

Ogden Point Cruise Ships Counts, 1990 to 2023

The 2023 charts and tables within this report are derived from the [GVHA Schedule](#). (October 19th, 2023)

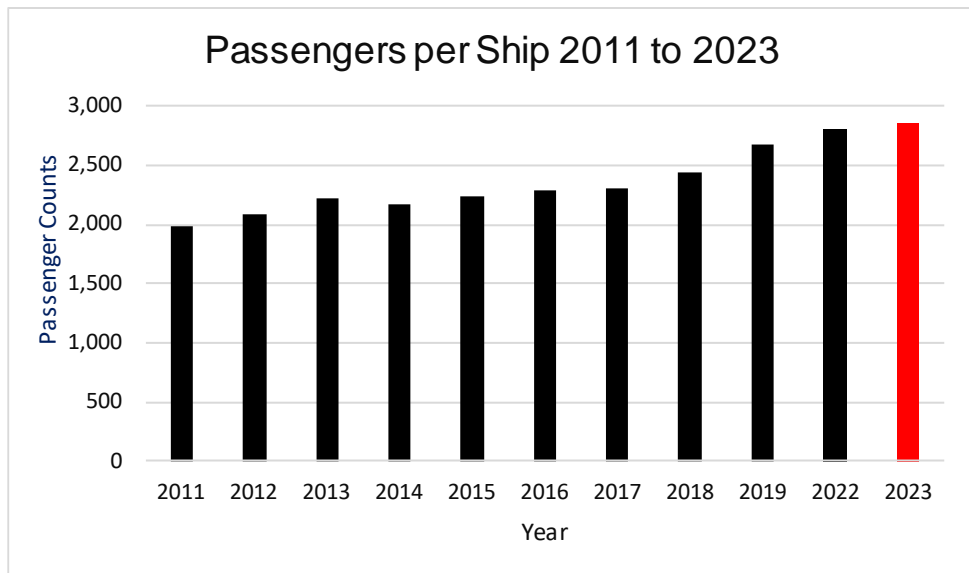
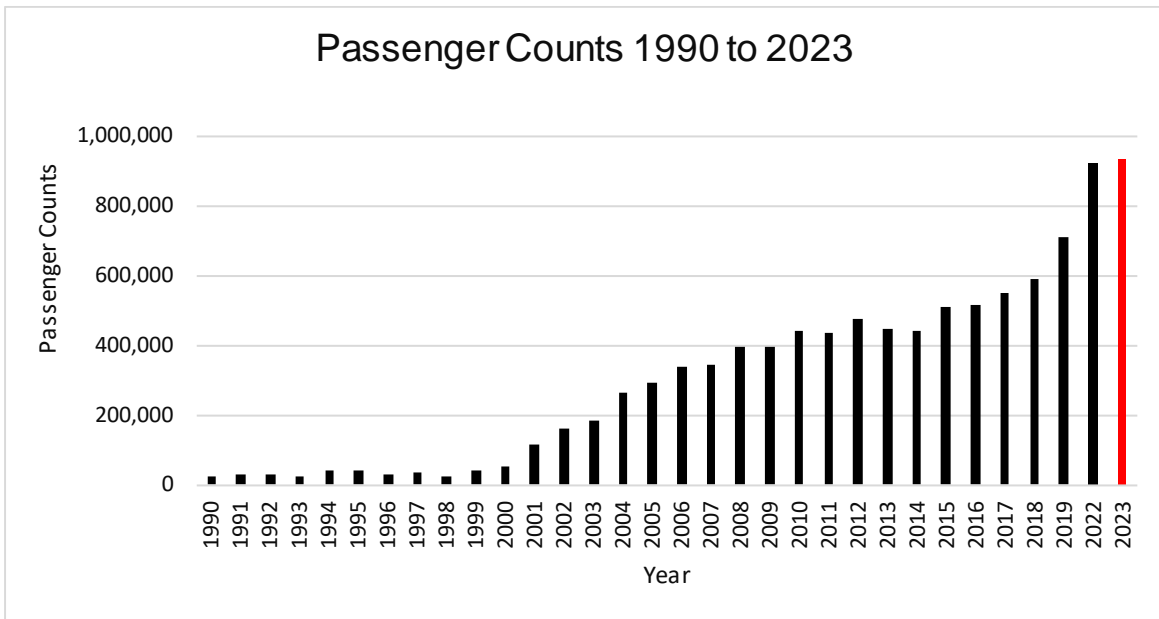
	Cruise Ship data 2011 to 2023										
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023
Ships	208	229	203	204	227	225	239	243	267	327	326
Passengers	414,388	476,916	449,668	442,044	507,842	516,660	551,938	592,166	713,894	922,497	935,479
Avg. Pax/Ship	1,992	2,083	2,215	2,167	2,237	2,296	2,309	2,437	2,674	2,821	2,870
Days in Port	104	108	96	102	112	113	116	119	125	163	161
Hours in Port	1,502	1,488	1,377	1,475	1,624	1,609	1,654	1,716	1,877	2,089	2,175
Pax hr in port	6.8	6.3	6.5	7.0	6.8	6.9	6.8	6.7	6.7	6.0	6.2
Pax % increase						+2%	+7%	+7%	+21%	+29.2%**	1.8%
Ship % increase							+6.2%	+1.7%	+9.9%	+22.5%	-0.3%

Passenger counts are based on the ship capacity. The actual passenger counts are usually higher.

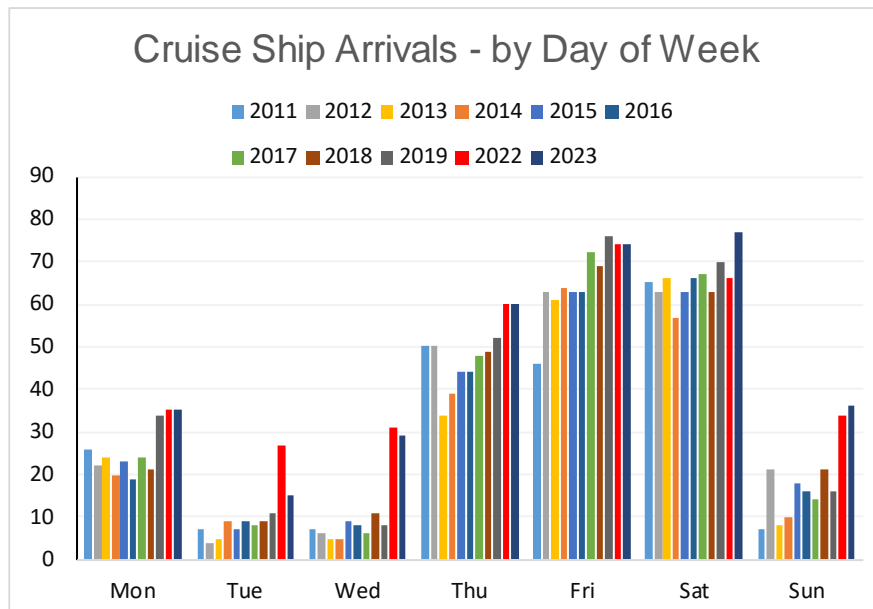
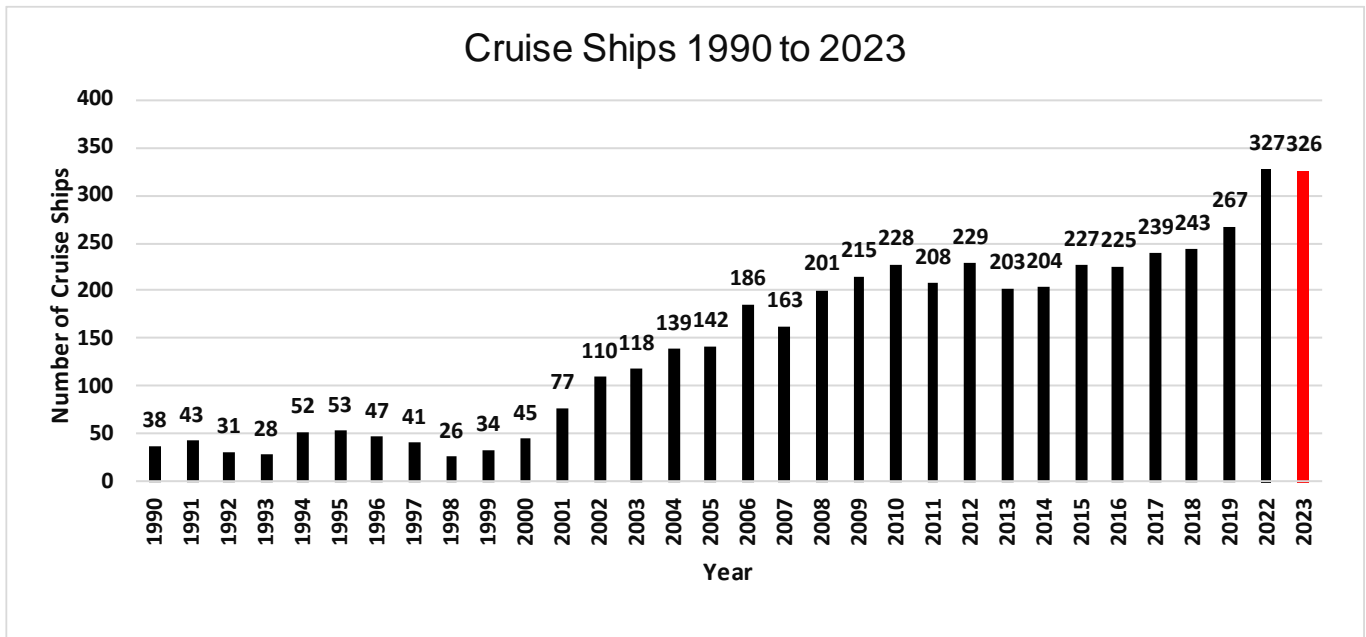
Due to COVID the 2022 actual passenger counts were significantly lower at [715,000](#).



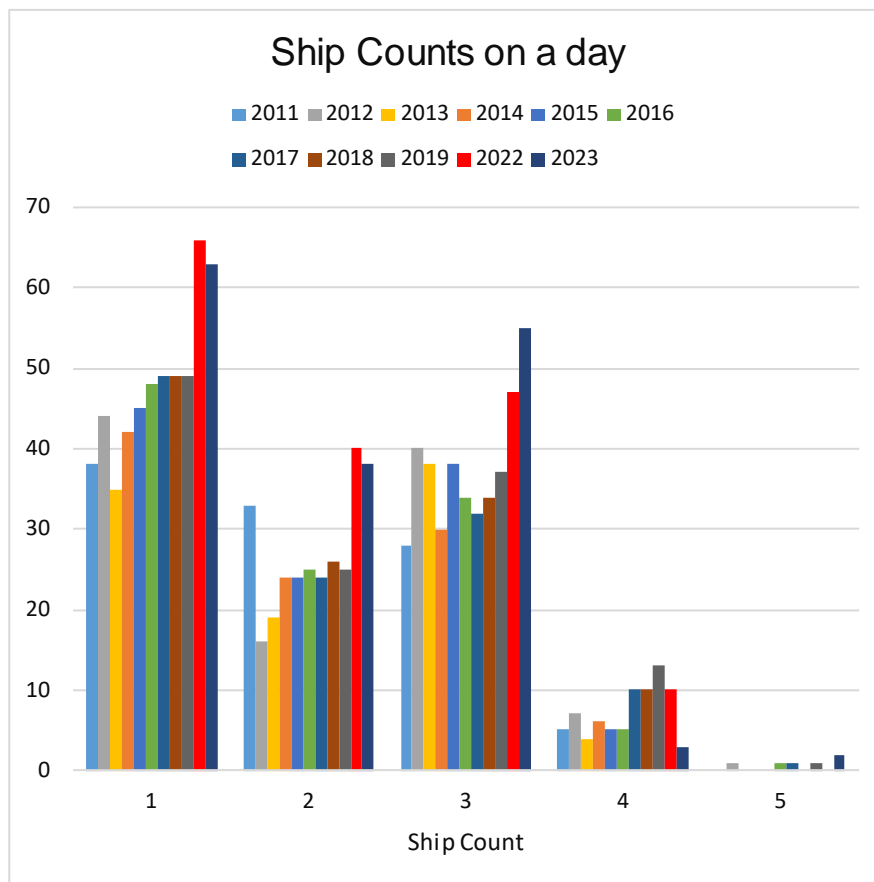
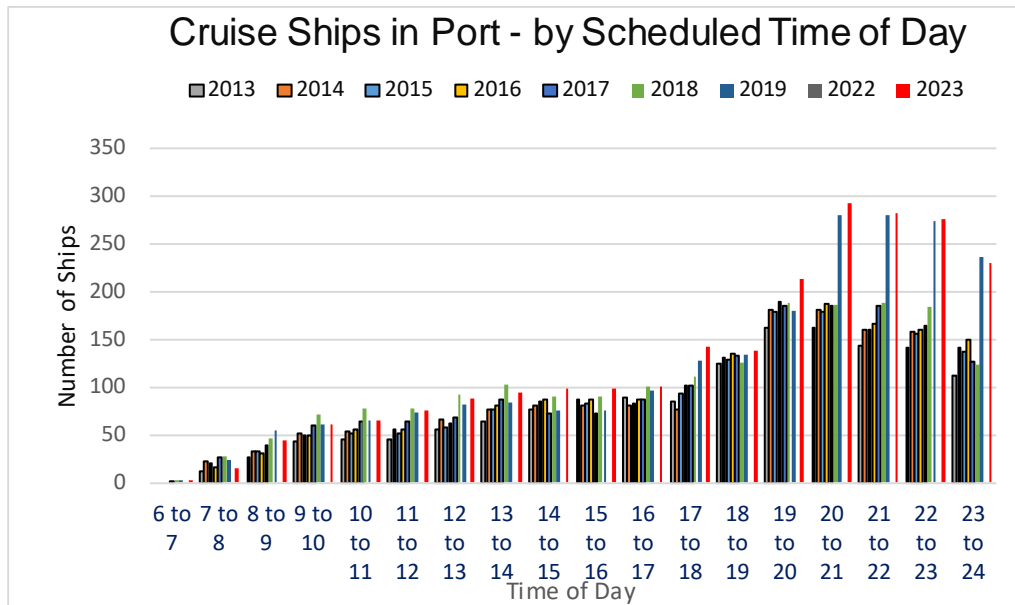
Ogden Point Cruise Ships Counts, 1990 to 2023



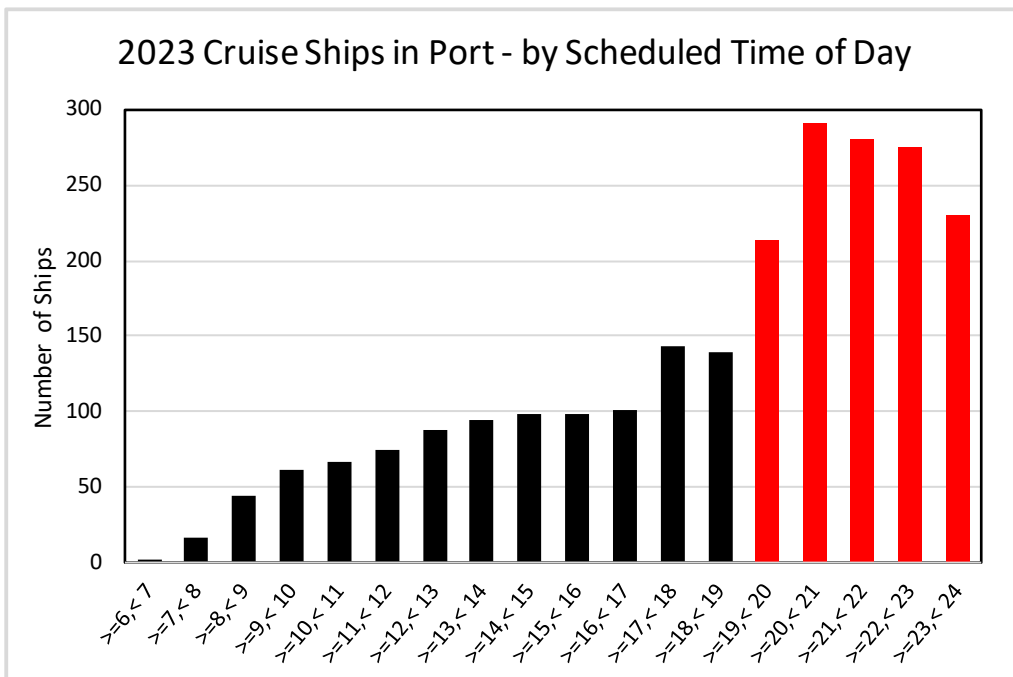
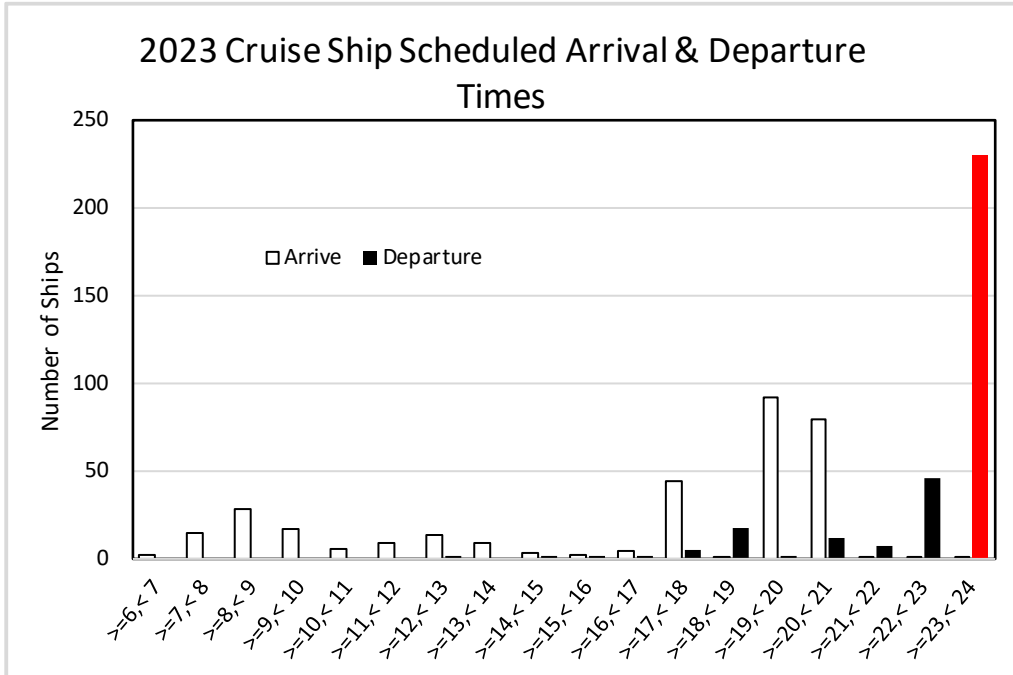
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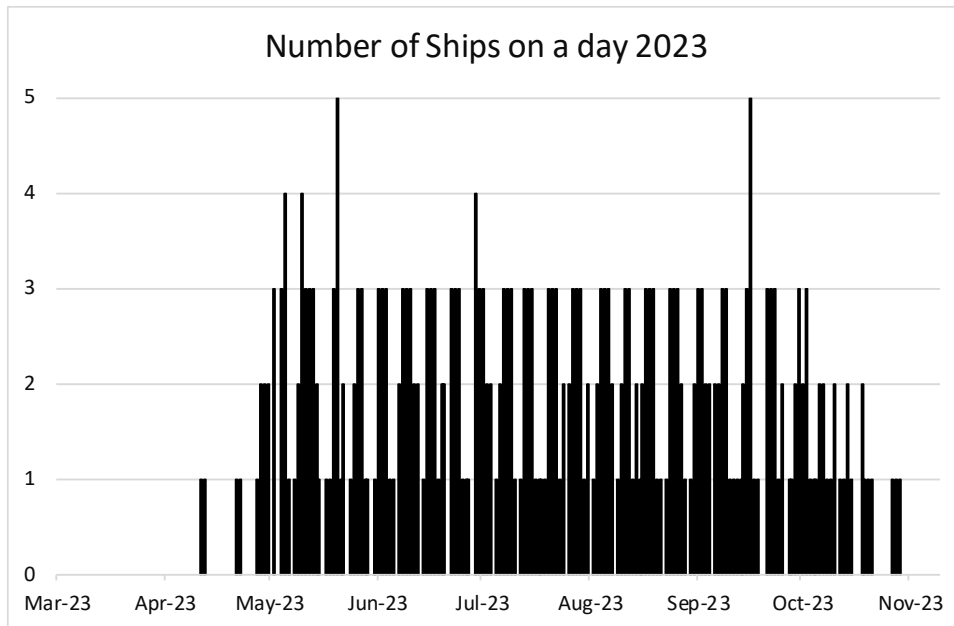
Ogden Point Cruise Ships Counts, 1990 to 2023



Ogden Point Cruise Ships Counts, 1990 to 2023



Ogden Point Cruise Ships Counts, 1990 to 2023



2023 Number of days without cruise ships	
April	22
May	6
June	4
July	3
August	4
September	4
October	10

2023		
Time in Port	Count	%
>0h, <1h	0	0%
>=1h, <2h	1	0%
>=2h, <3h	1	0%
>=3h, <4h	80	25%
>=4h, <5h	93	29%
>=5h, <6h	25	8%
>=6h, <7h	26	8%
>=7h, <8h	3	1%
>=8h, <9h	11	3%
>=9h, <10h	11	3%
>=10h, <11h	21	6%
>=11h, <12h	13	4%
>=12h, <13h	15	5%
>=13h, <14h	10	3%
>=14h, <15h	3	1%
>=15h, <16h	5	2%
>=16h, <17h	8	2%
>=17h	0	0%
	326	100%

Ogden Point Cruise Ships Counts, 1990 to 2023

Percentage of departures occurring after 11pm and at midnight

	Visits		
	Total	Departure Time	
		>= 11pm	"11:59pm"
Carnival Cruise Lines	39	37	37
Celebrity Cruise Line	24	18	18
Compagne du Ponant	1	0	0
Cunard Line	6	1	1
Disney Cruise Line	1	0	0
Holland America Line	52	50	44
Lindblad Expeditions	6	6	0
Norwegian Cruise Line	73	63	61
Oceania Cruises	14	10	0
Princess Cruise Lines	62	44	40
Royal Caribbean Intl	44	0	0
Scenic USA	1	0	0
Seabourn	3	1	0
	326	230	201
		71%	62%

Hours in Port

Ship Count	Hours	
	Together	Total
1	811	811
2	317	634
3	244	731
	1,371	2,175

i.e., there are 3 ships together in port for **244** hours; the total hours for all ships is **2,175**

Ogden Point Cruise Ships Counts, 1990 to 2023

Ships visiting Victoria in 2023 which were issued with air and water violations or exceedances by the Alaskan Department of Environment Conservation in 2018 (the last year of monitoring) ([ref](#))

	Visits
Eurodam	24
Nieuw Amsterdam	2
Noordam	2
Radiance of the Seas	2
Ruby Princess	1
Westerdam	21
	52

One of the five ships involved in the infamous “[Magic Pipe](#)” illegal dumping case will be visiting Victoria in 2023

“The case against Princess included illegal practices which were found to have taken place on five Princess ships – *Caribbean Princess*, *Star Princess*, *Grand Princess*, *Coral Princess* and *Golden Princess*.

	Visits
Grand Princess	1

When three ships are in port the estimated hourly GHG emission rate (tCO₂e/h) is likely 44% of the City of Victoria’s average hourly rate.

	tCO ₂ e/h
City of Victoria	33.1
3 Ships in Port	14.4
	44%

See P20 for basis

Ogden Point Cruise Ships Counts, 1990 to 2023

Friends of the Earth – [2022 Cruise Ship Report Card](#)

The Friends of the Earth compared the environmental footprint of **213** cruise ships based on Sewage Treatment, Air Pollution Reduction, Water Quality Compliance, Transparency, Criminal Violations, and awarded a grade between “A” and “D” plus a failing grade “F”. The following ships visiting Victoria this year scored either a “D” or an “F”.

	# of visits	
	D	F
BRILLIANCE OF THE SEAS	0	1
CARNIVAL MIRACLE	0	0
CELEBRITY ECLIPSE	0	2
CELEBRITY SOLSTICE	0	20
CROWN PRINCESS	10	0
DISCOVERY PRINCESS	0	22
EURODAM	24	0
KONINGSDAM	1	0
MAJESTIC PRINCESS	3	0
MS INSIGNIA	1	0
NOORDAM	2	0
NORWEGIAN SUN	19	0
OVATION OF THE SEAS	21	0
QUANTUM OF THE SEAS	20	0
QUEEN ELIZABETH	6	0
RADIANCE OF THE SEAS	0	2
RUBY PRINCESS	1	0
SEABOURN ODYSSEY	3	0
VOLENDAM	2	0
WESTERDAM	21	0
	134	47
	41%	14%
Total of D and F	181	
% of Total Visits	56%	

Ogden Point Cruise Ships Counts, 1990 to 2023

Ships – Hours in Port

		Visits	Total Hours in Port	Average Hours in Port
Brilliance Of The Seas	Royal Caribbean Intl	1	8	8.0
Carnival Luminosa	Carnival Cruise Lines	19	84	4.4
Carnival Spirit	Carnival Cruise Lines	20	80	4.0
Celebrity Eclipse	Celebrity Cruise Line	2	20	10.0
Celebrity Millennium	Celebrity Cruise Line	2	19	9.3
Celebrity Solstice	Celebrity Cruise Line	20	133	6.6
Crown Princess	Princess Cruise Lines	10	127	12.7
Discovery Princess	Princess Cruise Lines	22	115	5.2
Disney Wonder	Disney Cruise Line	1	10	10.0
Eurodam	Holland America Line	24	103	4.3
Grand Princess	Princess Cruise Lines	1	11	11.0
Koningsdam	Holland America Line	1	11	11.0
L'Austral	Compagne du Ponant	1	15	14.5
Majestic Princess	Princess Cruise Lines	3	34	11.3
Ms Insignia	Oceania Cruises	1	9	9.0
National Geographic	Lindblad Expeditions	6	96	16.0
Nieuw Amsterdam	Holland America Line	2	19	9.5
Noordam	Holland America Line	2	24	12.0
Norwegian Bliss	Norwegian Cruise Line	29	137	4.7
Norwegian Encore	Norwegian Cruise Line	25	111	4.4
Norwegian Sun	Norwegian Cruise Line	19	195	10.3
Ovation Of The Seas	Royal Caribbean Intl	21	179	8.5
Quantum Of The Seas	Royal Caribbean Intl	20	99	5.0
Queen Elizabeth	Cunard Line	6	64	10.7
Radiance Of The Seas	Royal Caribbean Intl	2	19	9.3
Regatta	Oceania Cruises	13	150	11.5
Royal Princess	Princess Cruise Lines	23	126	5.5
Ruby Princess	Princess Cruise Lines	1	6	6.0
Sapphire Princess	Princess Cruise Lines	2	23	11.5
Scenic Eclipse	Scenic USA	1	11	11.0
Seabourn Odyssey	Seabourn	3	27	9.0
Volendam	Holland America Line	2	26	13.0
Westerdam	Holland America Line	21	86	4.1
		326	2175	6.7

Ogden Point Cruise Ships Counts, 1990 to 2023

		Departure Time														
	2023	>=8am <9am	>=11am <Noon	>=noon <1pm	>=1pm <2pm	>=2pm <3pm	>=3pm <4pm	>=4pm <5pm	>=5pm <6pm	>=6pm <7pm	>=7pm <8pm	>=8pm <9pm	>=9pm <10pm	>=10pm <11pm	>=11pm <midnight	Totals
Arrival Time	6am to 7am			2												2
	7am to 8am					1	1	2	1					1	8	14
	8am to 9am					1	1	2	11	1	8				4	28
	9am to 10am							1	2				4	8	2	17
	10am to 11am								1					1	3	5
	11am to 12pm									1	1			5	2	9
	12pm to 1pm								2		3	1	2	5		13
	1pm to 2pm												1	2	6	9
	2pm to 3pm														3	3
	3pm to 4pm														2	2
	4pm to 5pm													3	1	4
	5pm to 6pm												1	24	19	44
	6pm to 7pm														1	1
	7pm to 8pm														92	92
	8pm to 9pm														80	80
	9pm to 10pm														1	1
10pm to 11pm														1	1	
11pm to midnight					1										1	
		0	0	2	0	1	2	2	5	17	2	12	7	46	230	326

Arrival Time	Ship Count	% of Total Visits	pax hours in Port
Morning Ships (>=6am , <Noon)	75	23%	10.9
Afternoon+ Ships (>=Noon, <7pm)	76	23%	6.5
Evening Ships (>=7pm, <midnight)	175	54%	4.5
	326		6.2

Ogden Point Cruise Ships Counts, 1990 to 2023

2023	Departure Time														Totals
	>=8am <9am	>=11am <Noon	>=noon <1pm	>=1pm <2pm	>=2pm <3pm	>=3pm <4pm	>=4pm <5pm	>=5pm <6pm	>=6pm <7pm	>=7pm <8pm	>=8pm <9pm	>=9pm <10pm	>=10pm <11pm	>=11pm <midnight	
Monday						1	1	1	1			1	7	23	35
Tuesday					1							1	1	12	15
Wednesday								2	2		3	2	2	18	29
Thursday									8	1	3	1	15	32	60
Friday			2											72	74
Saturday						1	1	2	3	1				69	77
Sunday									3		6	2	21	4	36
	0	0	2	0	1	2	2	5	17	2	12	7	46	230	326



Ogden Point Cruise Ships Counts, 1990 to 2023

Ship “TO” and “FROM” Ports

2023	From	To
Alert Bay, BC	4	1
Astoria	4	3
Cabo San Lucas	1	
Friday Harbor	1	3
Gulf Islands		
Haines	1	
Hilo, HI	2	
Icy Point	1	
Juneau	28	
Ketchikan	182	
Lahaina	1	
Los Angeles	1	1
Nawiliwili	1	
Prince Rupert	6	
San Diego	4	
San Francisco	6	4
Seattle	6	270
Sitka	16	
Skagway	47	
Vancouver	13	41
Wallace Island		1
?	1	2
	326	326

Ogden Point Cruise Ships Counts, 1990 to 2023

	2023	Ship Counts by Month							Totals
		Apr	May	Jun	Jul	Aug	Sep	Oct	
"Coming From" Port	Alert Bay, BC						1	3	4
	Astoria	1	2					1	4
	Cabo San Lucas		1						1
	Friday Harbor							1	1
	Haines				1				1
	Hilo, HI	1	1						2
	Icy Point		1						1
	Juneau		2	6	7	7	5	1	28
	Ketchikan	2	27	38	35	33	34	13	182
	Lahaina							1	1
	Los Angeles	1							1
	Nawiliwili		1						1
	Prince Rupert		1		3		1	1	6
	San Diego	2	2						4
	San Francisco	3	3						6
	Seattle		5					1	6
	Sitka			5	3	5	3		16
	Skagway		6	11	11	11	7	1	47
	Vancouver	1	2				4	6	13
	?		1						1
Totals	11	55	60	60	56	55	29	326	

	2023	Ship Counts by Month							Totals
		Apr	May	Jun	Jul	Aug	Sep	Oct	
"Going To" Port	Alert Bay, BC							1	1
	Astoria				1		1	1	3
	Friday Harbor						1	2	3
	Los Angeles							1	1
	San Francisco	1	1					2	4
	Seattle	2	37	56	56	53	50	16	270
	Vancouver	8	15	4	3	3	2	6	41
	Wallace Island		1						1
	?		1				1		2
	0								0
	0								0
	Totals	11	55	60	60	56	55	29	326

Ogden Point Cruise Ships Counts, 1990 to 2023

		COMING FROM																					
	2023	Alert Bay, BC	Astoria	Cabo San Lucas	Friday Harbor	Haines	Hilo, HI	Icy Point	Juneau	Ketchikan	Lahaina	Los Angeles	Nawiliwili	Prince Rupert	San Diego	San Francisco	Seattle	Sitka	Skagway	Vancouver	?	Totals	
GOING TO	Alert Bay, BC				1																	1	
	Astoria												1							2		3	
	Friday Harbor	3																				3	
	Los Angeles																			1		1	
	San Francisco																			4		4	
	Seattle			1		1		1	27	172	1			3					14	45	5		270
	Vancouver	1	4				2		1	10		1	1	2	4	6	5	2	2				41
	Wallace Island																1						1
	?																				1	1	2
		4	4	1	1	1	2	1	28	182	1	1	1	6	4	6	6	16	47	13	1	326	



Ogden Point Cruise Ships Counts, 1990 to 2023

Ship "Arriving From" ports with visit counts.

2023	Passengers (Normal Capacity)	Ship Count for Arriving From Port																		Total Visits	Total Passengers @ 100% capacity			
		Alert Bay, BC	Astoria	Cabo San Lucas	#REF!	Friday Harbor	Haines	Hilo, HI	Icy Point	Juneau	Ketchikan	Lahaina	Los Angeles	Nawiliwili	Prince Rupert	San Diego	San Francisco	Seattle	Sitka			Skagway	Vancouver	?
Brilliance Of The Seas	2,543															1							1	2,543
Carnival Luminosa	2,260					1				17									1				19	42,940
Carnival Spirit	2,124									20													20	42,480
Celebrity Eclipse	2,850						1													1			2	5,700
Celebrity Millennium	2,034															1				1			2	4,068
Celebrity Solstice	2,850						1												18		1		20	57,000
Crown Princess	3,080	1							7	1							1						10	30,800
Discovery Princess	3,660										1								20	1			22	80,520
Disney Wonder	2,400														1								1	2,400
Eurodam	2,104									23					1								24	50,496
Grand Princess	2,606															1							1	2,606
Koningsdam	2,650					1																	1	2,650
L'Austral	264	1																					1	264
Majestic Princess	3,560															1					2		3	10,680
Ms Insignia	684													1									1	684
National Geographic	100	3				1											2						6	600
Nieuw Amsterdam	2,106													1	1								2	4,212
Noordam	1,918																1				1		2	3,836
Norwegian Bliss	4,250									28						1							29	123,250
Norwegian Encore	3,998									25													25	99,950
Norwegian Sun	1,936			1						18													19	36,784
Ovation Of The Seas	4,180							8										5	7	1			21	87,780
Quantum Of The Seas	4,180							20															20	83,600
Queen Elizabeth	2,081									3								2	1				6	12,486
Radiance Of The Seas	2,500		1																		1		2	5,000
Regatta	684		1											3				9					13	8,892
Royal Princess	3,560									20						1						2	23	81,880
Ruby Princess	3,080																				1		1	3,080
Sapphire Princess	2,600		1																		1		2	5,200
Scenic Eclipse	228																1						1	228
Seabourn Odyssey	450												1	1							1		3	1,350
Volendam	1,440														1		1						2	2,880
Westerdam	1,840									21													21	38,640
0	#N/A																						0	0
		4	4	1	0	1	1	2	1	28	182	1	1	1	6	4	6	6	16	47	13	1	326	935,479

Ogden Point Cruise Ships Counts, 1990 to 2023

Ships – Historical Visits

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023	Totals
Amsterdam	12	12	1	14	17	19	11	18	11			115
Arcadia	1											1
Asuka li`									1			1
Azamara Quest									3			3
Brilliance of the Seas											1	1
Caribbean Princess												0
Carnival Freedom												0
Carnival Legend					14	15	17	17	18			81
Carnival Luminosa											19	19
Carnival Miracle			16	16						11		43
Carnival Spirit	18	18								20	20	76
Carnival Splendor										16		16
Celebrity Century	1	2	3	3								9
Celebrity Eclipse									3	1	2	6
Celebrity Infinity	19	19			3	3	1					45
Celebrity Millennium	2	2			1		1		1	2	2	11
Celebrity Solstice			18	18	19	18	18	21	18	20	20	170
Coral Princess		1		1	2	1	1	2				8
Crown Princess				2	19	18				20	10	69
Crystal Serenity		1				4	3					8
Crystal Symphony	11		1		1			3	5			21
Dawn Princess		1										1
Discovery Princess								3		20	22	45
Disney Wonder	2	15	1	1	1	1	1	1	3	2	1	29
Emerald Princess							18	20	1			39
Eurodam							23	22	22	24	24	115
Europa							2					2
Explorer Of The Seas						21	21	21				63
Golden Horizon												0
Golden Princess	19	17	19	19	15		1	1	1			92
Grand Princess			13	19	2	13	14	16	16	2	1	96
Hanseatic		1			0							1
Jewel Of The Seas					19							19
Island Princess	2	1		2		1	1	1	1			9
Koningsdam										1	1	2
L'Austral									1		1	2

Ogden Point Cruise Ships Counts, 1990 to 2023

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023	Totals
Le Soleal										2		2
Maasdam												0
Majestic Princess											3	3
MS Insignia											1	1
National Geographic											6	6
National Geographic Quest										2		2
National Geographic Venture										4		4
Nieuw Amsterdam						1	1	1	1	1	2	7
Noordam					2	1	1		1	2	2	9
Norwegian Bliss								19	23	24	29	95
Norwegian Encore										24	25	49
Norwegian Jewel		19	20	18	22	22	21	1	1			124
Norwegian Joy									25			25
Norwegian Pearl	19	21	21	20	21	22	21	21				166
Norwegian Spirit										10		10
Norwegian Sun			2	1	3		1	1		21	19	48
Ocean Victory												0
Oosterdam	22	21	21				23		22			109
Ovation Of The Seas									19	21	21	61
Pacific Princess					1							1
Quantum Of The Seas										23	20	43
Queen Elizabeth									4	4	6	14
Radiance Of The Seas	1			1						1	2	5
Regatta	4		4	7	10	7	7	9	11	11	13	83
Rhapsody Of The Seas	15	17	14	15								61
Royal Princess									1	6	23	30
Ruby Princess					19	20	22	23	21	4	1	110
Sapphire Princess	20	2	2								2	26
Scenic Eclipse										1	1	2
Scenic Eclipse II												0
Sea Princess	13	12										25
Seabourn Odyssey										2	3	5
Serenade Of The Seas										1		1
Seven Seas Explorer												0
Seven Seas Mariner						2	4	4	4	2		16
Seven Seas Navigator	2	2	2	2	3		2					13

Ogden Point Cruise Ships Counts, 1990 to 2023

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022	2023	Totals
Silver Discoverer										2		2
Silver Explorer												0
Silver Shadow												0
Silver Wind												0
Sojourn												0
Star Breeze												0
Star Princess		18	18	15	1	1	1	1	22			77
Statendam	2	3	1		9							15
Sun Princess		0				1						1
The World		1					1	2				4
Viking Orion										3		3
Volendam									2		2	4
Westerdam	21	20	21	22	21	22		1		15	21	164
Zaandam	2	1	2	3	1	1	2	10				22
Zuiderdam			1	1						1		3
	208	227	201	200	226	214	240	239	262	326	326	

Ogden Point Cruise Ships Counts, 1990 to 2023

Cruise Ship Greenhouse Gas Emissions

What is the Green House Gas (GHG) emission rate when three cruise ships are in port and how does it compare with the City of Victoria GHG estimate for 2023?

Summary

The report contains 4 sections:

- An estimate of the 2023 cruise ship GHG emissions.
- An estimate of the 2023 City of Victoria GHG emissions.
- An estimate of the 2023 cruise ship hours in port for the 1, 2 & 3 ship combinations.
- A comparison of both the cruise ship and City hourly and annual emission rates.

The conclusion is that when three ships are in port the estimated hourly GHG emission rate (tCO₂e/h) is likely **44%** and possibly over **56%** of the City of Victoria’s average hourly rate.

1) Green House Gas (GHG)– Estimating the 2023 cruise ship emissions (measured in tCO₂e)

The following analysis uses two sources to estimate the total 2023 cruise ship GHG emissions:

- [2019 GHVA Emissions Inventory](#) – includes 2018 GHG data.
- [The 2019 Capital Daily Report](#)

In both cases the 2023 estimate is obtained by prorating the hours the ships were in port to the currently scheduled 2023 cruise ship hours.

1a) GVHA Emissions Inventory

The GHVHA report estimates the total cruise ship GHG for 2018 while docked at Ogden Point at 8,252 tonnes.

Prorating this amount by the ratio of 2023 hours to 2018 hours gives a 2023 estimate of **10,462** tonnes.

	Hours in Port	tCO ₂ e
		GVHA from report
2018	1,716	8,252
2023	JBNA estimate	Prorate based on hours
	2,175	10,462
tCO ₂ e/h		4.8

Ogden Point Cruise Ships Counts, 1990 to 2023

1b) Capital Daily

The Capital Daily report estimates the total cruise ship GHG for 2019 while docked at Ogden Point at 11,406 tonnes.

Prorating this amount by the ratio of 2023 hours to 2019 hours gives a 2023 estimate of **13,435** tonnes

	Hours in Port	tCO ₂ e
	Capital Daily	
	from report	
2019	1,847	11,406
2023	JBNA estimate	Prorate based on hours
	2,175	13,435
tCO ₂ e/h		6.2

2) Estimate of the total City of Victoria CHG emissions for 2023

The City's [2022 Climate Leadership Plan Progress Report Update](#) provides a figure of 314,000 tCO₂e for 2020 and notes this to be a 24% reduction from the 2007 level. From these figures the 2030 target of 50% the 2007 level is calculated at 207,000 tCO₂e

From these figures an estimate for 2023 is **290,222** tCO₂e (=33.1tCO₂e/h)

	tCO ₂ e	tCO ₂ e/h
	From City Reports	
2021	314,000	36
2030	207,000	24
2023	interpolate between years	
	290,222	33.1

Ogden Point Cruise Ships Counts, 1990 to 2023

3) Cruise ship hours in port

Ships in Port at the same time	Total "ship" hours	Total "together in port" hours	Based on prorated 2019 Capital Daily GHG		Based on prorated 2018 GVHA GHG	
			tCO2e	tCO2e/h	tCO2e	tCO2e/h
1	811	811	5,006	6.2	3,899	4.8
2	634	317	3,914	12.4	3,048	9.6
3	731	244	4,514	18.5	3,515	14.4
	2,175	1,371	13,435	9.8	10,462	7.6

The table above is based on the above and an analysis of the GVHA cruise ship schedule.

4a) Comparison of the 2023 tCO2e hourly rates for "3 ships in Port" and "Total City of Victoria"

2023 tCO2e/h	
City of Victoria	
33.1	
Capital Daily	GVHA
18.5	14.4
55.9%	43.5%

We therefore have two estimates for the Cruise Ship hourly GHG emission rate when 3 ships are in port:

- 44% of the City of Victoria emission rate based on the GHHA report.
- 56% of the City of Victoria emission rate based on the Capital Daily report.

Ogden Point Cruise Ships Counts, 1990 to 2023

4b) Comparison of the total 2023 tCO₂e emissions for the Ogden Point Cruise Ships and the City of Victoria

2023 tCO ₂ e	
City of Victoria	
290,222	
Capital Daily	GVHA
13,435	10,462
4.6%	3.6%

We therefore have two estimates for the Cruise Ship total 2023 GHG emissions:

- **3.6%** of the City of Victoria emissions based on the GHHA report.
- **4.6%** of the City of Victoria emissions based on the Capital Daily report.