

Circulation Package



October 2024

PLANNING NEWSLETTER



THIS MONTH'S REPORT

OCTOBER 2024 VOL.7

The Planning Report gives an overview of Planning and Development activities occurring within the region. Each month a volume is issued by the Planning Department in local media news as an opportunity to create awareness amongst our dynamic local community. For inquires contact: Emmanuel Okorji Development Technician eokorji@rdmw.bc.ca 250-956-3301 (ext 1014)



<https://marinas.com/view/marina/16c59qz> Port Alice Rumble Beach Marina Port Alice BC Canada

INSIGHTS ON DEVELOPMENT APPLICATIONS

Did you know that a Site Permit or Building Permit (in the case of Coal Harbour) is required for any construction, alteration, and occupation of property lots within the RDMW community? Property Owners and Development applicants are encouraged to apply for the appropriate permit by contacting the RDMW Planning department staff.



KEY NOTES

A demolition permit is required for any demolition work occurring within the Coal Harbour community. Other communities such as Sointula, Woss and Hyde Creek do not require a demolition permit application process. In spite of this, it is still advisable to contact the Regional District to enquire on the safe disposal of the debris. Contact department for more details and questions.

KEY EVENTS

These are a few of the Key Events happening in and around the Regional District pertaining to planning;

- The RDMW is seeking to update its OCP and zoning bylaws.
- Beware of having fire pits and open burning very close to buildings and structure. Ensure to keep fires at a safe distance of about 10-20 feet away from any structures.
- The use of 5th wheel trailer and RV for dwellings is prohibited throughout the region, except in areas designated for RV parks and marinas.



Stakeholder Notification

Date | Time: 10/7/2024 11:23 AM

Via email.

Attention: Stakeholders

Event Type: Catch Basin Cleaning – Cook Creek to Port McNeil

Mainroad North Island Contracting will be starting their annual catch basin cleaning along all main routes from Cook Creek to Port McNeil. Traffic control will be attending and on-site.

Where: Cook Creek to Port McNeil

When: Monday – Friday | October 7 to November 30, 2024 | 8:00 AM to 6:00 PM

Drivers are reminded to respect cones, traffic control personnel, and watch for roadside workers. Please show respect for all roadside crews – Slow Down.

Our 24-hour communications and dispatch office will pass on all your observations and concerns to our crews when contacted. As always, a reminder to visit www.drivebc.ca.



See an issue on North Island Highways? Give us a call!
To be removed from our Email Distribution List, please contact communications@mainroad.ca

Mainroad North Island Contracting LP
3190 Royston Road
Cumberland, BC V0R 1S0
www.mainroad.ca

SEAWEED INDUSTRY DEVELOPMENT PLAN

FINAL

Prepared for:

Regional District of Mount Waddington



Prepared by:

LGL Limited
environmental research associates

October 4, 2024



EXECUTIVE SUMMARY

The Seaweed Industry Development Plan (SIDP) aims to support the growth of the seaweed industry in the Regional District of Mount Waddington (RDMW), located in northern Vancouver Island and the adjacent mainland. This initiative by RDMW is driven by the need to diversify the local economy, especially following the decommissioning of finfish farms, currently underway, and to explore the potential of seaweed cultivation as a sustainable and economically viable industry in the region.

The RDMW's economy has traditionally relied on natural resource sectors such as forestry, fishing, mariculture, marine industries, mining, and tourism. The seaweed sector, identified as promising for expansion, offers various applications including food, cosmetics, pharmaceuticals, biofuel, and agricultural additives. Seaweed's rapid growth and exploration for possible carbon sequestration capabilities also present opportunities for climate mitigation.

In March 2024, LGL Limited was engaged to lead the creation of the SIDP, supported by Canadian Kelp Research, BCL Biotechnologies Ltd., and Lighthouse Environmental Consulting. A Steering Committee, including members from RDMW, council, and provincial regulators, was established to guide the development of the SIDP.

Goals and Framework

The SIDP aims to provide guidance for seaweed cultivation in the RDMW, aligning with the United Nations Sustainable Development Goals (SDGs) related to industry, innovation, infrastructure, and life below water. The plan emphasizes building resilience, enabling technology adoption, creating a future workforce, expediting decarbonization, and integrating sustainability as a core business goal.

Engagement and Consultation

The development of the SIDP involved consultation with First Nations and active seaweed cultivators to gather local knowledge and industry insights. Engagement with First Nations was crucial, given their leadership role in potential industry development within their territorial waters. Interviews and workshops were conducted to gauge interest and gather information on cultivation methods, species selection, and industry trends.

Industry Analysis

The global seaweed industry has experienced significant growth, with a 736% increase from 1990 to 2020. In 2019, algae cultivation contributed nearly 30% of the 120 million tonnes of world aquaculture production. The global industry has focused on a few main species. However, the coastal waters of the Pacific Northwest, including BC, offer a rich biodiversity of seaweed species, presenting opportunities for developing a novel or specialized seaweed cultivation industry. In BC, multiple species of kelp are cultivated and wild harvested, including Bull, Winged, Giant, and Sugar kelp. The province has the potential to lead growth in this sector, particularly through partnerships with First Nations and business entrepreneurs. The existing infrastructure and expertise from the commercial fishing, marine tourism, and the mariculture industry in the RDMW provide a strong foundation for the establishment of seaweed cultivation.

Site Selection and Environmental Considerations

Appropriate site selection is critical for successful seaweed cultivation. Factors such as water depth, flow, temperature, and proximity to processing facilities are considered. Environmental features to avoid include protected areas, eelgrass beds, and existing kelp beds. Engagement with First Nations is essential to identify acceptable locations and activities.

Regulatory and Permitting Requirements

Seaweed cultivation in BC requires various permits and licences, including a Pacific Aquatic Plant tenure, Wild Aquatic Plant Harvester Licence, and Aquatic Plant Culture Licence, as well as reviews in parallel by federal agencies. If the market is for human consumption, compliance with Health Canada regulations for novel foods and provincial or federal food processing regulations is also necessary. If the product is to be sold outside of BC, export requirements apply.

Business Models and Funding Opportunities

Various business models exist for the seaweed industry, ranging from small family-owned operations to vertically integrated companies. In North America, the industry often adopts vertically integrated models due to its small size. Shared infrastructure facilities and co-op partnerships can help reduce costs and risks. Key business models include:

1. **Vertically Integrated Model:** Companies manage all stages of production, from cultivation to processing and marketing. This model allows for greater control over quality and supply chains but requires significant investment.
2. **Start-up Model:** The cultivator is responsible for each step, except for the nursery production of kelp seed, enabling the cultivator to focus on the grow out stage while outsourcing the technically difficult nursery seed production stage.
3. **Co-op Model:** Multiple small-scale cultivators share resources and infrastructure, reducing individual costs and risks. This model fosters collaboration and can help stabilize prices across the industry.
4. **Specialized Roles within a Supply Chain:** Companies focus on specific stages of production, such as seed production or processing, allowing for specialization and efficiency.

Funding opportunities are available from various sources, including the New Relationship Trust, National Research Council of Canada, and Coast Opportunity Funds. These funds can support the development, expansion, and sustainability of the seaweed industry in the RDMW.

Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

- **Strengths:** Suitable natural waters, experienced local workforce, existing mariculture infrastructure, and strategic location for international shipping.
- **Weaknesses:** High costs of transporting unprocessed seaweed, limited cold storage infrastructure, and competitiveness with overseas producers.
- **Opportunities:** Research and development, market development, and improved investment pipelines.
- **Threats:** Uncertainties in profitability, market size, and climate change and environmental impacts.

Conclusions and Next Steps

The SIDP identifies key areas for further consideration, including regulatory designations, business feasibility, infrastructure assessment, and environmental effects monitoring. A follow-up site-specific business plan will support practical application and cost-effective approaches in the RDMW. Engagement with First Nations and partnerships with local industries are crucial for the successful development of the seaweed industry.

The next steps include:

- Create a regional task force through the SIDP Steering Committee to assemble the various pieces needed for this industry.
- Clarify the regulatory status of local seaweed species with Health Canada.
- Further evaluate business feasibility and grow potential markets for kelp.
- Explore the potential for a seaweed co-op to support market access.
- Establish training programs to develop a skilled workforce for the seaweed industry.
- Develop a protocol for a seaweed nursery and seek funding to create and test a facility in the RDMW.
- Complete a thorough inventory of suitable infrastructure for seaweed cultivation and processing.
- Conduct pilot studies to establish the viability of cultivation for novel species of interest.
- Design a monitoring program to better assess the environmental effects of seaweed cultivation.

ACKNOWLEDGEMENTS

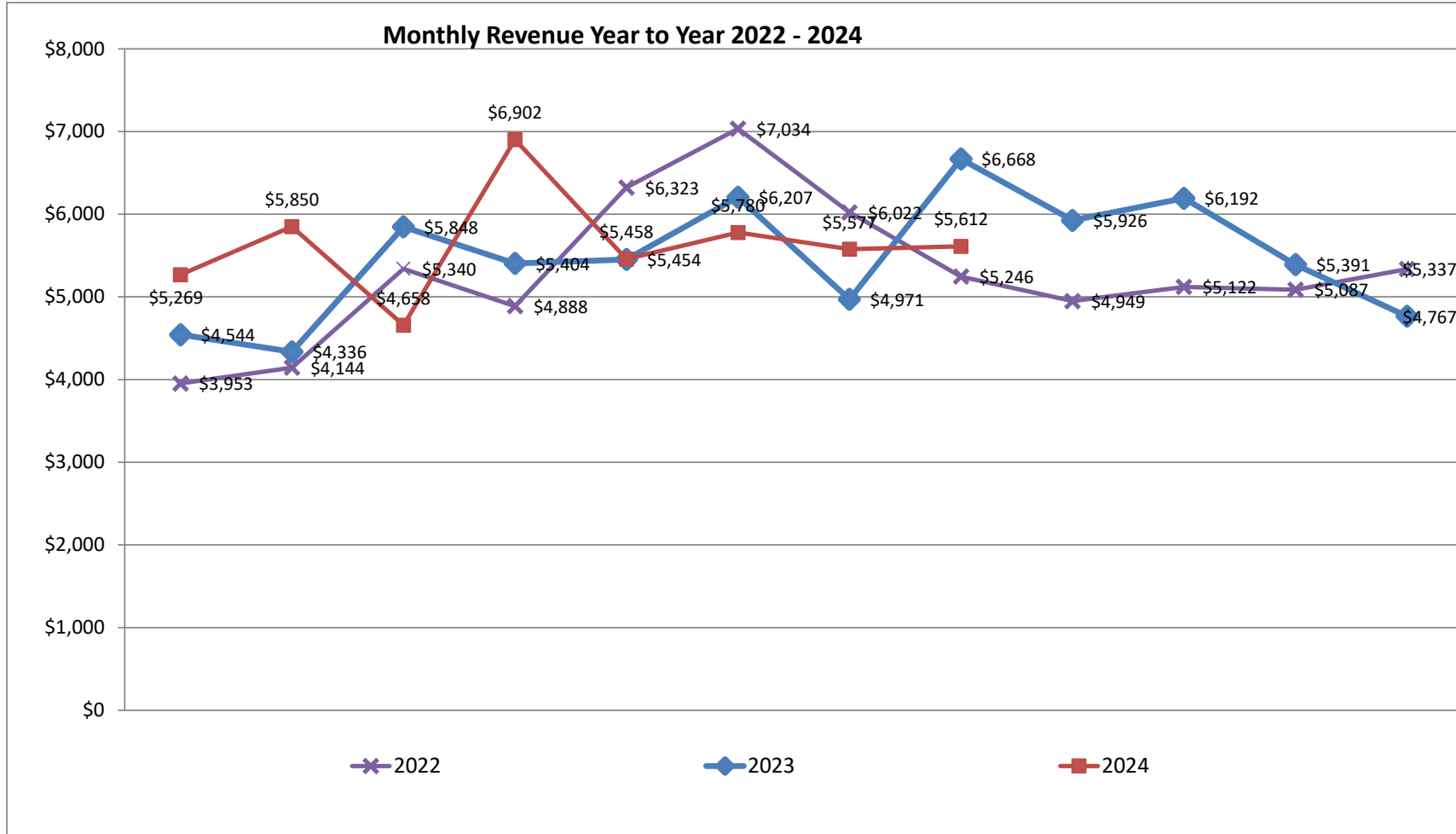
This plan was prepared by A. McConnell, C. Neufeld, L. Romero, and K. Truman, with input from S. LaCasse. Thanks to D. Keller and E. Plate for editorial support. The authors would like to recognize, with thanks, the support of the Regional District of Mount Waddington (RDMW), the Seaweed Industry Development Plan Steering Committee, Indigenous leadership, specifically, the Gwa'sala-'Nakwaxda'xw Nations, Mamalilikulla First Nation, 'N̓amgis First Nation, Quatsino First Nation, Tlatlasikwala First Nation, and the Da'naxda'xw Nation. We wish to also thank M. Obee, J. Hafting, R. Nagel, L. Zeiniert, M. Smith, K. Pawluk, M. Peeler, and E. Latham for additional input and information provided during the seaweed industry interviews. Funding to support this document was provided by the Province of BC via the RDMW as part of the Rural Economic Diversification and Infrastructure Program and the Island Coastal Economic Trust.

Average Monthly Revenue

	2022	2023	2024
August	\$5,246	\$6,668	\$5,612
Annual	\$63,446	\$65,707	<i>\$67,660 Projected</i>
Change	11.6%	3.6%	3.0%

Year/Year Comparison (Revenue)

2023 Jan - Aug	\$43,431
2024 Jan - Aug	\$45,107
increase	3.9%



Mount Waddington Transit Revenue Trends

2024

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date	<i>Projected</i>
Farebox	\$2,208	\$2,049	\$1,873	\$2,347	\$2,252	\$3,376	\$2,690	\$3,030					\$19,824	\$29,735.58
Ticket Sales	\$819	\$1,418	\$63	\$1,838	\$557	\$32	\$525	\$0					\$5,250	\$7,875.00
Pass Sales	\$663	\$804	\$1,143	\$1,138	\$1,070	\$793	\$783	\$1,002					\$7,393	\$11,089.50
BC Bus Passes	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>					\$12,640	\$18,960.00
Total	\$5,269	\$5,850	\$4,658	\$6,902	\$5,458	\$5,780	\$5,577	\$5,612	\$0	\$0	\$0	\$0	\$45,107	\$67,660.08

**estimate/average*

Projected: 3.0%

2023

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Farebox	\$1,981	\$2,046	\$1,890	\$2,643	\$2,683	\$2,907	\$2,530	\$2,657	\$2,509	\$2,324	\$2,298	\$1,978	\$28,447
Ticket Sales	\$315	\$0	\$1,575	\$75	\$189	\$609	\$84	\$1,575	\$851	\$1,313	\$0	\$525	\$7,110
Pass Sales	\$668	\$710	\$803	\$1,106	\$1,002	\$1,111	\$777	\$856	\$986	\$976	\$1,513	\$684	\$11,190
BC Bus Passes	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	\$18,960
Total	\$4,544	\$4,336	\$5,848	\$5,404	\$5,454	\$6,207	\$4,971	\$6,668	\$5,926	\$6,192	\$5,391	\$4,767	\$65,707

**estimate/average*

3.6%

2022

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Farebox	\$1,767	\$1,566	\$2,127	\$1,615	\$2,110	\$2,512	\$2,526	\$2,576	\$2,440	\$2,015	\$2,365	\$2,017	\$25,636
Ticket Sales	\$126	\$63	\$788	\$872	\$1,313	\$2,258	\$1,313	\$0	\$0	\$578	\$53	\$525	\$7,886
Pass Sales	\$480	\$935	\$846	\$1,028	\$1,528	\$918	\$835	\$1,090	\$929	\$949	\$1,090	\$1,216	\$11,841
BC Bus Passes	\$1,580	\$1,580	<i>\$1,580</i>	<i>\$1,375</i>	<i>\$1,373</i>	<i>\$1,347</i>	<i>\$1,348</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	<i>\$1,580</i>	\$18,083
Total	\$3,953	\$4,144	\$5,340	\$4,888	\$6,323	\$7,034	\$6,022	\$5,246	\$4,949	\$5,122	\$5,087	\$5,337	\$63,446

**estimate/average*

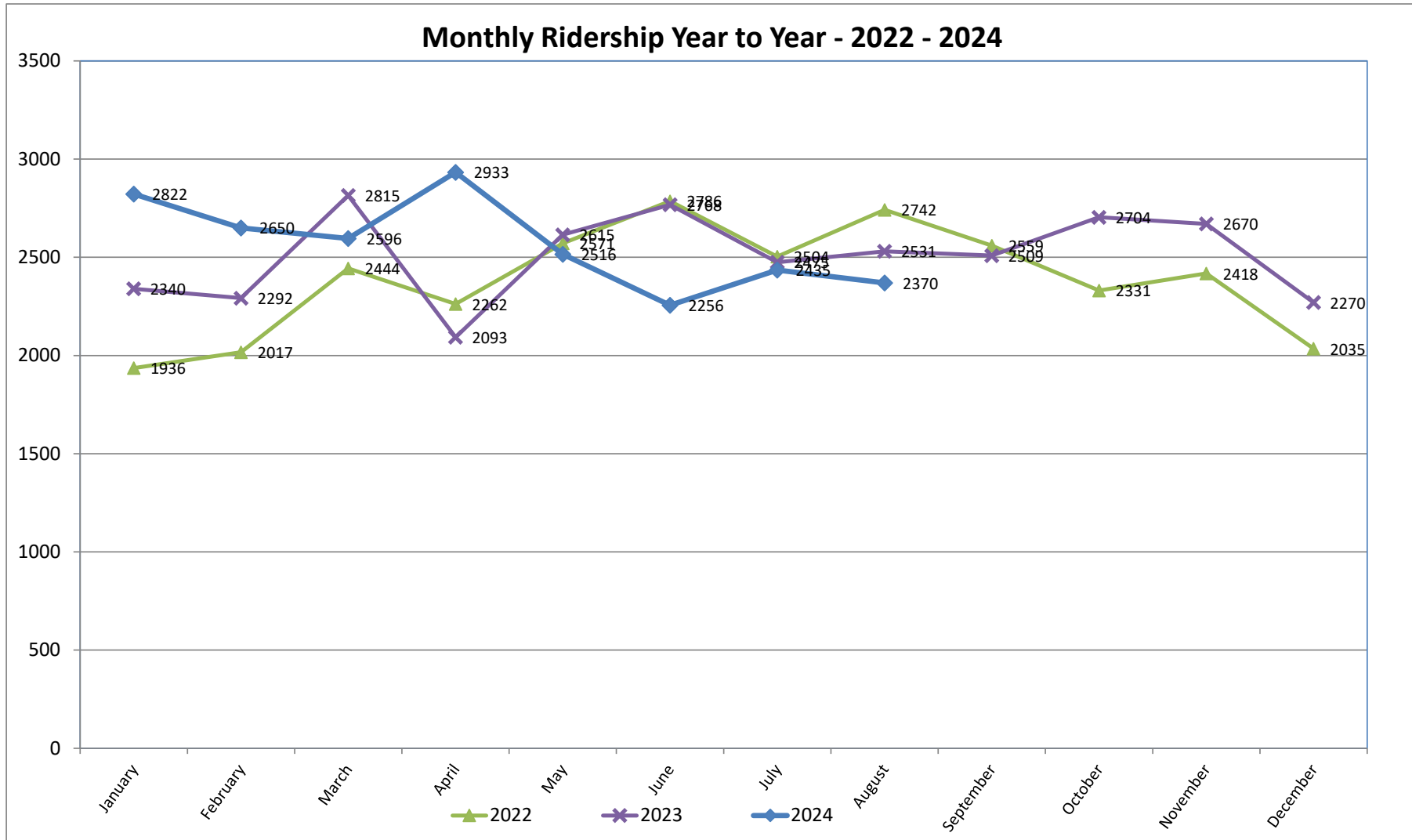
11.6%

Average Passengers per Month:

	2022	2023	2024
August	2742	2531	2370
Annual	28605	30082	30867 <i>Projected</i>
Change	19%	5%	3%

Year/Year Comparison (Ridership)

2023 Jan - Aug	19929
2024 Jan - Aug	20578
increase	3.3%



Mount Waddington Transit Ridership Trends

2024	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total	Projected 2024 Total
Route 1 to Port McNeill	544	515	502	574	488	461	472	454					4010	6015
Route 1 Saturdays	0	0	0	23	22	21	21	15					102	153
Route 2 to Port Hardy	548	485	519	564	490	494	474	481					4055	6083
Route 2 Saturdays	0	0	0	13	23	20	15	6					77	116
Route 4-Ft Rupert	488	484	468	564	414	247	334	350					3349	5024
Route 4-Airport Extension	19	34	26	31	6	8	10	1					135	203
Route 5-Coal Harbour/Quatsino	625	547	539	572	604	607	680	642					4816	7224
Route 5-Coal Harbour Saturdays	30	63	75	39	47	63	42	76					435	653
Route 6-Woss/Mount Cain	21	20	21	-	-	-	-	-					62	93
Route 11-PH Local	363	324	280	359	286	206	225	180					2223	3335
Route 12-PM Local	178	173	158	194	135	127	162	164					1291	1937
HandyDART-PH	6	5	8	0	1	2	0	1					23	35
HandyDART-PM	0	0	0	0	0	0	0	0					0	0
2024 Monthly Total	2822	2650	2596	2933	2516	2256	2435	2370	0	0	0	0	20578	30867

2023	January	February	March	April	May	June	July	August	September	October	November	December	2023 Total
Route 1 to Port McNeill	540	531	572	421	552	554	490	537	484	472	519	446	6118
Route 1 Saturdays	0	0	0	13	16	14	11	8	25	10	17	0	114
Route 2 to Port Hardy	455	509	555	390	551	540	502	506	506	495	460	391	5860
Route 2 Saturdays	0	0	0	15	7	11	7	12	29	18	15	0	114
Route 4-Ft Rupert	387	347	574	367	457	451	346	370	381	488	477	403	5048
Route 4-Airport Extension	44	22	45	22	25	4	6	13	1	4	12	24	222
Route 5-Coal Harbour/Quatsino	473	391	623	459	540	658	647	647	578	616	612	528	6772
Route 5-Coal Harbour Saturdays	21	48	13	34	35	58	65	40	51	21	34	0	420
Route 6-Woss/Mount Cain	22	40	13	-	-	-	-	-	-	-	-	51	126
Route 11-PH Local	260	262	277	241	278	310	238	219	308	368	353	288	3402
Route 12-PM Local	134	140	139	131	154	168	163	178	134	212	158	125	1836
HandyDART-PH	1	2	0	0	0	0	0	1	5	0	5	6	20
HandyDART-PM	3	0	4	0	0	0	0	0	7	0	8	8	30
2023 Monthly Total	2340	2292	2815	2093	2615	2768	2475	2531	2509	2704	2670	2270	30082

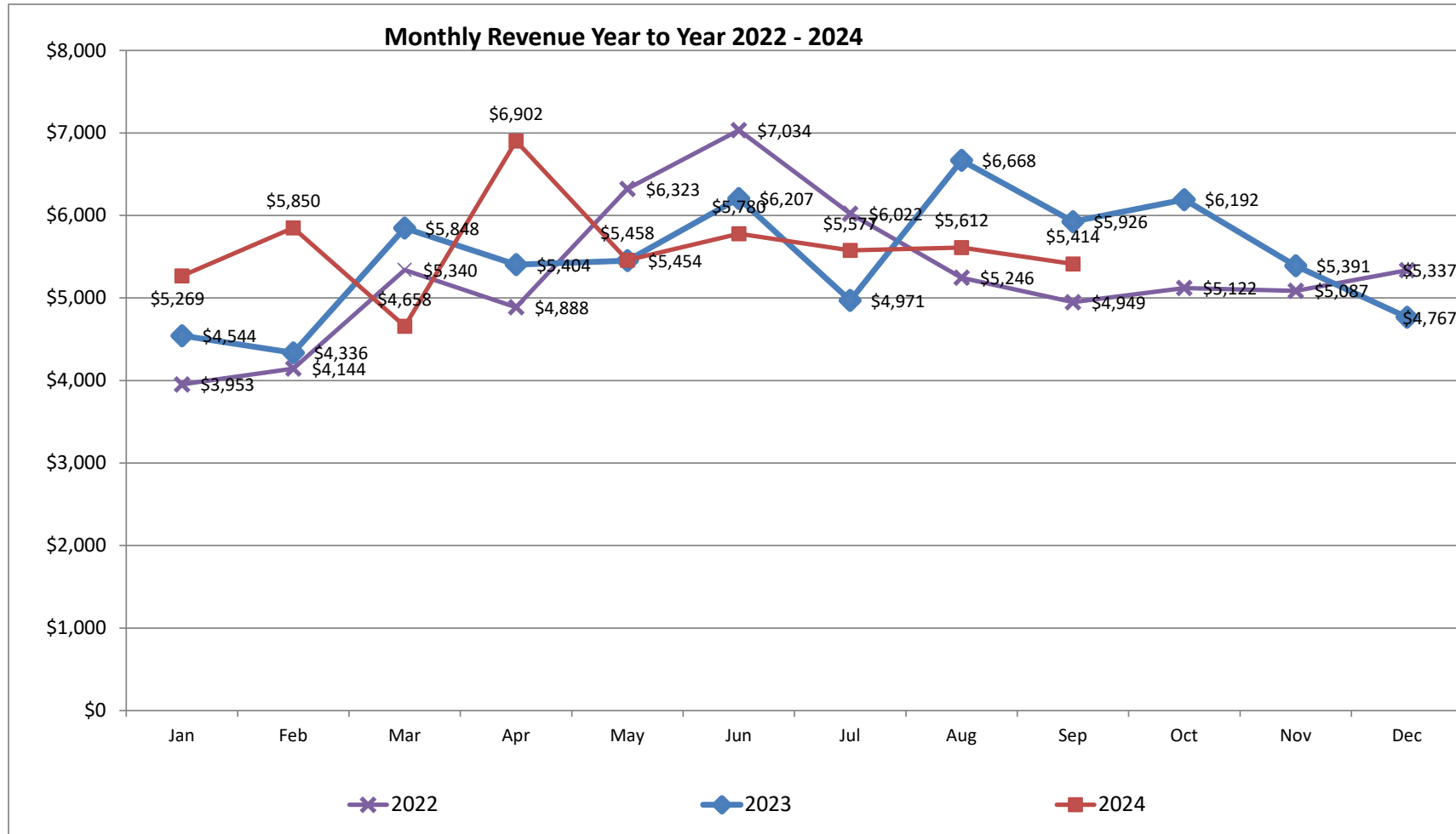
2022	January	February	March	April	May	June	July	August	September	October	November	December	2022 Total
Route 1 to Port McNeill	375	384	497	441	487	550	506	577	544	537	579	438	5915
Route 1 Saturdays	0	0	0	10	9	9	8	15	15	14	16	1	97
Route 2 to Port Hardy	500	515	587	578	663	634	467	516	561	548	572	460	6601
Route 2 Saturdays	0	0	0	9	5	15	11	4	9	8	5	0	66
Route 4-Ft Rupert	350	342	439	401	485	526	468	396	343	323	337	286	4696
Route 4-Airport Extension	3	11	11	12	17	20	9	13	1	14	28	29	168
Route 5-Coal Harbour/Quatsino	351	404	539	395	470	565	543	682	546	436	464	429	5824
Route 5-Coal Harbour Saturdays	13	18	27	20	39	27	30	35	37	24	17	0	287
Route 6-Woss/Mount Cain	16	14	18	-	-	-	-	-	-	-	-	41	89
Route 11-PH Local	160	181	192	244	268	281	249	297	278	224	236	212	2822
Route 12-PM Local	168	148	132	150	127	157	204	195	219	196	158	137	1991
HandyDART-PH	0	0	2	0	0	0	1	1	0	0	0	0	4
HandyDART-PM	0	0	0	2	1	2	8	11	6	7	6	2	45
2022 Monthly Total	1936	2017	2444	2262	2571	2786	2504	2742	2559	2331	2418	2035	28605

Average Monthly Revenue

	2022	2023	2024
September	\$4,949	\$5,926	\$5,414
Annual	\$63,446	\$65,707	<i>\$67,361 Projected</i>
Change	11.6%	3.6%	2.5%

Year/Year Comparison (Revenue)

2023 Jan - Sep	\$49,357
2024 Jan - Sep	\$50,521
increase	2.4%



Mount Waddington Transit Revenue Trends

2024

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date	Projected
Farebox	\$2,208	\$2,049	\$1,873	\$2,347	\$2,252	\$3,376	\$2,690	\$3,030	\$1,993				\$21,816	\$29,088.36
Ticket Sales	\$819	\$1,418	\$63	\$1,838	\$557	\$32	\$525	\$0	\$819				\$6,069	\$8,092.00
Pass Sales	\$663	\$804	\$1,143	\$1,138	\$1,070	\$793	\$783	\$1,002	\$1,023				\$8,416	\$11,220.67
BC Bus Passes	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580				\$14,220	\$18,960.00
Total	\$5,269	\$5,850	\$4,658	\$6,902	\$5,458	\$5,780	\$5,577	\$5,612	\$5,414	\$0	\$0	\$0	\$50,521	\$67,361.03

*estimate/average

Projected: 2.5%

2023

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Farebox	\$1,981	\$2,046	\$1,890	\$2,643	\$2,683	\$2,907	\$2,530	\$2,657	\$2,509	\$2,324	\$2,298	\$1,978	\$28,447
Ticket Sales	\$315	\$0	\$1,575	\$75	\$189	\$609	\$84	\$1,575	\$851	\$1,313	\$0	\$525	\$7,110
Pass Sales	\$668	\$710	\$803	\$1,106	\$1,002	\$1,111	\$777	\$856	\$986	\$976	\$1,513	\$684	\$11,190
BC Bus Passes	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$18,960
Total	\$4,544	\$4,336	\$5,848	\$5,404	\$5,454	\$6,207	\$4,971	\$6,668	\$5,926	\$6,192	\$5,391	\$4,767	\$65,707

*estimate/average

3.6%

2022

Revenue Source	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year to Date
Farebox	\$1,767	\$1,566	\$2,127	\$1,615	\$2,110	\$2,512	\$2,526	\$2,576	\$2,440	\$2,015	\$2,365	\$2,017	\$25,636
Ticket Sales	\$126	\$63	\$788	\$872	\$1,313	\$2,258	\$1,313	\$0	\$0	\$578	\$53	\$525	\$7,886
Pass Sales	\$480	\$935	\$846	\$1,028	\$1,528	\$918	\$835	\$1,090	\$929	\$949	\$1,090	\$1,216	\$11,841
BC Bus Passes	\$1,580	\$1,580	\$1,580	\$1,375	\$1,373	\$1,347	\$1,348	\$1,580	\$1,580	\$1,580	\$1,580	\$1,580	\$18,083
Total	\$3,953	\$4,144	\$5,340	\$4,888	\$6,323	\$7,034	\$6,022	\$5,246	\$4,949	\$5,122	\$5,087	\$5,337	\$63,446

*estimate/average

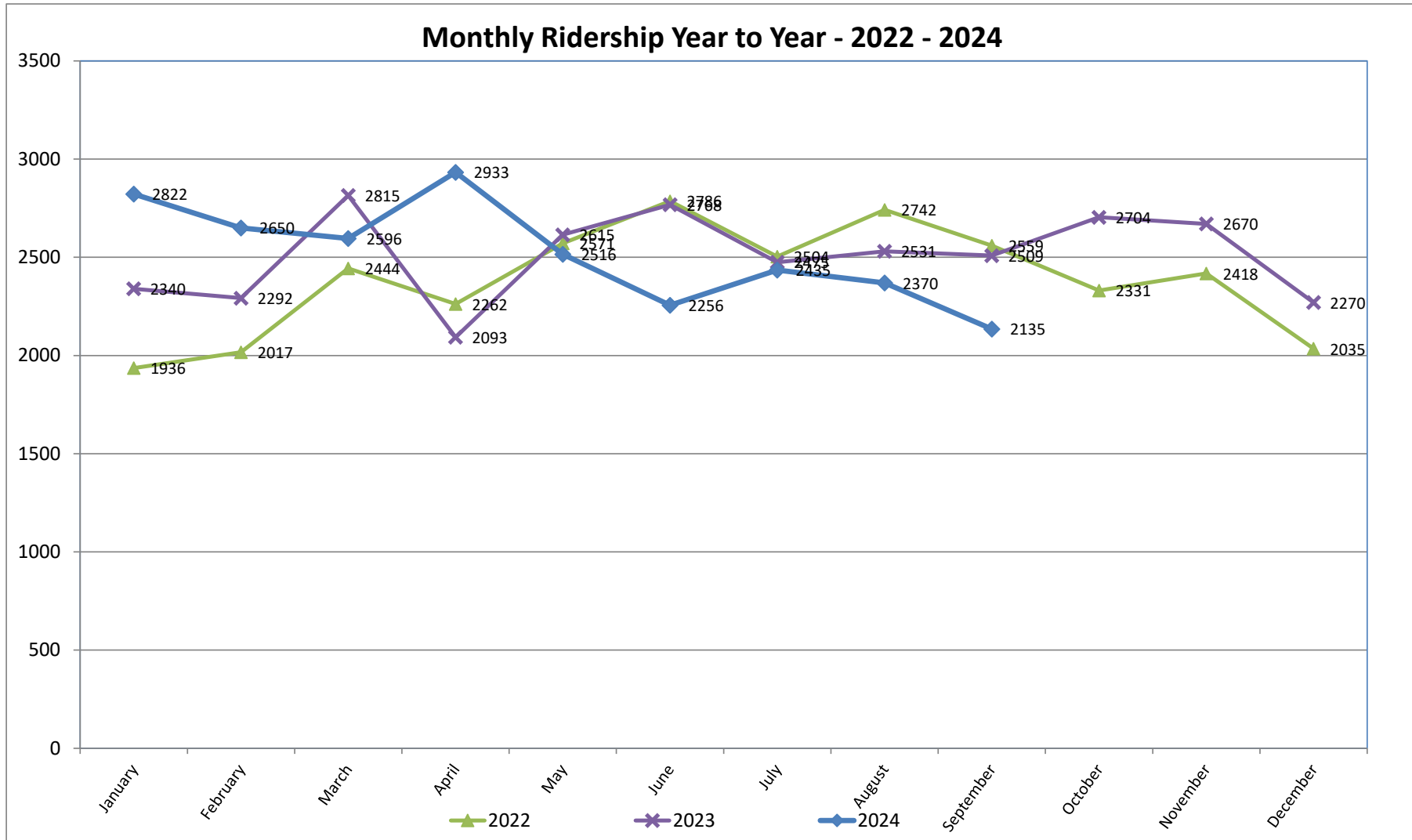
11.6%

Average Passengers per Month:

	2022	2023	2024
September	2559	2509	2135
Annual	28605	30082	30284 Projected
Change	19%	5%	1%

Year/Year Comparison (Ridership)

2023 Jan - Sep	22438
2024 Jan - Sep	22713
increase	1.2%



Mount Waddington Transit Ridership Trends

2024	January	February	March	April	May	June	July	August	September	October	November	December	2024 Total	Projected 2024 Total
Route 1 to Port McNeill	544	515	502	574	488	461	472	454	386				4396	5861
Route 1 Saturdays	0	0	0	23	22	21	21	15	4				106	141
Route 2 to Port Hardy	548	485	519	564	490	494	474	481	429				4484	5979
Route 2 Saturdays	0	0	0	13	23	20	15	6	1				78	104
Route 4-Ft Rupert	488	484	468	564	414	247	334	350	308				3657	4876
Route 4-Airport Extension	19	34	26	31	6	8	10	1	0				135	180
Route 5-Coal Harbour/Quatsino	625	547	539	572	604	607	680	642	629				5445	7260
Route 5-Coal Harbour Saturdays	30	63	75	39	47	63	42	76	21				456	608
Route 6-Woss/Mount Cain	21	20	21	-	-	-	-	-	-				62	83
Route 11-PH Local	363	324	280	359	286	206	225	180	252				2475	3300
Route 12-PM Local	178	173	158	194	135	127	162	164	105				1396	1861
HandyDART-PH	6	5	8	0	1	2	0	1	0				23	31
HandyDART-PM	0	0	0	0	0	0	0	0	0				0	0
2024 Monthly Total	2822	2650	2596	2933	2516	2256	2435	2370	2135	0	0	0	22713	30284

2023	January	February	March	April	May	June	July	August	September	October	November	December	2023 Total
Route 1 to Port McNeill	540	531	572	421	552	554	490	537	484	472	519	446	6118
Route 1 Saturdays	0	0	0	13	16	14	11	8	25	10	17	0	114
Route 2 to Port Hardy	455	509	555	390	551	540	502	506	506	495	460	391	5860
Route 2 Saturdays	0	0	0	15	7	11	7	12	29	18	15	0	114
Route 4-Ft Rupert	387	347	574	367	457	451	346	370	381	488	477	403	5048
Route 4-Airport Extension	44	22	45	22	25	4	6	13	1	4	12	24	222
Route 5-Coal Harbour/Quatsino	473	391	623	459	540	658	647	647	578	616	612	528	6772
Route 5-Coal Harbour Saturdays	21	48	13	34	35	58	65	40	51	21	34	0	420
Route 6-Woss/Mount Cain	22	40	13	-	-	-	-	-	-	-	-	51	126
Route 11-PH Local	260	262	277	241	278	310	238	219	308	368	353	288	3402
Route 12-PM Local	134	140	139	131	154	168	163	178	134	212	158	125	1836
HandyDART-PH	1	2	0	0	0	0	0	1	5	0	5	6	20
HandyDART-PM	3	0	4	0	0	0	0	0	7	0	8	8	30
2023 Monthly Total	2340	2292	2815	2093	2615	2768	2475	2531	2509	2704	2670	2270	30082

2022	January	February	March	April	May	June	July	August	September	October	November	December	2022 Total
Route 1 to Port McNeill	375	384	497	441	487	550	506	577	544	537	579	438	5915
Route 1 Saturdays	0	0	0	10	9	9	8	15	15	14	16	1	97
Route 2 to Port Hardy	500	515	587	578	663	634	467	516	561	548	572	460	6601
Route 2 Saturdays	0	0	0	9	5	15	11	4	9	8	5	0	66
Route 4-Ft Rupert	350	342	439	401	485	526	468	396	343	323	337	286	4696
Route 4-Airport Extension	3	11	11	12	17	20	9	13	1	14	28	29	168
Route 5-Coal Harbour/Quatsino	351	404	539	395	470	565	543	682	546	436	464	429	5824
Route 5-Coal Harbour Saturdays	13	18	27	20	39	27	30	35	37	24	17	0	287
Route 6-Woss/Mount Cain	16	14	18	-	-	-	-	-	-	-	-	41	89
Route 11-PH Local	160	181	192	244	268	281	249	297	278	224	236	212	2822
Route 12-PM Local	168	148	132	150	127	157	204	195	219	196	158	137	1991
HandyDART-PH	0	0	2	0	0	0	1	1	0	0	0	0	4
HandyDART-PM	0	0	0	2	1	2	8	11	6	7	6	2	45
2022 Monthly Total	1936	2017	2444	2262	2571	2786	2504	2742	2559	2331	2418	2035	28605

2024 Volunteer Transportation Network/HandyDart Trip Summary

Month	Total Trips	Total Clients	Lift Van	Community - Trips (T) /Clients (C)														Int w/ Transit	HandyDART				Int w/ VTN
				Port Hardy		Port McNeill		Alert Bay		Malcolm Island		Woss		Fort Rupert		Port Alice			Port Hardy		Port McNeill		
				T	C	T	C	T	C	T	C	T	C	T	C	T	C		AM	PM	AM	PM	
January	13	45	4	0	0	5	12	0	0	0	0	8	33	0	0	0	0	0	0	6	0	0	0
February	8	22	2	0	0	3	7	0	0	0	0	5	15	0	0	0	0	0	0	5	0	0	0
March	16	103	4	0	0	5	18	0	0	0	0	11	85	0	0	0	0	0	1	7	0	0	0
April	11	60	5	0	0	5	22	0	0	0	0	6	38	0	0	0	0	0	0	0	0	0	0
May	16	73	6	0	0	7	29	0	0	0	0	6	39	0	0	3	5	0	0	1	0	0	0
June	14	50	3	0	0	3	7	0	0	0	0	7	35	0	0	4	8	0	0	2	0	0	0
July	14	64	4	0	0	3	15	0	0	0	0	8	46	0	0	3	3	0	0	0	0	0	0
August	10	20	5	0	0	6	16	0	0	0	0	4	4	0	0	0	0	0	1	0	0	0	0
September	0	0																					
October	0	0																					
November	0	0																					
December	0	0																					
TOTAL	102	437	33	0	0	37	126	0	0	0	0	55	295	0	0	10	16	0	2	21	0	0	0
Riders/trip		4.3			0.0		3.4054						5.4				1.6	0.0					
Projected	153	656	50	0	0	56	189	0	0	0	0	83	443	0	0	15	24	0	3	32	0	0	0
Change	-32%	37%	18%	0	0	-21%	41%	0	0	-100%	-100%	79%	92%	0	0	-81%	-70%	0	-40%	1475%	-100%	-100%	0

2024 Volunteer Transportation Network/HandyDart Trip Summary

Month	Total Trips	Total Clients	Lift Van	Community - Trips (T) /Clients (C)														Int w/ Transit	HandyDART				Int w/ VTN	
				Port Hardy		Port McNeill		Alert Bay		Malcolm Island		Woss		Fort Rupert		Port Alice			Port Hardy		Port McNeill			
				T	C	T	C	T	C	T	C	T	C	T	C	T	C		AM	PM	AM	PM		
January	13	45	4	0	0	5	12	0	0	0	0	8	33	0	0	0	0	0	0	6	0	0	0	
February	8	22	2	0	0	3	7	0	0	0	0	5	15	0	0	0	0	0	0	5	0	0	0	
March	16	103	4	0	0	5	18	0	0	0	0	11	85	0	0	0	0	0	1	7	0	0	0	
April	11	60	5	0	0	5	22	0	0	0	0	6	38	0	0	0	0	0	0	0	0	0	0	
May	16	73	6	0	0	7	29	0	0	0	0	6	39	0	0	3	5	0	0	1	0	0	0	
June	14	50	3	0	0	3	7	0	0	0	0	7	35	0	0	4	8	0	0	2	0	0	0	
July	14	64	4	0	0	3	15	0	0	0	0	8	46	0	0	3	3	0	0	0	0	0	0	
August	10	20	5	0	0	6	16	0	0	0	0	4	4	0	0	0	0	0	1	0	0	0	0	
September	8	28	3	0	0	3	4	0	0	0	0	4	23	0	0	1	1	0	0	0	0	0	0	
October	0	0																						
November	0	0																						
December	0	0																						
TOTAL	110	465	36	0	0	40	130	0	0	0	0	59	318	0	0	11	17	0	2	21	0	0	0	
Riders/trip		4.2			0.0		3.25				0		5.4				1.5	0.0						
Projected	147	620	48	0	0	53	173	0	0	0	0	79	424	0	0	15	23	0	3	28	0	0	0	
Change	-35%	29%	14%	0	0	-24%	29%	0	0	0	-100%	-100%	71%	84%	0	0	-81%	-72%	0	-47%	1300%	-100%	-100%	0

7-MILE LANDFILL MONTHLY TONNAGE SUMMARY FOR August 2024

MONTH	8	PROJECTIONS NOT SEASONALLY ADJUSTED				
MATERIALS MANAGED IN THE LANDFILL AREA - TONNES	August 1 to August 31 (2024)	2024 UP TO August 31, 2024	PRO-RATED ANNUAL PROJECTION	BUDGET ANNUAL PROJECTION	VARIANCE	% WASTE STREAM
LANDFILL	625.38	4397.79	6597	7000	-5.8%	66%
GENERAL REFUSE FROM BELLA BELLA	31.60	267.49	401	464	-13.5%	4%
GENERAL REFUSE FROM KLEMTU	6.48	52.86	79	136	-41.7%	1%
GENERAL REFUSE FROM WUIKINUXV	2.81	25.73	39			
OTHER MATERIAL LANDFILLED FROM OUTSIDE OF RDMW	1.31	1.31	2	100		0%
FEE EXEMPT PUBLIC CLEANUP (<i>NOT ACCOUNTED IN LANDFILL TONNAGE</i>)	<u>3.11</u>	20.33	<u>30.50</u>	100	-69.5%	0%
VOLUME BASED LOADS CONVERTED TO TONNES	0.00	14.62	22			
TOTAL AMOUNT SENT TO ACTIVE LANDFILL FACE	670.70	4765.51	7148.27	7800.00		
RECYCLABLES AND STEWARDSHIP MATERIALS DIVERTED AT LANDFILL FACE	0.00	0.00	0	50	-100.0%	0%
WOODWASTE DIVERTED AT LANDFILL FACE	0.00	11.99	18	200	-91.0%	0%
METAL DIVERTED AT LANDFILL FACE	0.10	13.63	20	50	-59.1%	0%
OTHER MATERIALS DIVERTED AT LANDFILL	<u>0.00</u>	<u>0.00</u>	<u>0</u>	<u>200</u>	-100.0%	0%
TOTAL AMOUNT OF MATERIAL DIVERTED AT THE ACTIVE LANDFILL FACE	0.10	25.62	38.43	500.00	-92.3%	
TOTAL AMOUNT ACTUALLY LANDFILLED	670.60	4739.89	7109.84	7300.00	-2.6%	
MATERIALS DIVERTED FROM THE LANDFILL - TONNES						
TOTAL AMOUNT OF MATERIAL DIVERTED AT THE ACTIVE LANDFILL FACE	0.10	25.62	38	500	-92.3%	0%
OUTBOUND METAL	0.00	0.00	0	150	-100.0%	0%
SALVAGED MATERIALS	0.00	1.99	3	5	-40.3%	0%
CREOSOTE LOGS	0.00	4.42	7	5	32.6%	0%
PAPER/WAX CARDBOARD - COMPOSTABLE	0.00	0.00	0	250	-100.0%	0%
WOODWASTE FOR CHIPPING AT \$25/TONNE	114.50	838.70	1258	500	151.6%	12%
COMPOSTABLE MATERIALS	95.62	929.03	1394	1100	26.7%	14%
FINE GARDEN WASTE (NO CHARGE)	0.00	0.00	0	100	-100.0%	0%
RECYCLED MATERIALS	0.00	19.27	29	700	-95.9%	0%
ASPHALT SHINGLES	28.29	127.66	191	75	155.3%	2%
ASBESTOS TO ASBESTOS DISPOSAL AREA	3.22	25.52	38	100	-61.7%	0%
MMBC MATERIAL	<u>0.00</u>	<u>0.00</u>	<u>0</u>	<u>300</u>	-100.0%	0%
TOTAL DIVERTED	210.22	1972.21	2958.32	3785.00	-21.8%	29%
TOTAL TONNAGE MANAGED AT 7 MILE LANDFILL	880.82	6712.10	10068.16	11085.00	29.8%	
OTHER MATERIALS: ADDITIONAL TO LANDFILL - TONNES	August 1 to August 31 (2024)	2024 UP TO August 31, 2024	ANNUAL PROJECTION PRO-RATED FROM ACTUALS	BUDGET PROJECTION	VARIANCE	% WASTE STREAM
SOIL FOR REMEDIATION	0.00	0.00	0	100	-100.0%	
SOIL FOR DIRECT DEPOSIT	<u>0.00</u>	<u>0.83</u>	1	100	-98.8%	
TOTAL IMPORTED FILL	0.00	0.83	1.25	200.00	-99.4%	

7-MILE LANDFILL MONTHLY TONNAGE SUMMARY FOR SEPTEMBER 2024

	MONTH	9	PROJECTIONS NOT SEASONALLY ADJUSTED				
		SEPTEMBER 1 to SEPTEMBER 30 (2024)	2024 UP TO SEPTEMBER 30, 2024	PRO-RATED ANNUAL PROJECTION	BUDGET ANNUAL PROJECTION	VARIANCE	% WASTE STREAM
MATERIALS MANAGED IN THE LANDFILL AREA - TONNES							
LANDFILL		535.53	4932.38	6577	7000	-6.0%	65%
GENERAL REFUSE FROM BELLA BELLA		39.57	307.06	409	464	-11.8%	4%
GENERAL REFUSE FROM KLEMTU		5.46	58.32	78	136	-42.8%	1%
GENERAL REFUSE FROM WUIKINUXV		3.36	29.09	39			
OTHER MATERIAL LANDFILLED FROM OUTSIDE OF RDMW		0.00	0.37	0	100		0%
FEE EXEMPT PUBLIC CLEANUP (NOT ACCOUNTED IN LANDFILL TONNAGE)		<u>32.80</u>	53.13	<u>70.83</u>	100	-29.2%	1%
VOLUME BASED LOADS CONVERTED TO TONNES		0.00	14.62	19			
TOTAL AMOUNT SENT TO ACTIVE LANDFILL FACE		616.72	5380.34	7173.79	7800.00		
RECYCLABLES AND STEWARDSHIP MATERIALS DIVERTED AT LANDFILL FACE		0.00	0.00	0	50	-100.0%	0%
WOODWASTE DIVERTED AT LANDFILL FACE		0.00	11.99	16	200	-92.0%	0%
METAL DIVERTED AT LANDFILL FACE		0.58	14.21	19	50	-62.1%	0%
OTHER MATERIALS DIVERTED AT LANDFILL		<u>0.00</u>	<u>0.00</u>	<u>0</u>	<u>200</u>	-100.0%	0%
TOTAL AMOUNT OF MATERIAL DIVERTED AT THE ACTIVE LANDFILL FACE		0.58	26.20	34.93	500.00	-93.0%	
TOTAL AMOUNT ACTUALLY LANDFILLED		616.14	5354.14	7138.85	7300.00	-2.2%	
MATERIALS DIVERTED FROM THE LANDFILL - TONNES							
TOTAL AMOUNT OF MATERIAL DIVERTED AT THE ACTIVE LANDFILL FACE		0.58	26.20	35	500	-93.0%	0%
OUTBOUND METAL		0.00	0.00	0	150	-100.0%	0%
SALVAGED MATERIALS		0.00	1.99	3	5	-46.9%	0%
CREOSOTE LOGS		0.00	4.42	6	5	17.9%	0%
PAPER/WAX CARDBOARD - COMPOSTABLE		0.00	0.00	0	250	-100.0%	0%
WOODWASTE FOR CHIPPING AT \$25/TONNE		95.66	934.36	1246	500	149.2%	12%
COMPOSTABLE MATERIALS		111.65	1040.68	1388	1100	26.1%	14%
FINE GARDEN WASTE (NO CHARGE)		0.00	0.00	0	100	-100.0%	0%
RECYCLED MATERIALS		0.00	19.27	26	700	-96.3%	0%
ASPHALT SHINGLES		37.51	165.17	220	75	193.6%	2%
ASBESTOS TO ASBESTOS DISPOSAL AREA		0.00	25.52	34	100	-66.0%	0%
MMBC MATERIAL		<u>0.00</u>	<u>0.00</u>	<u>0</u>	<u>300</u>	-100.0%	<u>0%</u>
TOTAL DIVERTED		207.89	2217.61	2956.81	3785.00	-21.9%	29%
TOTAL TONNAGE MANAGED AT 7 MILE LANDFILL		824.03	7571.75	10095.67	11085.00	29.6%	
OTHER MATERIALS: ADDITIONAL TO LANDFILL - TONNES							
SOIL FOR REMEDIATION		0.00	0.00	0	100	-100.0%	
SOIL FOR DIRECT DEPOSIT		<u>0.00</u>	<u>0.83</u>	<u>1</u>	<u>100</u>	<u>-98.9%</u>	
TOTAL IMPORTED FILL		0.00	0.83	1.11	200.00	-99.4%	