thousands if it lasts more than a few sailings. The combination of higher traffic volumes with the risk of aging vessels failing makes a strong argument for life-extending as few vessels as possible.

As the major routes are an essential part of the province's supply chain and transportation network, cancellations have an even greater impact than on other routes. Cancelled sailings erode trust in the reliability of the ferry system overall, interrupt the delivery of goods and services and have a very real financial cost to commercial customers. The BC Trucking Association estimates that a single sailing cancellation can cost the sector well over $100,000 – costs that are directly passed on to consumers.

[2] The major routes include the routes connecting the Lower Mainland with mid and southern Vancouver Island, and on the route connecting Horseshoe Bay with Langdale. These are "Route 1" (Tsawwassen / Swartz Bay); "Route 2" (Horseshoe Bay / Nanaimo (Departure Bay)); "Route 3" (Horseshoe Bay / Langdale); and "Route 30" (Tsawwassen / Nanaimo (Duke Point)).

Sailing waits are also a concern. In July and August 2024, 227,000 vehicle equivalents ("AEQs") on Routes 1, 2, 3 and 30 experienced at least one sailing wait, with some customers delayed by three-to-five hours or more. Assuming 75 percent of these vehicle equivalents are under height, and each under height vehicle carries two people on average, almost 400,000 ferry customers were impacted by sailing waits over just two months during this past summer alone. The number of sailing waits jumps to more than half a million vehicles for the full year.

BC Ferries connects people with communities. Customers need to get on the ferry for any number of reasons, including moving goods, meeting friends and family, getting to work, business and medical appointments, and just plain enjoying recreation and tourism. For anyone who has driven up to the ferry with a car full of kids anxious to start their vacation, visit grandparents or just head out for an adventure, sitting on the tarmac in the blazing sun or in the cold for an extra one to five hours deters them from ever wanting to travel on BC Ferries again.

In Fiscal 2025 (to January 31, 2025), BC Ferries has seen over < > AEQs in commercial overloads on Routes 1, 2 and 30. The experience was similar in Fiscal 2024, with over < > AEQs in commercial overloads. Commercial customers cannot operate without certainty and reliability. When goods are delayed for any reason, the impacts are sharp and acute and carry financial costs that need to be absorbed by small BC businesses or passed directly on to British Columbians.

Sailing waits not only impact the individuals who are forced to wait, but also overall on-time performance. Ferry crews work hard to put as many vehicles on the car deck as possible, so no one is left behind. While that may delay a vessel by only 10 or so minutes per sailing, the accumulated impact is that on-time performance overall has dropped to almost its lowest level in years.

BC Ferries has done what it can to shape demand. On Routes 1, 2 and 30, it has increased the portion of reservations on every sailing from 58 percent in 2018 to an average of 77 percent today and sailing waits have decreased overall by about 25 percent. But demand has grown, and reservations sell out quickly, so the only option for many people, as was the case in 2024, is to show up at the terminal and wait.

BC Ferries also introduced Saver Fares – significantly discounted fares that include a free reservation and only available on less busy sailings. In Fiscal 2024, more than 500,000 AEQs travelled at off peak times on Saver Fares, marking a shift of 10 percent of all travel on the major routes. During Fiscal 2025 year to date (January 31, 2025), this has increased to a 20 percent shift.

The most effective solution to reducing wait times and addressing the risk of legacy vessels failing, is to introduce five new vessels with increased capacity. While BC Ferries' preferred option is to move from an 11-major vessel fleet to 12, an 11-vessel fleet with five new major vessels would be a significant improvement over what exists today and provides more reliability by retiring a legacy vessel and extending the life of only one vessel.

Each of the new vessels would carry 2,100 passengers and 360 vehicles – which represents 52 percent more passenger capacity and 24 percent more vehicle capacity than the average capacities of the retiring vessels.[3]

This additional capacity will contribute to improving customers' experience, generating additional revenue, improving the dependability of the ferry system overall and building today what will be essential to have tomorrow.

2.2 Keeping Fares Affordable

BC Ferries has heard clearly from its customers that reliability is paramount in what they expect from an essential public service. Equally as clear is that raising fares significantly to deliver a reliable service is unrealistic and not in the public interest. The options BC Ferries has highlighted for consideration (Options 2 and 5) meet a stringent test of affordability, both today and in the future.

When it comes to affordability, BC Ferries considers the projected amount of increased fares or increased investment from the Province necessary to deliver the expected service levels. It also considers the opportunity cost of the proposed option(s). < >

Life-extending a 50-year-old vessel also comes with reliability risks, and factored into affordability needs to be the increased risk of breakdown and delays and the costs associated with both. Cost certainty also needs to be a consideration, < >.

On the benefit side of the cost equation, there is supply chain certainty that results from increased capacity, reduced waits and greater reliability, which benefit and support the economic growth of BC's coastal communities and the people who live and work there, and the people who visit. The tourism sector benefits from the additional capacity, which allows it to grow and sustain employment.

[3] Based on ALB, COQ, COW and NW. The average for the legacy vessels being 290 AEQs and 1,380 passengers.

When considering all these factors singly and together, BC Ferries is confident that both Options 2 and 5 would deliver exceptional value for coastal communities, industry and local economies, and affordable fares for customers.

2.3 Reducing Environmental Impacts

BC Ferries operates in one of the most beautiful places on earth and is dedicated to preserving it for generations to come. The five NMVs reduce environmental impact compared to the vessels they are replacing, something customers say is a priority. The new vessels will use diesel-battery hybrid propulsion systems initially, and all-electric operation once shore-based recharging infrastructure becomes available. For the environment, building five NMVs now would provide the opportunity to significantly reduce vessel greenhouse gas ("GHG") emissions either through operation on 100 percent bio-/renewable diesel or all-electric operation once appropriate terminal infrastructure is in place, helping BC Ferries to align with the CleanBC targets and meeting the expectations of customers.

2.4 Contributing to the British Columbia Economy

British Columbians are living in uncertain economic times. The importance of moving goods within the province, and hosting visitors from within the province and the rest of Canada has become more pressing than it has been in the past.

BC's population is projected to increase by 44 percent by 2046, according to BC stats, and the Company expects demand will continue to rise. Planning for immediate and future growth is the only sure way to respond to the year-over-year growth BC Ferries has already experienced since the end of the pandemic, and the growth that is likely with possibly more Canadians travelling at home.

BC Ferries regularly surveys its customers, and they consistently rank reliability, availability, sustainability and affordability as their top concerns for a ferry transportation system. BC Ferries believes that seeking approval to construct five new major vessels is in the best interests of customers, the province and the ferry system.

< >

While it is a significant investment to construct five vessels that can carry thousands of passengers and hundreds of vehicles and be in service for 50 years or more, the new vessels would generate additional revenue, help to achieve provincial climate targets and improve the capacity and resiliency of the ferry system. The five new vessels would serve customers and communities for years to come.

< >

2.5 Future-Proofing the Ferry System

Future-proofing the ferry system is a commitment BC Ferries makes to its customers, to the public and to the province. BC Ferries' ability to deliver the dependable and reliable service that customers require year-round is being strained by a growing population, an aging fleet and shifting travel trends with locals staying closer to home while the number of visitors surge.

The major routes are important to the entire ferry system: they contribute 82 percent of all customer fare revenues – a significant financial contribution that helps to sustain all the other routes in the system and support overall affordability. The additional capacity that would be available among the five new vessels would generate additional fare revenue – something the ferry system sorely needs.

With the populations of the Lower Mainland, Vancouver Island and the Coastal Regions expected to grow considerably, the additional capacity and reliability provided by five new major vessels would be essential to maintaining an optimal ferry system. The Company's plan for five NMVs now readies the coastal ferry system for that future.

Section 3 NMV Project Update

3.1 Vessel Procurement

The Request for Proposals process closed on January 17, 2025. < >

The NMV Project is BC Ferries' largest-ever capital investment and is linked to other projects and initiatives that are required for its success. As noted in the Original Application, the Company has put in place governance processes to ensure appropriate oversight of the NMV Project.

3.2 Geopolitical Situation

BC Ferries is aware of possible tariffs that might be imposed by the United States on Canada, and that generally there is an amount of uncertainty with tariffs and international trade. Potential duties and tariffs could depend on the location of the shipyard selected.

An *import duty* is a general charge on imported goods, while a *tariff* is a specific duty on certain imports. Both are types of import taxes. Various goods imported into Canada are subject to duties or tariffs, depending on the nature of the item being imported, and the country of origin. BC Ferries does not expect to pay import duties on ferries, regardless of country of origin, due to an existing 2016 Order in Council (OIC)[4] that provides a complete remission on customs duties paid or payable under the Customs Tariff in respect of "ferry-boats" as they are classified in Canadian Customs Tariff schedules.

The impact of other tariffs applied worldwide cannot be predicted < >

[4] Ferry-Boats Remission Order, 2016 (P.C. 2016-509 June 14, 2016).

Section 4 Build Five and Life-Extend One Legacy Vessel (Option 5)

4.1 Project Milestones

Option 5 involves, as noted above, replacing five legacy vessels with five NMVs and life-extending only one (SUR). The project milestones for Option 5 would be consistent with those for Option 2:

Table 1: Project Milestones

Key Remaining Milestones	Approximate Forecast Date
Design-Build-Deliver Contract Award	April 2025
Detail Design of NMV Complete[1]	April 2026
NMV #1 Steel Cutting (Start Production)	April 2026
NMV #1 Delivery to BC	October 2028
NMV #1 Enters Service	April 2029
NMV #5 Enters Service	April 2031
Project Close	April 2032

[1] Vessel design and construction schedule is highly dependent on the capabilities of the shipyard selected.

Like Option 4, each retiring vessel includes a six-month contingency prior to retirement in case any issues exist with the NMVs' introduction. This approach temporarily expands the major fleet to 12 vessels, but with 11 in operation and the twelfth in lay-up in case it is needed.[5]

4.2 Option 5 Deployment Plan

The Original Application addressed vessel deployments that would result from building four NMVs and life-extending two legacy vessels (Option 4.) While both Options 4 and 5 would result in a major vessel fleet of 11 vessels during Phase 1,[6] due to the interoperability of various classes of vessels with specific routes, the vessel deployments would not be the same with both options. Figure 1 provides a possible deployment scenario under Option 5:

[5] This planning is subject to change, based on final timelines from the successful shipyard.

[6] Option 3 (Build 6) also provides for 11 vessels during Phase 1. However, this option is not contemplated further in this filing.

Figure 1: Vessel Deployment for Option 5 – Build 5 and Life-Extend One

NMV - Build 5 and LE 1 - Major Routes High Level Annual Deployment, excludes refits and relief deployments

Corridor	Route	Position	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
South Island	1	#1 SWB	NMV #4											
		#2 SWB	Spirit of Vancouver Island											
		#1 TSA	NMV #3											
		#2 TSA	Spirit of British Columbia								SBC			SBC
Mid Island	2	#1 HSB	Coastal Renaissance											
		#1 DEP	NMV #5											
		#2 DEP	SUR								SUR			
	30	#1 DUK	NMV #2											
		#2 Rte 30			Coastal Inspiration									
		#1 TSA	NMV #1											
Sunshine Coast	3*	Langdale #1	Coastal Celebration											
		Langdale #2			SUR									

Changes with new option

Retaining an 11 major vessel fleet foregoes several of the operational benefits that would occur through a twelfth major vessel, including the advantages of reduced pressure on vessel deployments during the refit season, and the additional capacity brought by an extra major vessel on Route 1 during the peak season. The Company will need to manage fleet deployments carefully to ensure it addresses issues caused by wait times, delays and overloads, especially as it moves to accommodate anticipated growth in demand due to population and economic development.

Routes 1, 2 and 30 are the coastal ferry system's most significant revenue-generating routes, making up over 80 percent of customer fare revenues. Between Options 4 and 5 – the two viable options that provide for an 11-vessel fleet in Phase 1 – Option 5 provides the flexibility for BC Ferries to service Routes 1, 2 and 30 with the largest vessels, increasing both vehicle and passenger capacity over today.

The proposed deployment described in Option 5 compares to Option 4 as follows:

- No anticipated changes to the deployments on Routes 1 (Tsawwassen to Swartz Bay) and 30 (Tsawwassen to Duke Point);
- On Route 2 (Horseshoe Bay to Nanaimo), service from Horseshoe Bay is not expected to change, but the primary service exiting from Departure Bay is expected to be provided with the NMV #5 instead of a Coastal Class vessel. This increases the overall capacity on Route 2 five years earlier (than Option 4), which will be especially beneficial to customers during peak season. In addition:
    - The additional capacity with the larger vessel on Route 2 during the peak season, would support the growth in demand projected for the Mid-Island Corridor; and
    - SUR would be the seasonal supplementary vessel and support Route 2 refit relief.

- On Route 3 (Horseshoe Bay to Langdale), improvements to the current service would come sooner by deploying a Coastal Class vessel as the primary, year-round ferry five years earlier than Option 4 (or Option 2). As a significantly newer vessel than the C-Class, a Coastal Class vessel would reduce service reliability risks. It would also provide improved loading, increased passenger capacity along with flexibility to close lounge spaces and sail with reduced crew during low demand times.

  While the overall AEQ capacity is about the same between a C-Class vessel (307) and a Coastal vessel (310), Coastal Class vessels have the associated benefit of much more robust commercial vehicle carrying capacity, which would help to reduce the pressure of goods movement to the sunshine coast.

  With only 11 major vessels, BC Ferries would not be able to explore expanding service on Route 3 to two ships year-round. The SUR would become the seasonal supplementary vessel on Route 3 and otherwise would provide refit and emergency relief on Routes 2 and 3.

As with Option 4, Option 5 would have three vessels operating as supplementary and refit relief across the major routes, providing similar relief and refit planning as today.

Deployment considerations are discussed in further detail in Appendix B.

4.3 Retiring Legacy Vessels

BC Ferries has described the challenges and risks – including financial and operational – with continuing to operate legacy vessels built in the 1960s, 1970s and 1980s. The Company noted in the Original Application it is willing to accept the reliability risks associated with life extending SUR and OAK (Option 2) and considers the risks manageable for the five year period between Phase 1 and Phase 2. Nevertheless, a protracted service failure is always possible, and would incur significant costs associated with repairs, loss of system revenue, customer confidence and reputational damage.

If the failure was serious enough to cause the vessel to be removed from service permanently, the system would be without a major vessel for several years until a replacement could be secured on an emergency basis. This would be especially severe if a second major vessel were to experience a protracted unscheduled out of service period – especially if the major vessel fleet is at 11 ships and not 12.

While a life-extension of the SUR defers the major capital investment, it only provides limited gains in service reliability and does not fully eliminate the risk of a catastrophic failure for that vessel. As noted in the Original Application, older vessels tend to break down more often and can be difficult and expensive to repair due to obsolete technology.

From the operational perspective, the most desirable and prudent approach within each option – if affordable and consistent with fleet planning – is to replace the aged legacy vessels instead of life extending them.

4.4 Improved Fleet Resiliency Through Replacing All but One Legacy Vessel

A twelfth major vessel, as described in Option 2 (Build 5, Life Extend 2), provides significant improvements to the resiliency of the major routes system in comparison to any of the eleven vessel options, and supports not only expansion of seasonal service in shoulder and peak but also reduces the inconvenience of the refit relief vessel having a smaller capacity than the primary vessel. If a twelfth major vessel is not added during Phase 1, a decision on the twelfth major vessel will ultimately be deferred to Phase 2 of the NMV shipbuilding program, although this would eliminate the benefits of having an additional vessel in the fleet until then. At that point, the Company anticipates the need for a twelfth vessel will stand on its own, given the capacity projections for the mid 2030s and beyond.

In lieu of a twelve major vessel fleet, Option 5 (Build 5, Life Extend 1) is desirable. This option involves replacing five of the six legacy vessels now and life extending one vessel to be replaced by 2037. Option 5 improves interoperability of the major vessel fleet through the retirement of four of the five legacy vessels and the replacement of these vessels (two classes) with a single interoperable class of ship.

As noted above, it will also improve overall vessel reliability due to having one fewer 50-year-old vessel operating in the fleet, and places the remaining legacy ship in a supplementary and refit relief role to reduce its overall running hours while enabling the Company to match service with demand by operating its newest and largest vessels.

4.5 Modest Improvements in Vessel Capacity

The Original Application reviewed how BC Ferries is expecting AEQ growth of approximately 15 percent along the major routes over the next 10 years, followed thereafter by a similar trajectory. BC Ferries believes that Option 2 will best address this population growth, because a twelfth major vessel not only supports resiliency throughout the year but also represents a step function in capacity during all times of the day during the peak season.

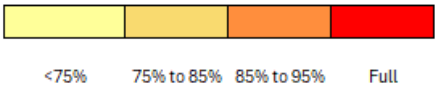
By comparison, an 11-major vessel fleet, as contemplated during Phase 1 of the NMV Project for Options 4 and 5, may help to ameliorate capacity utilization at existing traffic levels but still will be near or full during the peak season months. Table 2 reviews anticipated available capacity the first full year that all five Phase 1 NMVs are deployed under a possible scenario in Option 5:

Table 2: Option 5 – Estimated surplus capacity by month in the first year when all Five NMVs are in service

Metric		Apr-32	May-32	Jun-32	Jul-32	Aug-32	Sep-32	Oct-32	Nov-32	Dec-32	Jan-33	Feb-33	Mar-33
Monthly Capacity Utilization Option 5	Rte 1												
	Rte 2												
	Rte 30												
	Rte 3												
	Rte 2/30												

Average AEQ Available, By Sailing

Data	Route	Apr-32	May-32	Jun-32	Jul-32	Aug-32	Sep-32	Oct-32	Nov-32	Dec-32	Jan-33	Feb-33	Mar-33
Average available capacity by sailing	Rte 1	62	75	61	26	0	72	66	39	87	86	70	70
	Rte 2	104	93	72	43	27	70	101	138	153	160	141	106
	Rte 30	129	117	94	65	49	92	125	162	177	184	165	131
	Rte 3	60	57	68	117	106	90	73	90	108	108	102	71



The table shows that, while the NMVs will provide incremental per-vessel capacity, an 11-vessel fleet ultimately will fall behind the demands of projected population growth on Route 1 during the peak season shortly after the NMVs are introduced, resulting in the risk of longer waits, delays and overloads. The lack of an additional major vessel will cause significant adverse impacts on overall major route capacity, and therefore on customer service and satisfaction, which will worsen as time progresses.

Of the two options for an 11-vessel fleet, the possible deployment scenario for Option 5 will lead to improvements in customer service and satisfaction on Route 2 approximately five years earlier than with Option 4. The deployment of a NMV on Route 2 compared to a Coastal Class vessel, as outlined in the Original Application for Option 4 (and Option 2), will increase the passenger and vehicle vessel capacity provided by approximately 15 percent and 8 percent, respectively. This additional capacity, about 400 additional AEQs and just under 4,000 additional passengers per day, will improve the travel experience for customers on Route 2 by reducing overloads and sailing wait times compared to Option 4.

Option 5 also deploys a Coastal Class vessel to Route 3 earlier than other options, which would address the commercial capacity constraints currently experienced. In addition, while the overall capacity change will be minimal, the customer experience should be greatly improved with the newer Coastal Class vessels.

Considering the two options for an 11-vessel fleet, the following table summarizes the increase in capacity provided to Route 2 and Route 3, five years sooner in Option 5 in comparison to Option 4. The incremental capacity is broken out by passengers, AEQs and semi-trailers over the course of a day:

Table 3: Routes 2 and 3 Estimated Daily Increase in Capacity by Type, Options 4 and 5

Route 2	Option 4 Coastal	Option 5 NMV	% increase	Daily increase
AEQ Capacity	310	360	16.1%	400
Passenger Capacity	1,604	2,100	30.9%	3,968
Semi Trucks	32	34	6.3%	16

Route 3	Option 4 SUR	Option 5 Coastal	% increase	Daily increase
AEQ Capacity	307	310	1.0%	48
Passenger Capacity	1,494	1,604	7.4%	1,760
Semi Trucks	12	32	166.7%	320

Table 3 shows that the increase in capacity is greater on Route 2 with one NMV (Option 5). In the peak season this additional capacity will support a reduction in customer overloads compared to operating a Coastal Class vessel (Option 4). In the off-peak season, an NMV may be slightly too large for the anticipated demand, which provides BC Ferries with an opportunity to use the vessel to provide refit relief for other NMVs on Routes 1 and 30. The benefit of utilizing the same class of vessel for refit relief is the vessels will be deployable without needing to adjust or modify any existing infrastructure, or to re-train crew beyond route familiarization. This ability to cost-effectively redeploy vessels across the major routes supports BC Ferries' vessel strategy and is vital to ensuring service consistency.

On Route 3, the difference is minor between Options 4 and 5 in the daily increase in overall AEQ capacity. A Coastal Class vessel will allow BC Ferries to close a passenger deck and reduce crew levels when passenger demand is low, and it will help to reduce wait times for commercial customers with its unobstructed main car deck.

4.6 Terminal Infrastructure

The Original Application reviewed how, for a 12-major vessel fleet, a new lay-by berth (Berth 2A) would be needed at Tsawwassen terminal to support the introduction of NMVs and their transition activities, and ongoing lay-ups and refits for the fleet. Consistent with the details provided in the Original Application, Berth 2A would not be needed during Phase 1 of the NMV Project as Options 4 and 5 include only an 11-vessel fleet.

All other terminal projects are accounted for in the capital plan based on either condition or original NMV deployment options. No additional terminal projects are needed to support Option 5.

4.7 Environment

The environmental benefits of the NMVs were reviewed in the Original Application. In comparison to the vessels being replaced, the NMVs will have lower underwater radiated noise, lower airborne radiated noise, zero waste water discharge (i.e., zero black, grey, bilge, and ballast water discharge), lower 'energy per nautical mile - AEQ' (i.e. MJ/nm-AEQ) consumption due to efficient diesel-battery hybrid propulsion, lower particulate exhaust discharge, and the opportunity to reduce their direct GHG emissions to near zero levels either through operation on 100 percent bio-/renewable diesel or all-electric operation once appropriate terminal infrastructure is in place.

The investment in NMVs present an opportunity for BC Ferries to align with the provincial government's GHG reduction targets for 2030 and beyond. They have been deliberately designed to operate on 100 percent biodiesel in the near-term, becoming all-electric in the longer term. Appendix D of the Original Application discussed the overall GHG reduction opportunities during the 2050 timeframe with a system of 11 or 12 major vessels in operation (with the assumption the Spirit Class vessels will have been replaced by equivalent NMVs). Option 5 represents no changes to the information provided previously, but it does permit further GHG reduction opportunities in comparison to Option 4. An opportunity exists to reduce approximately 116,500 tonnes of tank to wake CO_2e emissions over the five year period from Fiscal 2032 through Fiscal 2037, including by removing an additional legacy vessel sooner, operating the fifth NMV on 100 percent bio-diesel on Route 2, shifting a Coastal Class vessel to Route 3 (where it would use less energy per day), and moving the remaining legacy vessel to a supplemental role.

Section 5 Financial Analysis

5.1 BC Ferries Completed a Financial Analysis

The Original Application explained how the six aging legacy vessels present a growing out-of-service risk. For the reasons explained in the Original Application, the Company continues to support procuring five NMVs now, while life-extending two others (Option 2) to achieve a major vessel fleet of 12.

< > If the twelfth major vessel is not supported, it is prudent to proceed with procuring five vessels now and retiring an additional legacy vessel, leaving only SUR to be life extended. This approach has several benefits:

- < >
- BC Ferries receives the benefits of vessel standardization by having five same-class vessels; and
- Fleet resiliency is supported by replacing older vessels with new, more reliable and larger ships.

The Company has completed a financial analysis for Option 5 that supports the case that it is in the financial interests of the coastal ferry system to proceed with five NMVs now. The detailed financial analysis is presented in Appendix C.

5.2 Affordability

BC Ferries has heard clearly from its customers that that the ferry system is an essential public service and they expect it to be both reliable and affordable. The Company agrees with its customers, and also believes that measured increases in fares that reflect necessary capital investments in the ferry system are both prudent and necessary for the long term sustainability of BC Ferries. The options BC Ferries has highlighted for consideration (Option 2 and this new Option 5) both meet a stringent test of affordability.

To help define affordability, BC Ferries considers a number of factors that prioritize customers, the communities it serves and the financial sustainability of the Company:

- < >
- < >
- The cost certainty that comes from future-proofing the system in advance of any future increases in inflation with the expectation that, like most purchases, building future NMVs will not be cheaper in the future;

- The projected amount of increased fares or increased investment from the Province that is necessary to deliver the expected service levels;
- The cost to customers of the increasing risk of breakdowns and delays, and the benefit to avoiding those impacts;
- The provincial supply chain certainty that results from the proposed option(s), with increased capacity, reduced waits and greater reliability, benefitting and not hindering both the economic growth of BC's coastal communities and the people who live and work there; and
- The tourism industry sector benefits and the related job sustainment and growth that comes from not having to turn away visitors and/or have them choose to travel elsewhere because they can't rely on BC Ferries to visit coastal communities.

When considering all of these factors together, as well as individually, BC Ferries is confident that both Options 2 and 5 not only prioritize affordability, but will also deliver exceptional value for coastal communities, industry and local economies, and more affordable fares for customers.

5.3 Fifth New Major Vessel is Essential

To maintain overall current levels of service delivery on the major routes in accordance with the Coastal Ferry Services Contract, the Company needs to operate a fleet of at least 11 major vessels. While BC Ferries' preference for Phase 1 of the NMV shipbuilding program is for an additional (twelfth) major vessel, a bare minimum of 11 vessels is reflected in all options under consideration in this filing.

< > It is reasonable and prudent to procure a fifth NMV instead of life extending one of the two legacy vessels.[7] In these circumstances, the fifth NMV becomes the eleventh major vessel in the fleet, and in so doing, has now become an essential acquisition for the Company and for service delivery to British Columbians.

[7] < >

Section 6 Conclusion

< >

While expanding BC Ferries' fleet to 12 major vessels (Option 2) remains the preferred option, if the incremental vessel is not supported by the Ferries Commissioner, then BC Ferries recommends proceeding with the procurement of five NMVs now and retiring five legacy vessels (Option 5) which is supported by the detailed financial analysis in Appendix C. Life extending only one legacy vessel will help to contain overall costs to the ferry system, while reducing service, operational and financial risks associated with operating over-50-year old vessels through the transition to replacement.

Forward Looking Statements

This document contains certain "forward looking statements". These statements relate to future events or future performance and reflect the Company's expectations regarding our growth, financial and business risks, results of operations, performance, business prospects and opportunities, and industry performance and trends. They reflect management's current internal projections, expectations and beliefs, and are based on information currently available to management. Some of the market conditions and factors that have been considered in formulating the assumptions upon which forward looking statements are based include population and demand growth estimates, shipbuilding demand and cost projections, ship reliability estimates, traffic trends, inflation, interest rates, fuel costs, construction costs and timelines, the state of the economy, tariff impacts and fluctuating financial markets. A number of factors could cause actual events or results to differ materially from the results discussed in the forward looking statements. Although we believe that the forward looking statements contained in this document are based upon reasonable assumptions, investors cannot be assured that actual results will be consistent with these forward looking statements. These forward looking statements are made as of the date of this document and British Columbia Ferry Services Inc. assumes no obligation to update or revise them to reflect new events or circumstances except as may be required by applicable law.

Appendix A: Summary of Options

The table below summarizes the options considered by BC Ferries:

Table 4: Summary of Options (by Number of Vessels)

	New Builds	Life-Extend Legacy Vessels	Retire Legacy Vessels	Additional (Twelfth) Major Vessel	Net Number of Major Vessels at End of NMV Project[1]
Option 1 – Build 7	7	0	6	1	**12**
Option 2 – Build 5	5	2	4	1	**12**
Option 3 – Build 6	6	0	6	0	**11[2]**
Option 4 – Build 4	4	2	4	0	**11[2]**
Option 5 – Build 5	5	1	5	0	**11[2]**

[1] Including the existing Spirit Class vessels (two) and Coastal Class vessels (three)

[2] Twelfth major vessel to be added to the fleet in Phase 2 of the NMV Project

The new option, Option 5 – Build 5 and Life Extend 1, involves building five NMVs, retiring five legacy vessels (ALB, COQ, COW, NW and OAK), and life-extending one legacy vessel (SUR). The SUR would be replaced by 2037 as part of the Phase 2 NMV Project.

Appendix B: Deployment Considerations

B.1 Introduction

This appendix details possible deployment and service opportunities based on various NMV Project options. At a high level:

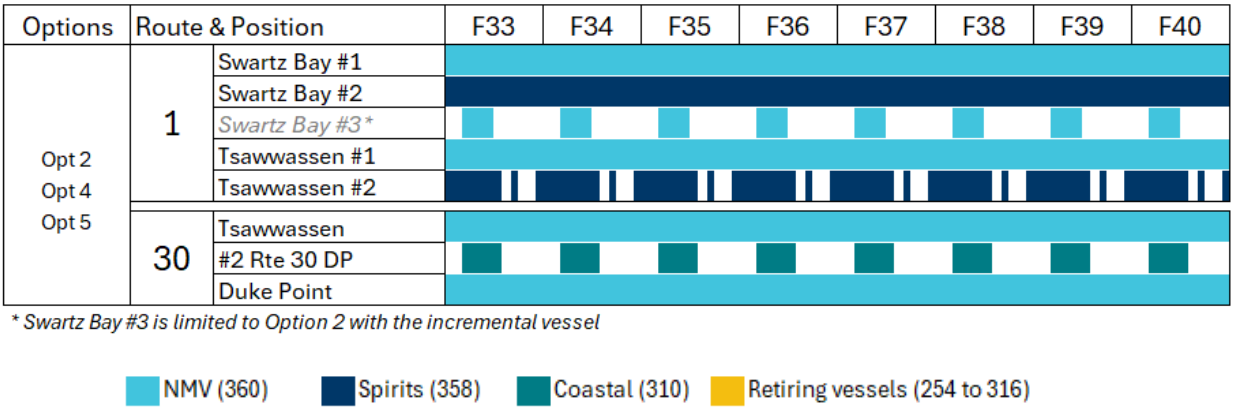
- There are no changes to Routes 1 and 30 between the options, aside from the fifth peak season major vessel on Route 1;
- A NMV would be deployed on Route 2 five years earlier in Option 5, and with both Options 4 and 5 the second NMV would be deployed at the same time; and
- Overall, Option 5 would not fundamentally alter BC Ferries' major fleet planning. With Option 5, a Coastal Class vessel would be deployed on Route 3 five years earlier than Option 4.

These considerations are discussed in more detail below.

B.2 Routes 1 and 30 Deployments

Route 1 and Route 30 deployments are consistent across Options 2, 4 and 5 with the only change being whether there is a twelfth major vessel, which supports peak season service on Route 1 (as a Swartz Bay #3 vessel) or only 11 major vessels which limits Route 1 to four vessels:

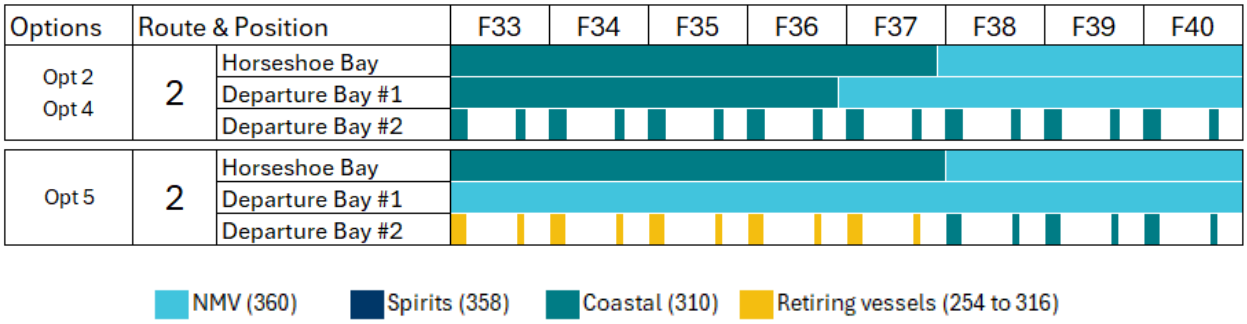
Table 5: Route 1 and Route 30 Deployment - all options



B.3 Route 2 Deployments

The difference in deployment plan between Options 2, 4 and 5 is the timing of when the NMVs are deployed over Phase 1 or Phase 2, as outlined below:

Table 6: Route 2 Deployment Options

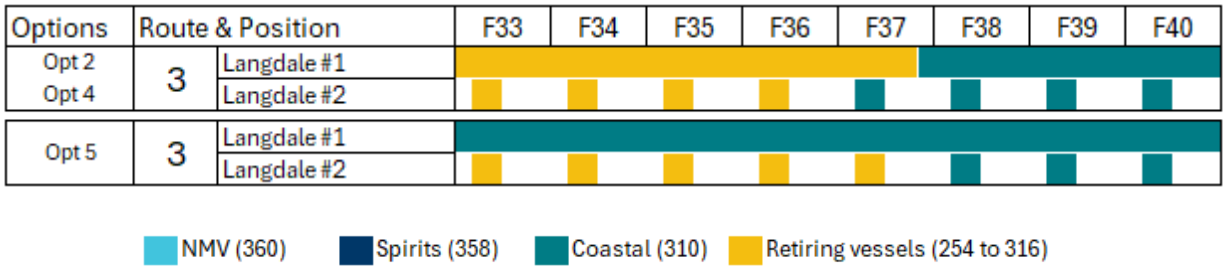


A combination of Route 2 Coastal Class vessels and a Route 30 NMV is expected to be able to cover the projected growth of the mid-island corridor for the short term between the NMV Phase 1 and Phase 2 builds. The longer-term growth projections indicate that the Phase 2 NMV's would be needed on Route 2.

B.4 Route 3 Deployments

Table 3 outlines the longer-term deployment plan for Route 3 for Options 2, 4 and 5. The difference between each option is the timing of *when* the Coastal Class vessels are deployed to Route 3, not *if* they are deployed to Route 3. Under Option 5, Route 3 receives a Coastal Class vessel five years sooner:

Table 7: Route 3 Deployment Options



BC Ferries has considered approaches that could enable the redeployment of a relief vessel to expand service into the shoulder and off peak to support the growing population of the Sunshine Coast if required / desired in the future. In Option 2, with a twelfth major vessel in the fleet, an opportunity exists to increase the duration of the year where two ships are operating on Route 3 to help with the seasonal increase in discretionary travel. Without the twelfth vessel, supplemental service would be limited to June through Thanksgiving. *All options currently show the same level of service on Route 3, and the only variant is the timing of the vessel deployments.*

B.5 Route 3 Vessel Assignment

B.5.1 Coastal Class Vessel

This filing has discussed how the potential deployment plan for Route 3 (Horseshoe Bay to Langdale) would see, under Options 2, 4 and 5, a Coastal Class vessel eventually being used year-round as the primary ship on the route. The difference between Options 2, 4 and 5 is the timing of the Coastal Class deployment – not the actual deployment of the vessel itself. This filing has also noted that Coastal Class vessels are significantly younger than C-Class vessels and are expected to reduce many of the service reliability risks for Route 3.

In addition, the Coastal Class would be an appropriate operational 'fit' for Route 3, as it was designed to be flexible and interoperable across all major routes. This design includes:

- Standard BC Ferries amenities that are spread across two enclosed decks;
- A large upper exterior promenade deck with wind break;
- Upper car deck with unobstructed vehicle lanes, improved loading for vehicles;
- Full height main vehicle deck that carries up to 32 semi-trucks; and
- Flexible design supports closure of a passenger deck and reduced crew levels when deployed on routes with lower passenger volumes, *allowing BC Ferries to 'right size' crew license and passenger decks to the volumes of traffic being carried*.

The following table compares the capacities of the current C-Class vessel serving the route with a Coastal Class vessel:

Table 8: Comparison of SUR and Coastal Class Vessels

	Queen of Surrey	**Coastal Class Vessel**	**% Increase**
AEQ Capacity	307	310	1.0
Passenger Capacity	1,494	1,604	7.4
Semi-Trucks	12	32	166.7

C-Class vessels have the smallest semi-trailer capacity of all major vessels and traditionally have been well suited to their deployment on Route 2 (Horseshoe Bay to Nanaimo) and Route 3. However, in recent years increases in passenger and commercial vehicles travelling on Route 3 have resulted in increased wait times for commercial customers, which has been passed on to consumers on the Sunshine Coast through the increased costs of goods / shipment costs.

BC Ferries has improved commercial goods travel on Route 3 through changes to sailing schedules and increasing supplementary service on Monday to Friday. Deploying a Coastal Class vessel on Route 3 would provide a significant increase in commercial capacity that is expected to be well suited to the growth in this sector.

B.5.2 Route 3 Planning

< >

Of the four major routes, Routes 1, 2 and 30 are highly utilized during the peak season, with limited room to improve existing capacity with more revenue management tools. On the other hand, Route 3 is well-utilized at key travel periods but overall still has under-utilized capacity. Flexibility in vessel deployments remains through future major vessel replacement decisions; however, the near and medium-term opportunity for Route 3 will be to focus on using revenue management initiatives to improve capacity utilization while providing greater travel certainty for customers.

Appendix C: Detailed Financial Analysis

< Redacted >