



March 6, 2021

MEMO TO : Park Board Commissioners
FROM : Donnie Rosa - General Manager, Vancouver Board of Parks and Recreation
SUBJECT : Parking Data for Stanley Park & Beach Avenue - Board Briefing Memo

Dear Commissioners,

The purpose of this memo is to respond to a December 2020 Board enquiry seeking parking revenue and utilization data for the lots in Stanley Park and along Beach Avenue (in Sunset Beach Park). Please note that considerable staff time was required to extract and analyze the data and to prepare the extensive amount of information requested. Key takeaways are included in the 'Summary' section at the end of this memo.

As requested, in order to create a baseline for comparative purposes, the information provided includes parking data on revenues and lot use utilization for 2017 through 2020. A differentiation between vehicles and buses was also requested, however this information is not currently available as it is not tracked by Easy Park's parking data collection system (Smarking App). Easy Park will advise staff should further data become available.

Parking Revenue – Stanley Park

Gross revenue (as well as the number of parking transactions) for all of Stanley Park for 2017 to 2020 is represented in Figure 1 below. Annual parking revenues for Stanley Park are typically very consistent usually ranging between \$5.1 million to \$5.2 million as noted in the table below.

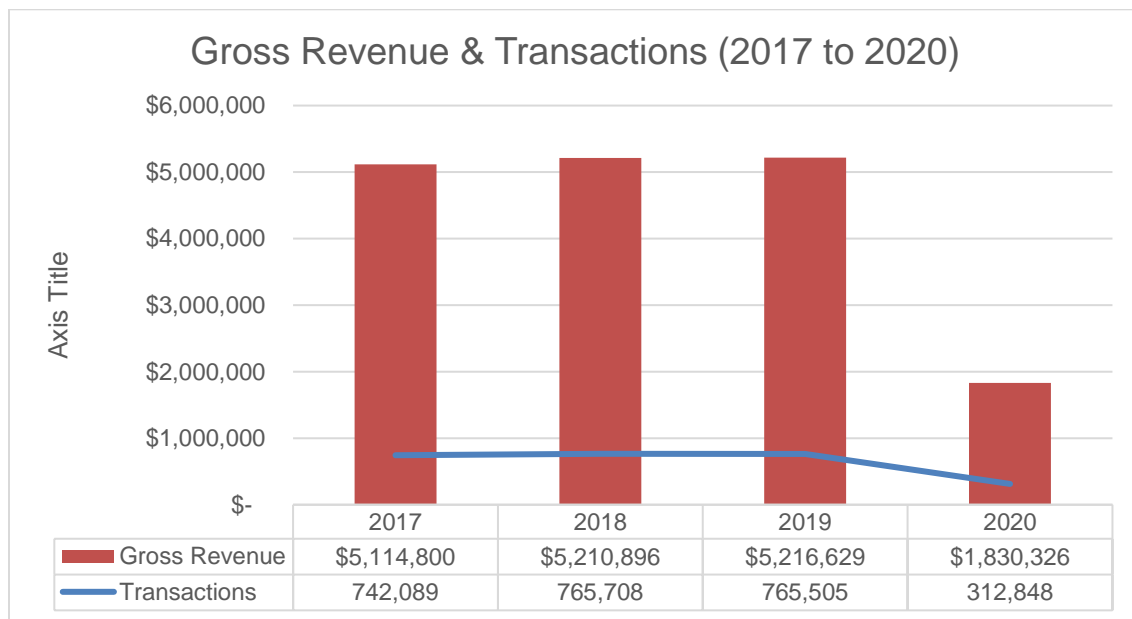


Figure 1: Parking Gross Revenue 2017-2020 - Stanley Park

As shown in Table 1 below, these gross parking revenues can be further broken down into the 24 different parking zones in Stanley Park, which include parking lots and any on-street parking associated with each area. For comparison purposes with 2020, the revenue for 2017-2019 has been included as an annual average. It should also be noted that in 2020, all parking lots shown below were closed between April 8 and June 22, when the park was closed to vehicles in response to the COVID-19 pandemic. When the park was reopened to vehicles, most lots were also reopened with some exceptions, as noted in the “Parking Lot Status” column in the table below. A map showing the specific locations of all of these lots is included in Appendix A.

PARKING ZONE	REVENUE 2017-2019 Annual Average	REVENUE 2020 Only	2020 % of Annual Avg	Parking Lot Status Jun 22 - Sep 25 2020
Aquarium	\$ 1,199,889.71	\$ 373,559.49	31%	OPEN
Info Booth	\$ 493,021.55	\$ 231,334.37	47%	OPEN
Ceperley Meadow	\$ 402,782.55	\$ 47,625.13	12%	CLOSED
Totem Poles	\$ 374,614.23	\$ 107,227.64	29%	OPEN
Miniature Railway	\$ 371,166.72	\$ 101,062.39	27%	OPEN
Prospect Point Café	\$ 338,602.48	\$ 91,966.54	27%	PARTIALLY OPEN
Brockton Oval	\$ 306,505.03	\$ 64,089.08	21%	OPEN
Service Yard Pkg Lot	\$ 230,242.24	\$ 72,835.79	32%	OPEN
Teahouse	\$ 224,542.21	\$ 94,567.35	42%	PARTIALLY OPEN
Third Beach	\$ 200,203.36	\$ 39,242.58	20%	CLOSED
Second Beach Pkg Lot	\$ 175,837.13	\$ 29,712.85	17%	CLOSED
North Lagoon Drive	\$ 167,439.17	\$ 80,951.60	48%	OPEN
Tennis Courts Parking Lot	\$ 147,219.95	\$ 153,781.04	104%	OPEN
Royal Vancouver Yacht Club	\$ 103,938.65	\$ 39,655.58	38%	OPEN
Park Drive (L. Arch to Pipeline Rd)	\$ 96,649.26	\$ 45,524.74	47%	CLOSED
Second Beach - Park Drive	\$ 77,862.30	\$ 57,608.63	74%	OPEN
Rowing Club (on Park Drive)	\$ 59,166.82	\$ 12,417.82	21%	CLOSED
Stanley Park Brewery	\$ 56,424.82	\$ 105,551.43	187%	OPEN
Brockton Point	\$ 45,735.97	\$ 10,830.22	24%	CLOSED
Prospect point - Picnic Area	\$ 38,646.09	\$ 25,663.24	66%	OPEN
Park Board Office	\$ 23,813.38	\$ 24,663.68	104%	OPEN
Pipeline Road	\$ 22,029.58	\$ 4,549.48	21%	OPEN
South Lagoon Drive	\$ 12,721.27	\$ 13,944.28	110%	OPEN
Prospect Point - Park Drive West	\$ 11,720.55	\$ 1,961.12	17%	CLOSED
GRAND TOTAL	\$ 5,180,775.00	\$ 1,830,326.06	35%	

Table 1: Parking Gross Revenue 2017-2020 by Zone - Stanley Park

As shown above, 2020 saw a total drop in \$3.35 million (65% drop) in revenue from parking compared to the average of the past three years of \$5.18 million. The top six revenue-generating parking lots in the park (Aquarium, Info Booth, Ceperley Meadow area, Totem Poles, Miniature Railway and Prospect Point Café) accounted for the majority of this drop at approximately \$2.2 million.

Therefore, it is assumed that the drop in revenue experienced for 2020 is directly related to the impact of COVID-19 (lack of tourism, facility closures, etc.) and the parking lot closures due to the temporary traffic changes implemented as part of the Park Board's COVID-19 pandemic response. As the park was closed to vehicles from April 8 to June 22, and then reopened from June 22 to September 25, with some parking lots remaining closed, staff isolated and analyzed the parking revenues made in those time periods and compared them with the same time periods in 2017, 2018, and 2019 to estimate the impact of these changes on parking revenues. Figure 2 and Table 2 below show the estimated revenue loss from 2019 to 2020, broken down into the following time periods reflecting the different traffic management phases in Stanley Park:

1. Jan 1 to Apr 8: No changes to traffic system
2. Apr 8 to Jun 22: Park closed to vehicles
3. Jun 22 to Sep 25: Park re-opened to vehicles; temporary bike lane on Park Drive
4. Sep 25 to Dec 31: Temporary bike lane removed (except in Ceperley Meadow area)

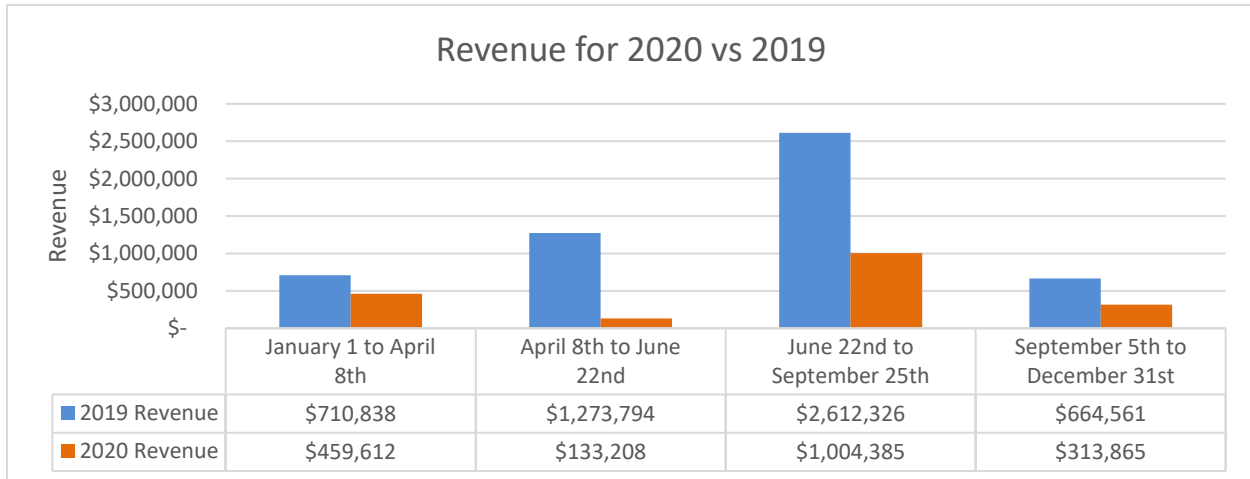


Figure 2: Parking Gross Revenue Comparison 2019 & 2020 by Time Period - Stanley Park

Description	Estimated Revenue Loss (\$) 2020 vs. 2019
Jan 1 to Apr 8: no changes to traffic system	\$ 251,226
Apr 8 to Jun 22: closed to vehicles	\$ 1,140,586
Jun 22 to Sep 25: reopened to vehicles; temp bike lane on Park Drive	
Closed Parking Lots	\$ 441,612
Partially Open Parking Lots (Teahouse & Prospect Point)	\$ 158,638
Open Parking Lots	\$ 1,007,690
Sep 25 to Dec 31: temp bike lane removed except by Ceperley Meadow	\$ 350,696
TOTAL	\$ 3,350,449

Table 2: Parking Gross Revenue Estimated Loss by Time Period - Stanley Park

Based on this data, it is estimated that approximately \$1,582,199 (47%) of the revenue loss in 2020 was due to parking lot closures, with approximately \$1,768,250 (53%) due to reduced

visitation related to the COVID-19 pandemic (temporary facility closures & capacity restrictions, reduced local travel, drop in tourism, etc.).

Parking Revenue Comparison 2019-2020 – Stanley Park

The graph in Figure 3 depicts the total revenue for all of Stanley Park earned each day between February 1 and April 30, comparing 2019 (the blue line) to the same weekday in 2020 (the orange line). Parking revenue is generally fairly consistent year to year, however as shown below, 2020 revenues began to drop in mid-March when facilities and businesses in Stanley Park began to close due to the COVID-19 pandemic.

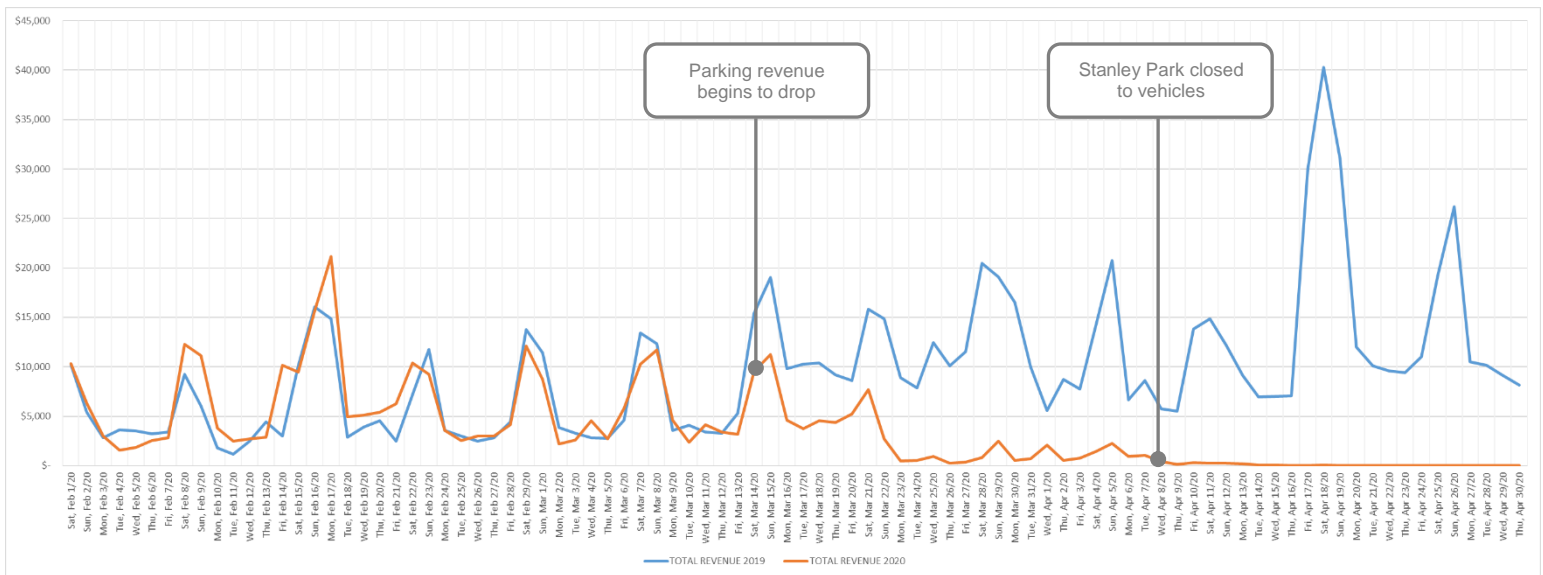


Figure 3: Parking Gross Revenue 2019 & 2020 Daily Earnings Feb 1 - Apr 30 - Stanley Park

Parking Revenue – Beach Avenue

There are four (4) pay parking lots located along Beach Avenue in Sunset Beach Park. Moving west to east, the four lots and their respective allocated parking spots are shown in Table 4 below.

Sunset Beach Park Parking Lots	Number & Distribution of Parking Stalls					
	Public	Reserved	SPARC	Lifeguard	Motorcycle	EV
Cardero Street	7	5	2	2	-	2
Jervis Street	55	-	2	-	1	2
Sunset Beach	50	2	2	3	-	2
Aquatic Centre	67	2	4	-	-	-

Table 3: Parking Lots along Beach Avenue – Sunset Beach Park

In 2020, three of the four pay parking lots in Sunset Beach Park could not be accessed from April to December when the east lane of Beach Avenue was closed to vehicles. An annual comparison of the total parking revenue for all four lots combined, along with the total transactions (pay stations and digital apps) is summarized in Figure 4. Please note that EV charging stations are not under the jurisdiction of the Park Board and revenue was not available during the preparation of this report. Also, as previously noted, a breakdown of cars and buses is not readily available

at this time as Easy Park’s parking data collection system currently does not track this information. Given the design and access limitations of these lots for large vehicles and buses, an assumption can be made that use is primarily reflective of cars and motorcycles

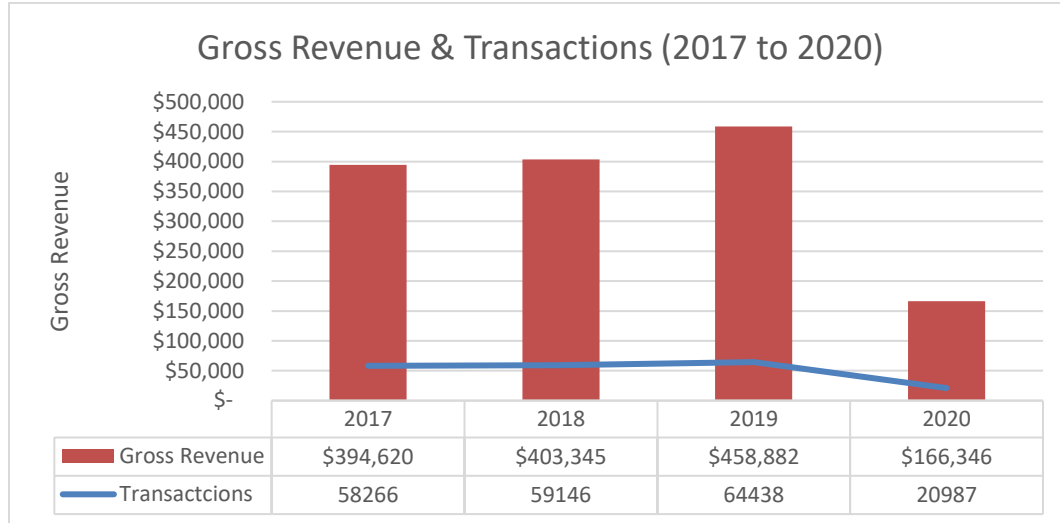


Figure 4: Parking Gross Revenue 2017-2020 – Sunset Beach Park

Between 2017 and 2019, the total average annual parking revenue for the four lots combined at Sunset Beach Park was \$418,989. In 2020, the total revenue for the same lots was \$166,346, representing an average drop of 60%. Data on street parking revenues collected by the City of Vancouver along Beach Avenue, from the Vancouver Aquatic Center to Denman Street, was also obtained. Table 4 below shows the approximate revenue earned from Beach Avenue street parking in 2017 through 2020.

Year	Revenue
2017	\$145,000
2018	\$150,000
2019	\$160,000
2020	\$80,000

Table 4: City of Vancouver Street Parking Revenue – Beach Avenue

The annual gross parking revenues for each lot in Sunset Beach Park are summarized below in Table 5. For comparison purposes with 2020, the revenue for 2017-2019 has been included as an annual average.

PARKING LOT	REVENUE 2017-2019 Annual Average	REVENUE 2020 Only	% CHANGE	2020 Status Apr - Dec
Cardero Street	\$ 50,433	\$ 7,823	↓ 84%	CLOSED
Jervis Street	\$ 139,783	\$ 19,184	↓ 86%	CLOSED
Sunset Beach	\$ 72,509	\$ 24,075	↓ 67%	CLOSED
Aquatic Centre	\$ 156,224	\$ 115,264	↓ 26%	OPEN

Table 5: Parking Gross Revenue 2017-2020 by Lot – Sunset Beach Park

Parking Lot Utilization – Stanley Park

As some lots are utilized more than others, the data for each lot was analyzed to determine its overall occupancy. Some important factors to note:

1. The data analyzed includes both pay stations transactions as well as digital transactions using one of Easy Park's many parking apps (Honk Mobile, PayByPhone, and Passport). Occupancy is determined by EasyPark based on the time the ticket was purchased and for how long. It is possible for someone to purchase a ticket and leave earlier than the time duration selected, which is why some "capacity" can read as greater than 100%. The key takeaway if a parking lot is over 100% is that it is "at capacity" or full.
2. As the data was based on purchased tickets, all occupancy numbers were automatically increased 20% to account for the average ratio that 1 out of every 5 vehicles are parked in Stanley Park without paying for parking (as observed and recommended in calculations by Easy Park). Therefore, this additional 20% is not reflected in the revenue shown above, but is reflected in the "occupancy" of the lot to get a most realistic picture of how many parking lots have capacity. This ratio was not applied to the Beach Avenue Parking data.
3. For Stanley Park, the parking lots have been broken down into "east" and "west" sides of the park (for formatting purposes); the maps included in Appendix A show the parking lot locations in each area.
4. As Stanley Park has the same EasyPark location number for the entire park, it is possible for people to purchase a ticket in one location and park in another location, or move around and park in multiple locations during their visit.

Based on the above factors, the average "daily peak" occupancy for each parking lot in Stanley Park, averaged over the past four years (2017 to 2020), is provided in Appendix A. Based on the four year average, it was found that about five (5) of the thirteen (13) parking lots on the east side of Stanley Park surpass an average of 50% capacity based on their number of available public parking stalls:

1. Totem Poles (lot & street) – 82%
2. Aquarium – 80%
3. Rowing Club (street) – 66%
4. Info Booth – 64%
5. Stanley Park Pavilion – 61%

Only one parking lot on the west side of the park surpassed a four year average of 50% capacity based on their available number of available public parking stalls:

1. Prospect Point Bar & Grill – 87%

When comparing utilization rates on an annual basis (vs. using a 4 year average that includes 2020), 6 of the 13 lots on the east side of the park, and 3 of the 15 lots the west side of the park show an average "daily peak" occupancy exceeding 50% of capacity prior to 2020 (see Tables 6 & 7 for breakdown).

Parking Zones – Stanley Park East	2017	2018	2019	2020
Stanley Park Pavilion	65%	67%	78%	35%
Pipeline Road	15%	9%	8%	3%
Miniature Train	41%	44%	45%	11%
Service Yard (Public Lot)	33%	35%	36%	12%
Park Drive (L. Arch to Old Pipeline Rd)	13%	15%	13%	4%
Lumberman's Arch	52%	60%	55%	30%
Brockton Point	25%	44%	43%	13%
Totem Poles	94%	96%	93%	46%
Brockton Oval	23%	21%	22%	8%
Yacht Club	16%	15%	14%	6%
Aquarium	98%	99%	93%	30%
Info Booth	72%	75%	76%	34%
Rowing Club	82%	79%	78%	26%

Table 6: Parking Lot Average Daily Occupancy 2017-2020 by Zone – Stanley Park (East Side)

Parking Zones – Stanley Park West	2017	2018	2019	2020
Stanley Park Brewery	31%	28%	41%	44%
South Lagoon Drive	10%	10%	10%	8%
Tennis Courts	33%	33%	32%	25%
Park Board Office	25%	25%	22%	18%
Bowling Club (Park Drive)	48%	48%	43%	10%
Ceperley (parking lot)	58%	60%	58%	13%
Ceperley (Park Drive)	37%	40%	40%	11%
North Lagoon Drive	28%	25%	26%	24%
Second Beach (Park Drive angled stalls)	31%	29%	27%	18%
Second Beach (parking lot)	48%	45%	45%	14%
Tea House Restaurant	54%	54%	52%	21%
Third Beach (parking lot)	25%	24%	24%	7%
Prospect Picnic Area (parking lot)	12%	13%	13%	7%
Park Drive (west of Prospect Point)	3%	9%	8%	2%
Prospect Point Bar & Grill	79%	106%	112%	41%

Table 7: Parking Lot Average Daily Occupancy 2017-2020 by Zone – Stanley Park (West Side)

Parking Lot Utilization – Beach Avenue

Parking lot occupancy information for 2019 was also collected for the four parking lots located along Beach Avenue in Sunset Beach Park. Occupancy rates for 2020 were not included as 3 out of the 4 lots were closed for the majority of the year (April - December).

As shown in Table 8 below, the “daily peak” occupancy was calculated for each lot, and averaged for the whole year, as well as just the summer period (June to September).

Parking Lots – Beach Avenue	2019 Full Year	2019 Jun-Sep
Cardero Street	123%	137%
Jervis Street	52%	71%
Sunset Beach	24%	30%
Aquatic Centre	37%	42%

Table 8: Parking Lot Average Occupancy 2019 – Beach Avenue

Based on these calculations, the Cardero Street parking lot (by the Inukshuk) has the highest occupancy (least vacancy), while the Sunset Beach parking lot has the lowest occupancy (highest vacancy).

SUMMARY

In summary, the key takeaways from the analysis of parking data for Stanley Park are:

1. In 2020, Stanley Park saw a \$3.35 million decrease (65% reduction) in revenue compared to previous years (on average).
2. Both parking revenues and parking occupancy are consistent across the three years prior to the COVID-19 pandemic. It is assumed the revenue decline for 2020 was due in part to the parking lots being closed as a result of the temporary traffic changes, and in part due to facilities and businesses being closed in the spring, along with decreased tourism in the summer due to travel restrictions.
3. There were some exceptions to the revenue drops -- parking lots on the southern edge of Stanley Park increased in revenue for 2020 compared to previous years, likely because there was an increased demand for these lots when the majority of the park was closed to vehicles.
4. Generally speaking, parking lots on the east side of the park tend to be the highest occupied (least vacant) than the parking lots on the west side of the park.
5. In previous years, the parking lot at Prospect Point (near the café) is the highest occupied (least vacant) parking lot, while the on-street parking on Park Drive just west of Prospect Point is the least utilized parking zone (most vacant) in the whole of Stanley Park.

The key takeaways from the analysis for parking along Beach Avenue are:

1. Sunset Beach Park’s parking lots saw a \$252,603 drop in revenue compared to prior years (on average).
2. As three out of the four lots were closed as of April 2020, it can be assumed that these closures were the primary cause for the decreased revenues. The loss in revenue for the Aquatic Centre is likely associated with the facility being closed for a period of time and then reopening with only limited service during the COVID-19 pandemic.



3. The Cardero Street parking lot by the Inukshuk has the highest occupancy (least vacant) average around 127%, while the Sunset Beach parking lot has the lowest occupancy (highest vacancy) at around 23%.

Regards,

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Donnie Rosa (*she/they*)
General Manager - Vancouver Board of Parks and Recreation

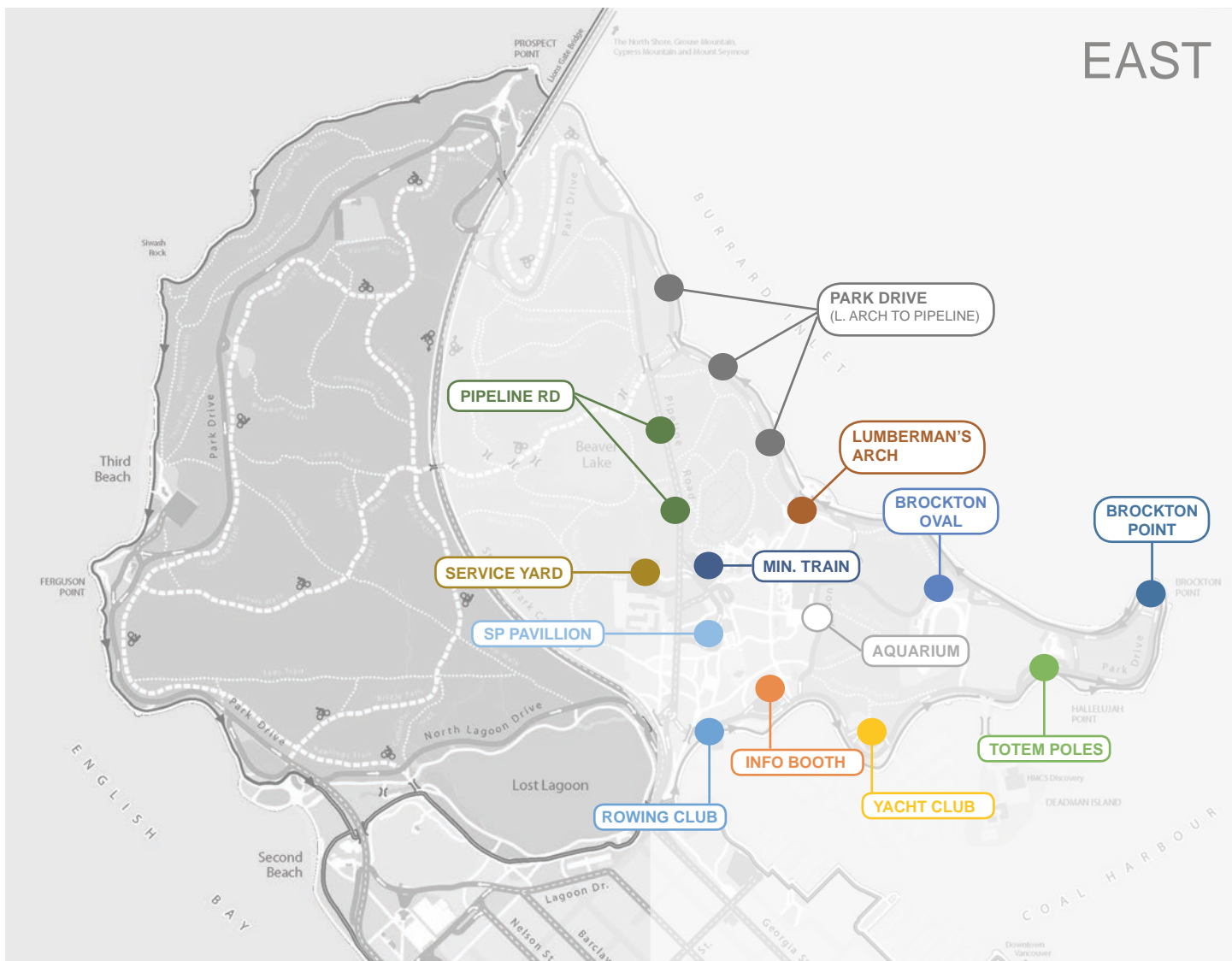
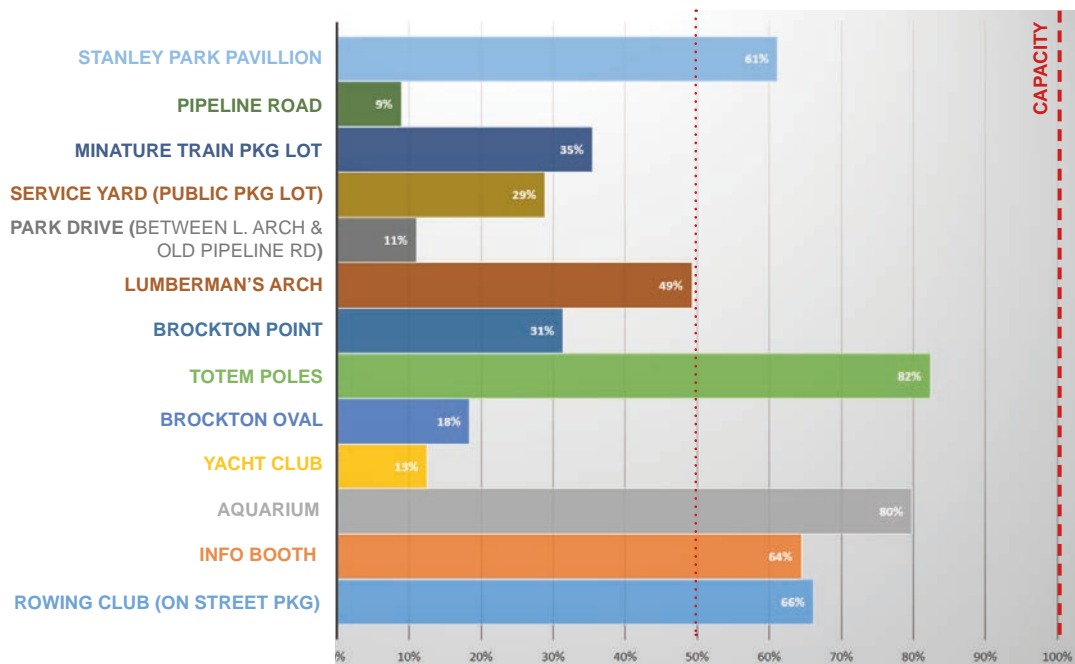
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Planning & Park Development Team
PB Communications

STANLEY PARK - PARKING OCCUPANCY BY LOT | EAST SIDE

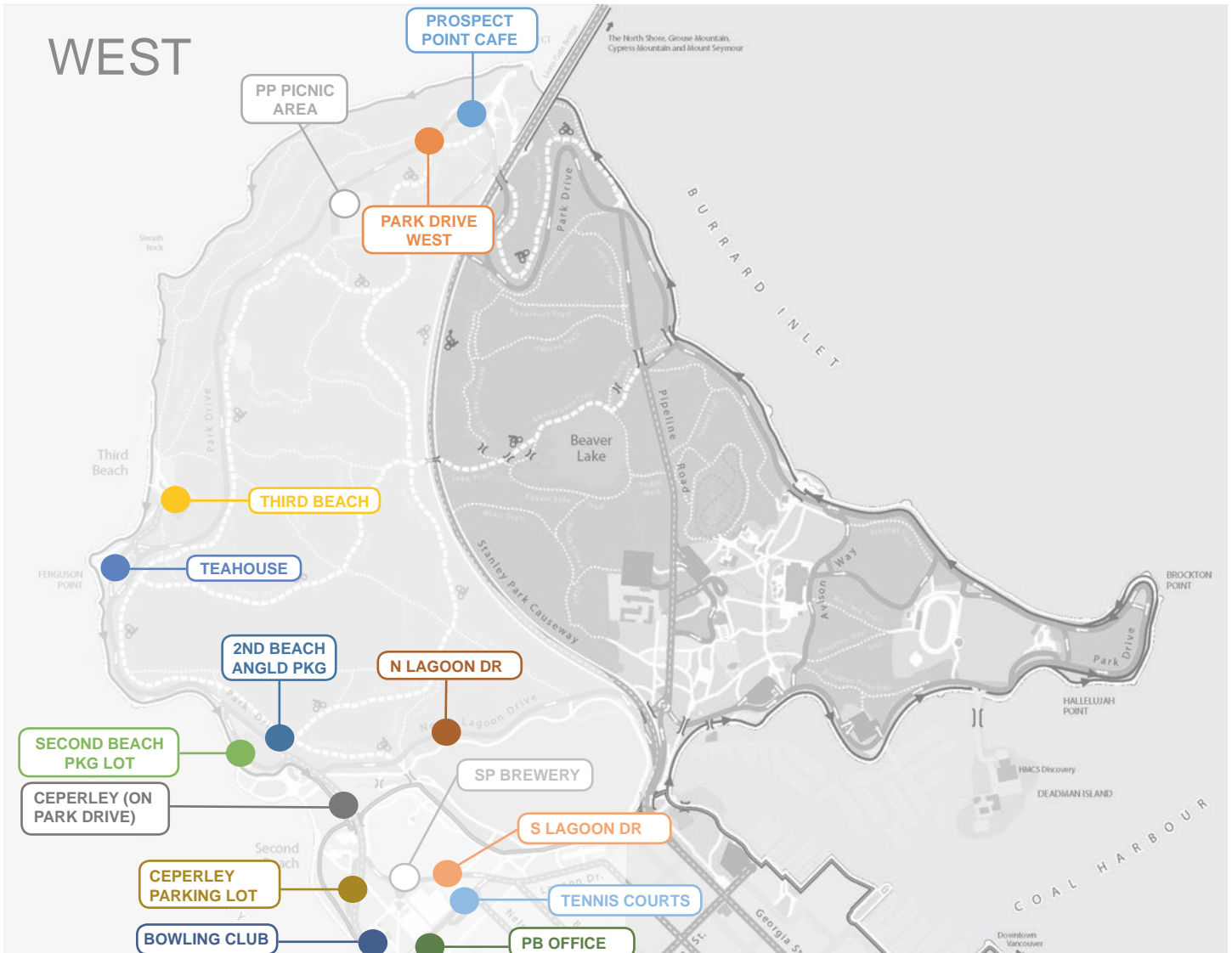
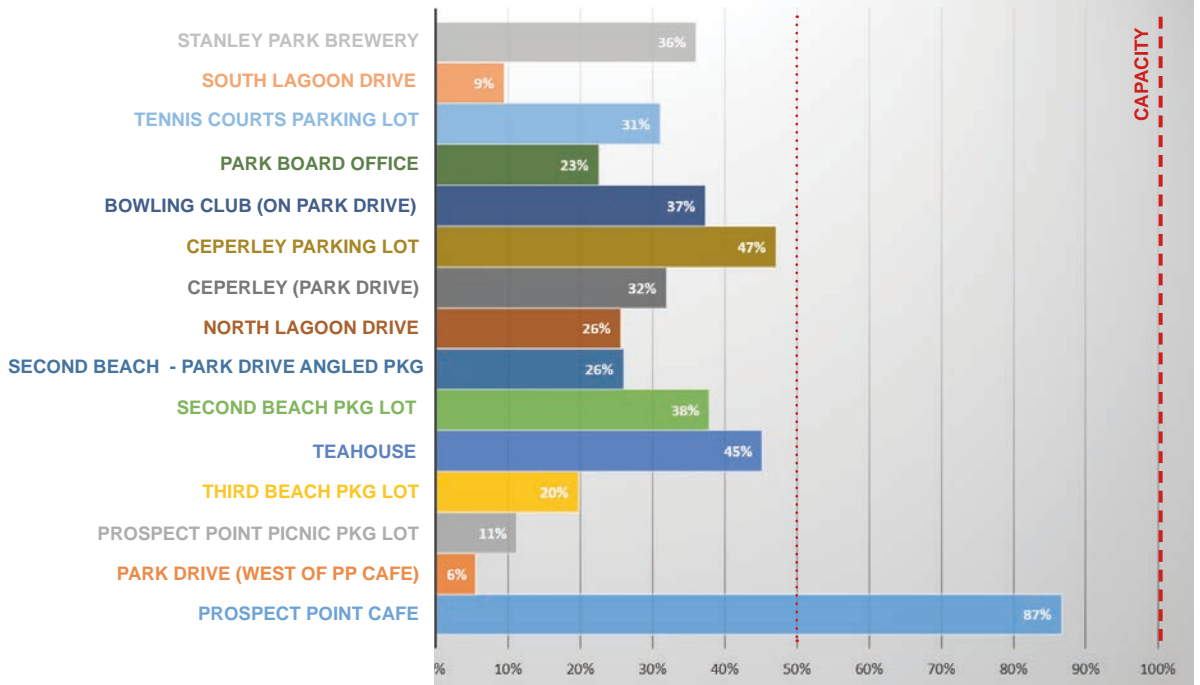
Average "daily peak" Occupancy (2017-2020)

The table to the right shows the average "daily peak" occupancy for 2020, 2019, 2018 and 2017. This represents the most occupied any lot was each day, which was then averaged over four years). Please note that parking zones can include either parking lots, on street parking or both (if associated with the same zone or amenity).



STANLEY PARK - PARKING OCCUPANCY BY LOT | WEST SIDE

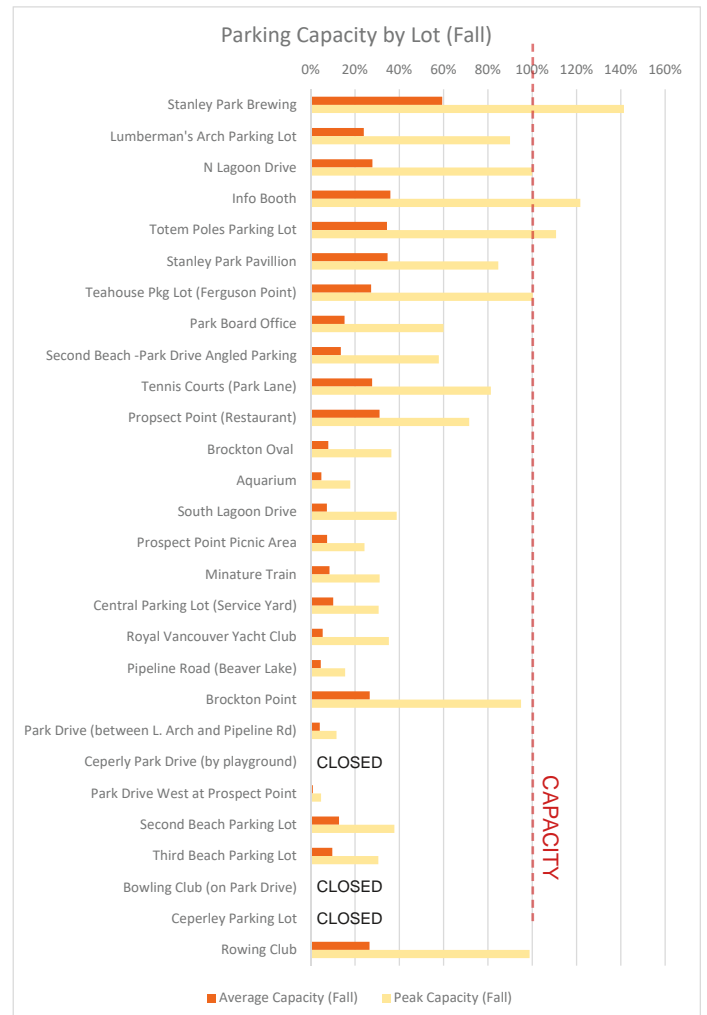
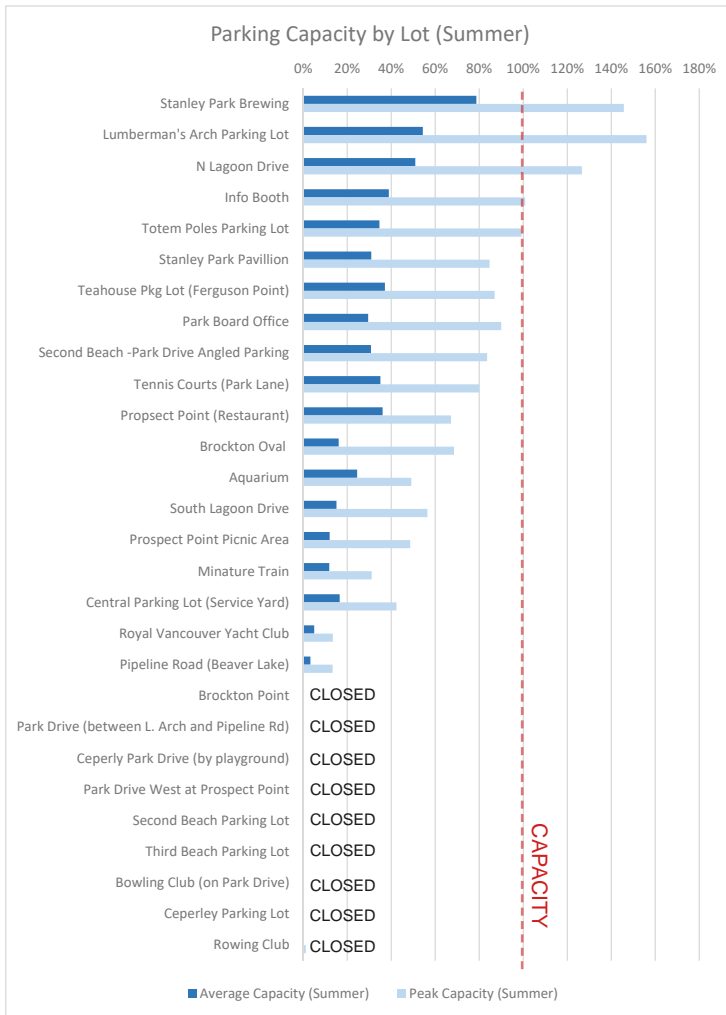
Average "daily peak" Occupancy (2017-2020)



STANLEY PARK - PARKING OCCUPANCY - June 22nd to December 31st, 2020

TMP INSTALLED - June 22nd to Sept. 25th

TMP INSTALLED - Sept. 25th to Dec. 31st



SUNSET BEACH PARK - PARKING OCCUPANCY BY LOT

Average “daily peak” Occupancy (2019)

