

Transportation Action Plan

2020 Results

28 October 2020

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1 Introduction

This report presents the results of the short-term and medium-term actions in Whistler's Transportation Action Plan, which were implemented in 2017 through 2020. Results from previous years are documented in the following reports:

- Transportation Action Plan 2019 Results, 30 December 2019.
- Transportation Action Plan 2018 Results, 31 December 2018.
- Transportation Action Plan Summer 2017 Results, 9 November 2017

1.1 Whistler Transportation Action Plan

The Whistler Transportation Action Plan 2018–2028 is the long-term transportation plan for the community, approved by the Resort Municipality of Whistler Council on 2 October 2018. The Transportation Action Plan identifies a range of priority transportation actions to be implemented in the short-, medium- and longer-term. The Action Plan was developed in response to increasing issues affecting transportation to, from and around Whistler. With an increasing permanent population and more visitors to Whistler, transportation is more of a challenge than ever, especially parking availability, traffic congestion and transit capacity. To identify the best strategies and actions to address these issues, Council reactivated the Transportation Advisory Group (TAG) in 2015 to provide advice and recommendations on the development of a Transportation Action Plan.

TAG is composed of a group of diverse stakeholders representing Tourism Whistler, the Whistler Chamber of Commerce, Whistler-Blackcomb, BC Transit, the Ministry of Transportation and Infrastructure, and four citizens-at-large, plus representatives of various municipal departments. These stakeholders worked together to develop a Transportation Action Plan that identified short, medium and long-term actions to address transportation issues. TAG initially focused on refining and prioritizing actions that could be implemented in 2017. The draft Action Plan was presented to Council in December 2016 and was followed by an extensive public engagement process in January and February 2017. The 2017 Transportation Action Plan was adopted by Council in June 2017, and the first phase of the Action Plan was implemented in summer 2017.

The Action Plan supports TAG's vision that Whistler's transportation system efficiently and affordably moves people and products to, from and within Whistler, while delivering a high-quality experience and minimizing impacts on natural areas. Recommended actions in the short-and medium-term plans are separated into five strategy areas:

- Highway 99 efficiencies, which include an accident investigation assessment, an intersection investigation, and a capacity review examining the potential for additional lanes, intersection upgrades, and other changes to improve capacity of the highway.
- Transit improvements, including increased transit service on key routes at key times, free transit on summer weekends and holiday Mondays, reduced monthly pass prices, a new Spirit

Transit Pass, and an expanded Family Travel Program. Parking revenues are used to offset the costs of transit improvements.

- Peak day operations plans to help control the flow of traffic into and out of municipal parking lots, and secure bicycle parking to encourage more trips by bicycle instead of by automobile.
- Better parking management, including actions to improve parking availability, and better information regarding parking.
- Preferred transportation modes are supported with actions to improve bicycle parking and Valley Trail linkages, encourage car-sharing and upgrade the Gateway bus loop.

Concurrently with the development of the Transportation Action Plan, a Short-Term Action Plan (2017) and a Medium-Term Action Plan (2018–2019) were developed and approved by RMOW Council. Further actions in 2020 and later years were under consideration at the time that the COVID-19 pandemic began in March 2020, and most summer 2020 actions were subsequently deferred. The Transportation Advisory Group (TAG) is currently reprioritizing medium and long-term transportation actions in consideration of COVID-19 recovery plans and the recently adopted Whistler Climate Action Plan Big Moves.

1.1.1 Summer 2017 Actions

The summer phase of the Action Plan was implemented on 1 July 2017. Improvements to transit service in summer 2017 included:

- Free transit operated on Saturdays, Sundays and holiday Mondays all summer, all day. This was a continuation of the successful pilot project in summer 2016 that operated on six Saturdays from the BC Day weekend to the Labour Day weekend.
- The frequency of transit service was increased on Routes 1 and 2 to provide 15-minute service from both the north and the south ends of Whistler.
- The price of the monthly transit pass was reduced by \$15 to \$50 per month, to match the new price of a monthly parking pass.
- The Family Travel Program was expanded to allow any fare paying adult to travel with up to three children aged 12 for free. Previously, the program was only available to adult pass holders.

More bicycle parking was available in the summer. Additional bicycle racks were installed in the Village, and a free secure bicycle valet parking service was provided in the Village on weekends.

Changes to parking prices and regulations in the Day Lots included:

- Pricing was introduced for parking in Lots 4 and 5 at \$5 per day, in effect for peak summer months from 1 July through 4 September 2017.
- The price in Lots 1, 2 and 3 was increased from \$8 to \$10 per day.
- New 1-month and 2-month parking passes were available for employees and residents to park in Lots 4 and 5, priced at \$30 per month.

- In Lots 1, 2 and 3, the price of the 1-month general parking pass was increased by \$20 to \$50 per month, to match the new reduced price of a monthly transit pass. The 3-month and 6-month parking passes that were sold previously were eliminated in summer 2017.
- Oversize vehicles such as RVs and vehicles with trailers were relocated to the eastern half of Lot 3, and a new price of \$20 per day was applied to oversize vehicles. Previously, there was not a higher rate for oversized vehicles regardless of how many parking stalls were occupied.
- Commercial buses that in previous summers had parked in Lot 4 were relocated out of the Day Lots to several locations near the Village. Removing the bus parking area that had a capacity of up to 10 buses created an additional 58 general purpose parking stalls in Lot 4.

Changes to parking prices and regulations in the Village included:

- The time limits for parking on Main Street, at Village Green, at the municipal hall and in the surface lot at the Conference Centre were reduced from 4 hours to 2 hours.
- The time limits at Gateway Loop, the Visitor Centre and on Sundial Crescent were reduced from 2 hours to 1 hour. The 10 parking stalls at the Gateway Loop were not available during winter 2017-18 as they were occupied by construction equipment and vehicles.
- Parking in municipal lots in the Village was free after 7:00 pm, two hours earlier than in previous years when pay parking was in effect until 9:00 pm.

1.1.2 Winter 2017-18 Actions

Action Plan initiatives implemented in summer 2017 were maintained in winter 2017-18, including changes to parking time limits and pricing. New actions included:

- A \$5 per day price for Lots 4 and 5 was in effect for the peak winter season from 15 December 2017 through 15 April 2018.
- An area of Lot 4 was designated for commercial bus parking, with capacity for up to 12 buses. Bus parking was priced at \$5 per hour to a maximum of \$25 per day.
- A carpool pass program was introduced for Lots 4 and 5, allowing passholders to register up to five vehicles per pass (only one of which could be parked at a time).
- A GIS-based web map identifying parking locations, hours and rates. The parking section of the Tourism Whistler app was also enhanced with additional information.
- A discounted Spirit Transit Pass was introduced as a benefit to people that completed the Chamber of Commerce's Whistler Experience customer service training program.

Significant changes were made to transit service in winter 2017-18. The bus route network was simplified, most noticeably with the former Valley Connector (route 1) separated into two routes north and south of the Village. Other routes were renamed and renumbered to better indicate the network structure and route destinations, and to prepare for future service expansions. The frequency of transit service was also increased during all time periods.

Active transportation options were supported by increased snow clearing on the Valley Trail, promoting the existing track set trail for cross-country skiing from Alpine Meadows to the Village, as well as a new online map indicating snow-cleared routes.

1.1.3 Summer 2018 Actions

The key Action Plan initiatives implemented in summer 2017 returned again in summer 2018, including peak season pay parking in Day Lots 4 and 5, free transit service on weekends and holiday Mondays, and a free bike valet service at the Farmers' Market and special events in the Village. For summer 2018 the summer peak season was defined as June 15 to September 15. New changes to parking pricing and regulations in summer 2018 included:

- Pay parking was introduced for the 25 spaces on Blackcomb Way in the Upper Village, and was priced the same as in the Village (\$1 for the first hour and \$2 for the second hour).
- Free parking was provided in the 13 stalls at Gateway Loop, with a 15-minute time limit.
- The capacity of the commercial bus parking area in Lot 4 was increased to 14 buses.

1.1.4 Winter 2018-19 Actions

Action Plan initiatives implemented in 2017 and 2018 were maintained in winter 2018-19, including changes to parking time limits and pricing. New actions included:

- A new Route 10 "Valley Express" service was introduced in December 2018, operating between Emerald Estates and Function Junction/Cheakamus Crossing with a scheduled travel time of 30 minutes. This pilot project is intended to better connect neighbourhoods north and south of the Village during peak periods by providing a one-seat trip with no need to transfer buses in the Village. Travel times are minimized as Route 10 does not detour into Whistler Village or Whistler Creekside but serves these areas with new bus stops along Highway 99.
- Carpool passes for Lots 4 and 5 could also be purchased on-line (in addition to purchasing in person at the Municipal Hall).
- Six stalls in Day Lot 4 were converted to Singing Pass Trail parking stalls where parking is permitted up to three days with a BC Parks reservation number.

1.1.5 Summer 2019 Actions

Summer 2019 continued the same initiatives as in the two previous summers, including peak season pay parking in Day Lots 4 and 5, free transit service on weekends and holiday Mondays, and a free bike valet service at the Farmers' Market and special events at Whistler Olympic Plaza in the Village. As in the previous year, the summer peak season was defined as 15 June to 15 September. New changes to parking pricing and regulations in summer 2019 included:

• The free bike valet service provided at evening concerts in Whistler Olympic Plaza was expanded to include Saturday daytime from 11 am to 6 pm. This meant that on seven Saturdays the service was available from 11 am through to 10 pm.

- Secure bicycle parking was available in an enclosure in the Library parking lot from 16 April through 16 October, with a capacity of 30 bicycles.
- The Route 10 Valley Express service continued through the spring/summer/fall transit season at a reduced service level.
- The free transit service on weekends and holiday Mondays ended on Labour Day (2 September) consistent with the last day of summer service on Route 8 Lost Lake Shuttle.
- Motorcycle parking areas were implemented in Day Lots 3 and 4, with the motorcycle parking price at half of the vehicle price (applicable in the motorcycle parking areas only).
- A dynamic parking availability sign was installed at the end of July at the entrance to the underground parking at the Whistler Conference Centre, indicating the number of available parking stalls.
- The number of parking stalls in the Conference Centre surface lot was increased when the lot was restriped, adding 6 additional general stalls and one additional accessible stall.
- The number of parking stalls in Day Lots 4 and 5 was reduced due to Transport Canada requirements for emergency helicopter landing areas associated with the Health Centre Heliport. Parking stalls on the north side of Lot 4 were closed, reducing the total capacity from 640 to 618 stalls. Most of the unpaved north part of Lot 5 was closed to parking, reducing the capacity of Lot 5 by approximately 115 vehicles.
- The company managing Smart Park technology ceased operation, and as a result on 15 June the municipality stopped accepting payments for parking in the Village using Smart Park meters.
- PayByPhone became available as a means of paying for parking in municipal lots in the Village in summer 2019.
- On-line purchase of carpool passes for Day Lots 4 and 5 was available beginning in June 2019.

1.1.6 Winter 2019-20 Actions

Action Plan initiatives implemented in 2017 through 2019 were maintained in winter 2019-20, including changes to parking time limits and pricing. New actions included:

- Service on the Route 10 Valley Express was increased with additional buses during the midday.
- A free bus pass was implemented for high school students, beginning with 500 students registered at Whistler Secondary School and the Waldorf School as of 6 January 2020.
- The price of the general parking pass for Day Lots 1–3 was increased from \$50 to \$60 as of 1 December 2019. In an effort to reduce the number of parking passes in use, sales of parking passes at ticket machines was discontinued as of 5 March 2020.
- A consistent rate of \$2 per hour was implemented in municipal parking lots in the Village, which means that the price for the first hour of parking increased from \$1 to \$2. This change was implemented on 1 February 2020.

• The time period for pay parking on Blackcomb Way was changed in December 2019 to begin at 8:00 am (from the previous 10:00 am) to be consistent with parking times in the Day Lots.

1.1.7 Summer 2020 Actions

Price increases for the Day Lots were planned to take effect on 15 June, but were postponed due to the COVID-19 pandemic. The planned new prices were \$12 per day in Lots 1, 2 and 3 (a \$2 increase) and \$6 per day in Lots 4 and 5 (a \$1 increase).

The additional revenue that would have been generated by these parking price increases was intended to fund expansion of the free weekend transit service and bike valet service to Fridays. These expansions of service were also postponed.

Service levels on the Route 10 Valley Express were increased in the spring, summer and fall to bring them closer to winter service levels.

Fourteen new dual-port, Level-2 EV charging stations were added in Day Lots 1, 2 and 4 and in the Conference Centre surface parking lot, and were operational on 10 September. These additional charging stations represent a six-fold increase in charging capacity at primary parking lots in the Village.

1.2 COVID-19 Pandemic

The first cases of COVID-19 emerged globally at the end of 2019, and the first case in BC was confirmed at the end of January 2020. By mid-March there were more than 60 new COVID-19 cases in BC, and the pandemic began having an effect in Whistler. Vail Resorts closed the Whistler-Blackcomb resort on 15 March. A provincial state of emergency was declared on 18 March, border closures were expanded to include the U.S. on 20 March, and domestic non-essential travel was discouraged on 25 March. The Resort Municipality of Whistler closed playgrounds, several parks and trails, and gathering areas in other parks on 22 March. The Province closed all provincial parks on 8 April.

Although all levels of government urged the public to stay home and only make essential trips, outdoor activity was still permitted in BC and some people continued to travel to Whistler. On 25 March, Whistler's mayor publicly asked people not to come to Whistler until further notice (officials in other Sea-to-Sky communities made similar statements).

Numbers of COVID-19 cases and hospitalizations declined through April, and on 6 May the Province announced the BC Restart Plan, describing a phased approach to mitigate the impacts of COVID-19. Phase 1 permitted essential travel only and required many businesses to close. Phase 2 began on 18 May, and allowed many businesses to reopen but continued the previous travel restrictions. Phase 3 began on 24 June, and permitted non-essential travel and tourism, as well as the reopening of schools.

The municipality reopened all parks and trails on 19 May. On 27 July, Garibaldi and Stawamus Chief Provincial Parks reopened with a free day pass reservation system through to 12 October (Joffre Lakes Provincial Park did not reopen in summer 2020).

Shortly after Phase 3 of the BC Restart Plan began, the Whistler-Blackcomb resort reopened on 29 June, including the gondolas and mountain bike park (the Peak Chair did not open in summer 2020). The Whistler Gondola operated to Labour Day (7 September). The Blackcomb Gondola, Creekside Gondola and Peak-to-Peak gondola operated daily through to 7 September and on weekends from 12 through 27 September. The Whistler Mountain Bike Park operated daily until 12 October.

Almost all events planned in Whistler in late winter and summer 2020 were cancelled, including:

- Provincial Luge Championships (was 18–19 March)
- Canadian Skeleton Championships (was 28 March)
- Whistler Cup (was 16–19 April)
- World Ski and Snowboard Festival (was 16–26 April)
- Whistler Canada Cup XCO (was 20 June)
- Children's Festival (was 10–12 July)
- Crankworx (was 5–16 August)
- GranFondo (was 12 September)

The Ironman and Wanderlust events had previously announced prior to the COVID-19 pandemic that they would not return to Whistler in 2020.

The timeline of transportation facilities and services in Whistler includes:

- From 20 March through 31 May transit was free within Whistler, with rear door boarding only. On 30 March the maximum bus capacity was reduced to 20 passengers.
- Winter transit service ended and spring/summer/fall base transit service began on 27 March, five days earlier than the planned 1 April date. Weekend extra buses were suspended on 15 March, and the annual Late Winter Extra service was suspended for 2020.
- On 1 June transit fares and front door boarding were reinstated, and the maximum bus capacity was increased to 40 passengers.
- From Canada Day (1 July) through to Labour Day (7 September) transit was free on weekends and holidays, and the free Lost Lake shuttle was in service. These free services were originally planned to begin on 19 June.
- Regional coach services to Whistler from Metro Vancouver and the Vancouver International Airport were significantly reduced through the summer, and some service such as Epic Rides and Skylinx suspended their scheduled services during April and May.

- Peak season parking rates in Day Lots 4 and 5 were originally planned to begin on 15 June, but were delayed to 1 July. They remained in effect through to 15 September.
- The free bike valet secure parking service was available in Olympic Plaza on Canada Day, Saturdays and Sundays from 1 July through 6 September. In previous years the bike valet was at the farmers' market on Sundays, but in summer 2020 the farmer's market relocated to the Squamish Lil'wat Cultural Centre, where there was not sufficient space for the bike valet.
- A free shuttle bus operated to Rainbow Park from the Village and Creekside on the BC Day long weekend from 1 through 3 August, and on the following weekend 8 and 9 August. Ridership declined significantly on the second weekend and as a result the shuttle bus service was discontinued.
- Passengers were encouraged to wear face coverings while riding transit during the spring and summer. On 24 August, BC Transit together with TransLink and other transportation agencies, mandated the use of face coverings on buses in Whistler and communities across the province.

1.3 Conditions 2016-2020

In considering the changes resulting from the Transportation Action Plan, it is useful to compare activity levels in 2020 with the previous four years when parking surveys were conducted (2016 through 2019) as well as years before then.

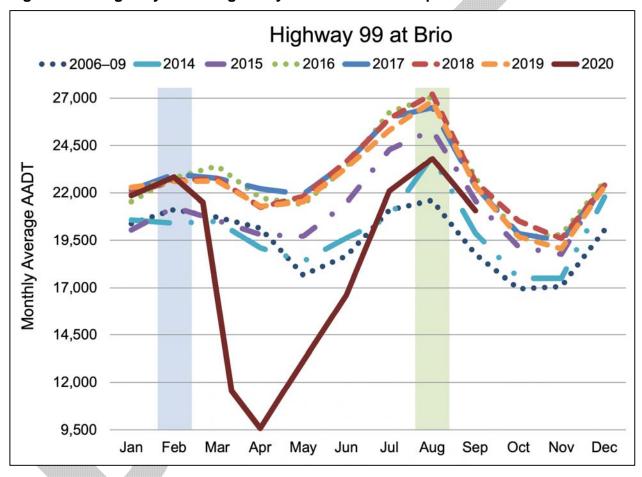
- In 2006 through 2009, average daily summer traffic volumes were only 3% higher than winter volumes. By 2019, the difference increased to 16% more traffic in the summer than the winter. Even during the summer shoulder months (June and September), traffic volumes are higher than during any of the winter months.
- Traffic volumes in summer 2020 were highest on the BC Day long weekend, averaging 25,550 vehicles per day Friday through Sunday. This amounts to 90% of the average 28,250 AADT on the BC Day long weekend the previous year.

Figure 1.1 illustrates average daily traffic volumes on Highway 99 at Brio, by month through to September 2020. February and August are the months when parking surveys are conducted, and are highlighted in Figure 1.1 in blue and green, respectively. Figure 1.2 provides a more detailed weekly chart of the increase in traffic volumes from the early days of the COVID-19 pandemic (the chart begins on 30 March) through the week beginning 5 October (ending 11 October). Significant changes in traffic patterns on Highway 99 include:

- Winter traffic volumes increased approximately 10% in 2016 as compared to previous years, but did not increase significantly since then, remaining consistent over the past five years. The average daily traffic volume was only 0.4% higher in February 2020 as compared with the February average for the previous four years
- Summer traffic volumes increased steadily from 2006 through to 2016, and remained consistent from 2016 through 2019. Traffic volumes decreased in March 2020 to less than 50% of previous years, but by summer 2020 volumes had rebounded to almost 90% of the average volumes in the previous four years.

- In 2006 through 2009, average daily summer traffic volumes were only 3% higher than winter volumes. By 2019, the difference increased to 16% more traffic in the summer than the winter. Even during the summer shoulder months (June and September), traffic volumes are higher than during any of the winter months.
- Traffic volumes in summer 2020 were highest on the BC Day long weekend, averaging 25,550 vehicles per day Friday through Sunday. This amounts to 90% of the average 28,250 AADT on the BC Day long weekend the previous year.

Figure 1.1 – Highway 99 average daily traffic at Brio to September 2020



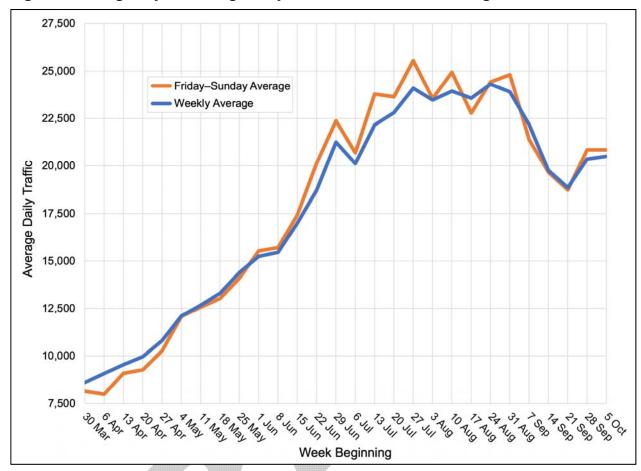


Figure 1.2 - Highway 99 average daily traffic at Brio, March through October 2020

Tourism Whistler reported that hotel occupancy levels in February 2020 were the same on weekends (when the parking surveys were undertaken) as in February 2019. The situation was much different in summer 2020 as a result of the COVID-19 pandemic. Hotel occupancy in July and August was less than two-thirds of the occupancy level in the previous year. Approximately 90% of visitor room nights from May through August were from BC, compared to 44% in the same months in 2019, reflecting the travel restrictions in effect during the pandemic.

These comparisons indicate that the winter months from November 2019 through mid-March 2020 were similar to winters in 2016 through 2019 in terms of activity, as measured by highway traffic and hotel occupancy. This means that for winter 2020, observed differences in parking, transit use and other transportation services over the past three years are likely due to the Transportation Action Plan rather than other external factors.

On the other hand, conditions in summer 2020 were much different than previous years. Although there was almost as much traffic as in previous years, travel restrictions due to the COVID-19 pandemic meant that most visitors were from BC. Consequently, it is not possible to assess the effects of the Transportation Action Plan on parking and other transportation facilities and services during summer 2020.

1.3.1 Transportation to Work

The Community Life Satisfaction Survey is conducted almost every year on behalf of the municipality, and monitors success at meeting goals that relate to community life, economic success and partnerships, the municipality's corporate plan as well as annual budgets. The survey was conducted in February 2020 prior to the COVID-19 pandemic.

One of the significant findings in 2020 is that permanent residents identified transportation as the second-most important issue facing their community that should receive the greatest attention from municipal leaders.

The majority of permanent residents (71%) and second homeowners (84%) indicated they were satisfied with local transit services, which represents a decrease from 79% and 87% respectively in 2019, but an increase from 2018 and 2017.

Figure 1.3 presents the findings of the 2017, 2018, 2019 and 2020 surveys regarding transportation modes that permanent residents use to travel to and from work (data are not available for 2016 as the Community Life Satisfaction Survey timing moved that year from October/November to January/February).

Results for 2020 show a continuing trend of increased driving alone to work, offset by reductions in some other modes, most notably carpooling, and to a lesser extent walking in the winter and cycling in the summer. It is important to recognize that data based on self-reported travel behaviour are not as reliable as observed data, and in this case observed data shows a consistent level of traffic and parking demand, and increased transit ridership over the same period.

Anecdotal reports from permanent residents that they are driving alone to work more often may be due in part to the success of the Transportation Action Plan. Improving parking availability has not only benefited visitors, but also residents, with the result that more permanent residents may perceive driving to work as an attractive option. Residents have also observed that the \$30 monthly price of a resident/employee parking pass is less expensive than a transit pass, and have reported driving for this reason. As discussed in Section 4, this "side effect" of the Action Plan can be remedied by adjusting the relative prices of parking (particularly monthly parking passes) and other transportation modes, so that transit and other modes are more attractive to residents commuting to work, and driving alone is less attractive.

Winter Months Vehicle drive alone Transit Vehicle multiple occupants 10% 7% Walk ■ 2020 Bicycle ■2019 ■2018 Work at home 2017 Other None 0% 10% 20% 30% 40% 50% 60% **Summer Months** Vehicle drive alone **Bicycle Transit** Walk **2020** Vehicle multiple occupants ■2019 ■2018 Work at home 2017 Other None 0% 10% 20% 30% 40% 50% 60%

Figure 1.3 – Transportation to/from work, 2017-20

Source: Community Life Satisfaction Survey, May 2020

2 Parking

This report presents the results of parking surveys undertaken in winter and summer 2020. These are compared to the results of similar parking surveys undertaken in 2016 through 2019 to identify changes in parking usage and patterns that can be attributed to the Transportation Action Plan.

2.1 Parking Data

Parking surveys were undertaken in public and private lots in Whistler Village. Limited counts of parked vehicles and buses were also undertaken at Whistler Creekside and during the winter in Lots 6, 7 and 8 at Base 2. These locations are illustrated in Figure 2.1.

Full Parking Surveys

---- Limited Parking Counts

ALTA LAKE

Village

Day Lots

1-5

(Village)

Day Lots

6-8

(Base 2)

Figure 2.1 – Parking survey locations, winter and summer 2020

The scope of the surveys was limited to publicly-accessible parking, which is parking that any member of the public can use on a casual, non-reserved basis. This includes:

- 383 to 396 parking spaces in municipal parking lots and street parking in the Village, in winter and summer respectively, including parking on Main Street, at the Conference Centre, library and other locations, and street parking on Blackcomb Way in the Upper Village.
- 1,485 to 1,538 parking stalls in Day Lots 1 through 5 in Whistler Village, in summer and winter respectively.
- 1,080 parking spaces in Day Lots 6 through 8 at Base 2 during the winter.
- 1,458 stalls in the Whistler Creekside parkade during the winter, and 882 stalls during the summer when levels P3 and P4 are closed.
- Motorcycle parking provided in the Conference Centre surface lot, and in Day Lots 3 and 4.
- Over 900 stalls in hotels and other private parking lots in Whistler Village that are open to the general public, plus 276 stalls in the parking lot at Marketplace, which is privately operated.

2.1.1 Parking Inventory

Table 2.1 provides a summary of all publicly accessible parking locations in Whistler Village, Base 2 and Whistler Creekside available during the winter and summer, including municipal parking lots and street parking, as well as private lots accessible to the general public. The last column of the table indicates the facilities where parking surveys were conducted. Notes regarding the numbers in Table 2.1 include:

- Eight stalls in the Conference Centre parking lot are blocked off during the winter due to a risk of falling snow from the Conference Centre roof and are not available for parking.
- Day Lots 6, 7 and 8 are not paved, and consequently the numbers of parking spaces indicated in Table 2.1 are estimated based on the area of each lot and observed parking patterns.
- The numbers of parking stalls in hotel lots that are available to the public varies depending on how the hotel allocates parking among general public parking and other uses such as guest parking, valet parking, employee parking and parking reserved for other uses.
- The Creekside parkade includes 1,279 all-day parking stalls on levels P1 through P4, plus 78 overheight stalls and 101 stalls for 15-minute, 1-hour and 2-hour parking on the top surface level. During the summer, parking in the parkade is available on levels P1 and P2 only (703 stalls plus surface stalls). Ten parking stalls designated for daycare drop-off and pick-up, and 10 stalls designated for taxi and bus parking are not included in the numbers in Table 2.1.

Table 2.1 – Inventory of publicly accessible parking, 2020

Location Lot Surface ground General Access Surveys				Under-	Parking	2020			
Conference Centre underground Gateway bus loop	Location	Lot	Surface	ground	General	Access	Surveys		
Gateway bus loop	Village	Conference Centre surface (w/s)	√		62/70	4	1		
Gateway visitors centre Village Green Village Green Village Green Village Green Village Centre Village		Conference Centre underground		✓	153	0	✓		
Gateway visitors centre Village Green Village Green Village Green Village Green Village Centre Village		Gateway bus loop	✓		13	0	✓		
Village Green V			1		6	1	✓		
Pan Pacific Village Centre Westin Pan Pacific Mountainside Valada			1		8	1	✓		
Pan Pacific Village Centre Westin Pan Pacific Mountainside Value Val		Sundial	1		4	2	✓		
Westin Pan Pacific Mountainside ✓ 110 793 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 ✓					246/254	8			
Westin Pan Pacific Mountainside ✓ 110 793 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 3 ✓ ✓ 78 ✓		Pan Pacific Village Centre		√	338		✓		
Village North Main Street ✓ 78 3 ✓ Morth Library Municipal hall ✓ 28 2 ✓ Marketplace Brewhouse Town Plaza ✓ 47 1 ✓ Day Lot 1 Day Lot 1 Day Lot 2 Day Lot 3 West Day Lot 3 West Day Lot 3 East (winter/summer) Day Lot 4 Day Lot 5 ✓ 107/73 0 ✓ Upper Village Glacier Lodge Le Chamois ✓ 16 ✓ ✓ 16 ✓ ✓ Base 2 Day Lot 6 (winter only) Day Lot 8 (winter only) Day Lot 8 (winter only) ✓ 380 ✓		_		√	345		✓		
Village North Main Street Library Municipal hall Ithray 28 Ithray 2 Ithray 3		Pan Pacific Mountainside		V	110				
North Library Municipal hall					793				
North Library Municipal hall	Village	Main Street	1	/ A	78	3	√		
Municipal hall	_	Library	Allk	1	17	2	✓		
Marketplace		•	1		28		✓		
Brewhouse						7			
Brewhouse		Marketplace	√		273	3	/		
Town Plaza				1		1	1		
Day Lots Day Lot 1				1		0	✓		
Day Lot 2 259 9 √ Day Lot 3 West √ 172 10 ✓ Day Lot 3 East (winter/summer)						4			
Day Lot 2 259 9 √ Day Lot 3 West √ 172 10 ✓ Day Lot 3 East (winter/summer)	Day Lots	Day Lot 1	/		205	5	1		
Day Lot 3 West			1			9	✓		
Day Lot 5						10	✓		
Day Lot 5			1		107/73	0	✓		
Day Lot 5			✓		618	6	1		
Upper Village Blackcomb Way s/o Chateau Glacier Lodge Le Chamois 25 0 16 16 133 0 133 0 15 133 0 15 15 15 16 16 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18		Annual management of the contract of the contr	✓		122	4	✓		
Upper Village Blackcomb Way s/o Chateau ✓ 25 0 ✓ Village Le Chamois ✓ 16 ✓ 92 ✓ Base 2 Day Lot 6 (winter only) ✓ 380 ✓ Day Lot 7 (winter only) ✓ 360 ✓ Day Lot 8 (winter only) ✓ 340 ✓ Creekside 15-min, 1-hour and 2-hours ✓ 98 3 ✓ Overheight ✓ 78 ✓ ✓ Levels P1-P4 (winter/summer) ✓ 1,269/693 10 ✓					1,483/1,449	34			
Village Glacier Lodge J 16 92 Le Chamois J 133 0 Base 2 Day Lot 6 (winter only) J 380 J Day Lot 7 (winter only) J 360 J Day Lot 8 (winter only) J 340 J Creekside 15-min, 1-hour and 2-hours J 98 3 Overheight J 78 J Levels P1-P4 (winter/summer) J 1,269/693 10 1,445/869 13	Upper	Blackcomb Way s/o Chateau	1			0	√		
Le Chamois Jean Section 2 Jean Section 3 Jean Sect				1					
Base 2 Day Lot 6 (winter only) ✓ 380 ✓ Day Lot 7 (winter only) ✓ 360 ✓ Day Lot 8 (winter only) ✓ 1,080/0 0 Creekside 15-min, 1-hour and 2-hours ✓ 98 3 Overheight 78 ✓ Levels P1-P4 (winter/summer) ✓ 1,269/693 10 1,445/869 13		I HOLDER		✓	92				
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1,445/869 13		_		1		10	/		
		(
	Totals (Winter/Summer) 5,715/4,003 + 66								

2.1.2 Parking Surveys

The parking demand and associated problems are not as severe in the winter as in the summer, and consequently parking surveys are undertaken every two years in the winter rather than every year as they are in the summer. Full parking surveys were undertaken in winter 2016 and 2018, and these were supplemented in winter 2019 with a small number of surveys in selected locations.

Full parking surveys were undertaken in February 2020 on three consecutive weekends, consistent with previous winter surveys:

- Saturday and Sunday 15 and 16 February, which is the Family Day long weekend in Canada and the Presidents Day long weekend in the U.S. While this is typically a peak weekend in terms of visitor numbers, it is only a "near-peak" weekend in terms of parking demand.
- Saturday and Sunday 22 and 23 February represent a "near-peak" weekend with parking demand higher than on the previous 17/18 February weekend but not as high as on the following weekend.
- Saturday 29 February and Sunday 1 March represent a peak weekend with the highest parking demand of the three survey weekends.

The ski season ended early in 2020 due to the COVID-19 pandemic, with the last day of winter skiing on Saturday 14 March rather than Sunday 19 April as originally planned. Additional parking surveys were undertaken in late June and early July to assess whether parking demand and activity levels had returned to normal:

- Saturday and Sunday 20 and 21 June (Fathers Day).
- Wednesday 1 July (Canada Day).
- Saturday and Sunday 4 and 5 July.

Full parking surveys were undertaken in summer 2020 on three weekends, consistent with the two survey weekends in previous summers, plus a third weekend in July to capture the effects of the COVID-19 pandemic in early summer:

- Saturday and Sunday 4 and 5 July.
- Saturday and Sunday 1 and 2 August, which is the BC Day long weekend and a peak weekend during the summer.
- Saturday and Sunday 29 and 30 August, the weekend prior to the Labour Day weekend.

For 2020, manual parking surveys were limited to occupancy surveys, in which counts were undertaken of the numbers of vehicles in parking lots were undertaken at regular intervals:

- In municipal parking lots in the Village, counts were undertaken every two hours from 10:00 am to 4:00 pm in winter, and from 11:00 am to 5:00 pm in summer.
- In Day Lots 1 to 5, counts were undertaken every two hours from 9:00 am to 5:00 pm in the winter, and from 10:00 am to 6:00 pm in the summer.

- On Blackcomb Way in the Upper Village, counts were undertaken every two hours from 9:00 am to 5:00 pm in the winter, and from 10:00 am to 6:00 pm in the summer.
- In private lots with publicly-accessible parking, counts were undertaken every four hours.

Duration surveys were not undertaken in 2020. These surveys involve recoding licence plate numbers at 30-minute or hourly intervals to determine the amount of time that vehicles are parked. Duration surveys undertaken form 2016 through 2019 showed little variation in results, and it was therefore expected that duration surveys would not show different results in 2020, and for that reason there would be no benefit in undertaking the surveys.

Data from the parking surveys was supplemented with data from the following sources:

- The municipality provided data regarding parking transactions in the Day Lots and municipal parking lots in the Village, plus numbers of monthly parking passes sold.
- Whistler-Blackcomb undertook daily counts of vehicles parked in the Creekside parkade, Lots 6, 7 and 8 at Base 2 (during winter), and Lots 1 through 5 in the Village.
- Occupancy data was recorded by the parking counter system in the Conference Centre underground parking.

2.2 Parking Availability

Availability is a key concept in any discussion of parking. Availability refers to the number or percentage of unoccupied parking stalls that are available at any given time for a motorist to park in. Parking surveys typically measure occupancy, which is the number or percentage of parking stalls in a facility that are occupied at any given time. It is preferable, however, to consider availability rather than occupancy, as availability is what motorists looking for parking experience, and the lack of availability is what generates complaints from the visitors, residents and businesses.

Ensuring adequate availability is the primary objective in managing parking facilities. The goal is to:

- Maximize the use of a valuable resource (parking) and maximize revenue.
- Maintain adequate availability of parking to attract visitors and customers, and positively affect their experience.
- Minimize or avoid negative impacts associated with parking, such as congestion and motorist frustration.

A general "rule of thumb" in the parking industry is that the optimum occupancy of a parking facility is 85%, which is equivalent to 15% availability. This is an appropriate target for street parking and shorter-term lots such as those in the Village. For parking lots where people park for longer periods of time, such as the Day Lots, the target occupancy can be as high as 90%, which is equivalent to 10% availability. In any case, when occupancy exceeds 90% (meaning availability is less than 10%) it indicates a problem and a need for action to improve availability.

The 10% and 15% availability targets recognize that at any given moment the availability in a specific parking lot could be higher or lower than 10% or 15%. Parking surveys are typically conducted at one-hour intervals (sometimes at 30-minute intervals, and sometimes every two or more hours). This means that if a parking survey at 1:00 pm measured 15% availability and the next survey at 2:00 pm measured 15% availability, even though the actual availability between 1:00 and 2:00 pm could have been lower than 15% at times, availability was likely adequate for much of the hour.

Over time, data collected from parking surveys and other sources will help staff and decision makers assess the suitability of the 10% and 15% availability targets to conditions in Whistler. For example, it might be that during the winter a 5% availability target is appropriate for the Day Lots, as most people park for the day to go skiing, while during the summer there is greater turnover in the Day Lots and the 10% availability target would remain the appropriate target.

The other question that can be answered over time is on how many days is it acceptable for availability during peak times to be less than target levels. Roads and other transportation facilities are typically designed to accommodate "near peak" demands rather than the worst day of the year, and the same approach can be used in managing parking. Staff and decision makers may consider it acceptable for parking availability to be less than the target level during special events, holidays and on long weekends, if there is adequate availability on other days.

2.3 Results Winter 2019-20

Figure 2.2 indicates daily parking revenues for municipal parking lots in the Village and the Day Lots on weekends and holidays during the ski season from 28 November 2019 through 14 March 2020. Days on which parking surveys were undertaken are indicated in Figure 2.2 with light blue columns and asterisks. Parking revenues on the first survey weekend (the Family Day/Presidents Day long weekend) were higher than any other weekend during the winter. It is important to note that there is no direct correlation between daily parking revenues and daily parking demand, as parking passes are not reflected in daily revenues, yet they account for a significant proportion of parking activity (as discussed in detail later in this section).

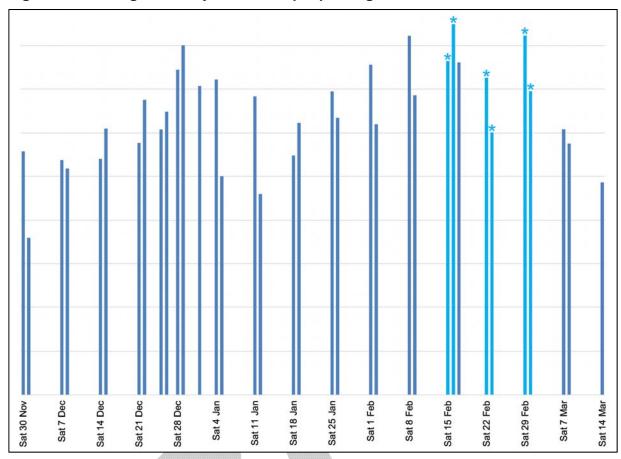


Figure 2.2 – Village and Day Lot municipal parking revenue, winter 2019-20

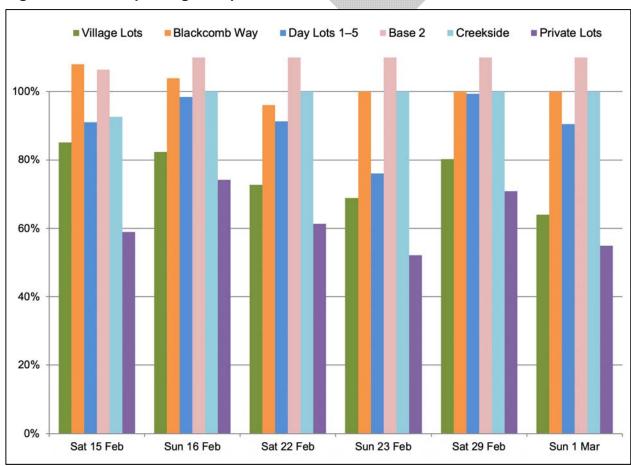
Table 2.2 and Figure 2.3 summarize peak parking occupancies on the six survey days during February and March 2020. Significant results include:

- The overall peak parking occupancy in municipal lots in the Village (surface and underground) was at or below the 85% target on all six survey days.
- The parking on Blackcomb Way in the Upper Village was fully occupied on five of the six survey days, with more than 25 vehicles observed on two days.
- In Day Lots 1 through 5, the overall peak parking occupancy exceeded the 90% target on five of the six survey days, reaching 98% and 99% on two days.
- Day Lots 6, 7 and 8 at Base 2 were full on all the six survey days. While the results suggest the Base 2 lots were more than 100% occupied, these figures are calculated using the nominal capacity for each lot. Because the lots are unpaved and the capacity of each lot depends on how vehicles are parked, on peak days when vehicles are parked close together it is possible to fit more vehicles in each lot than 100% of the nominal capacity.
- Day parking at Creekside (levels P1 through P4 plus overheight parking on the top level) was full on five of the six survey days, and exceeded the 90% target on the remaining day.
- Private lots have limited capacity on all days.

Table 2.2 – Peak parking occupancies, winter 2020

		Sat	Sun	Sat	Sun	Sat	Sun	
	Capacity	15 Feb	16 Feb	22 Feb	23 Feb	29 Feb	1 Mar	
Village*								
 Main Street 	78	90%	90%	85%	68%	76%	74%	
 Conf Centre** 	215	84%	86%	84%	74%	90%	65%	
 Other Village 	76	88%	75%	63%	54%	71%	63%	
All Village*	369	85%	82%	73%	69%	80%	64%	
Blackcomb Way	25	108%	104%	96%	100%	100%	100%	
Day Lots 1–5*	1,483	91%	98%	91%	76%	99%	90%	
Base 2 Lots 6–8	1,080	106%	115%	118%	116%	114%	114%	
Creekside	1,445	93%	100%	100%	100%	100%	100%	
Private lots	1,095	59%	74%	61%	52%	71%	55%	
* Excludes accessible	* Excludes accessible parking stalls ** Surface and underground parking							

Figure 2.3 – Peak parking occupancies, winter 2020



2.3.1 Day Lot Results

There were 1,483 parking spaces available in the Day Lots in Whistler Village (Lots 1 through 5) during winter 2019-20. Figure 2.4 provides a comparison of peak parking occupancies in the Day Lots in winter 2020 compared to winters in 2016, 2018 and 2019. This winter, the maximum occupancy of the Day Lots exceeded the target 90% on five of the six survey days, reaching almost 100% peak occupancy on two days. In comparison, the 90% target was not exceeded in winter 2019, and was only slightly exceeded on one day in winter 2018. The 90% target was exceeded on one of three days in winter 2016, prior to the implementation of the Transportation Action plan, when the maximum occupancy reached 107%.

These results indicate that the improvements in availability in the Day Lots that were achieved in winters 2018 and 2019 as a result of the Transportation Action Plan did not continue in winter 2020. Peak occupancy in the day lots substantially exceeded the 90% target for the first time since the Transportation Action Plan was implemented.

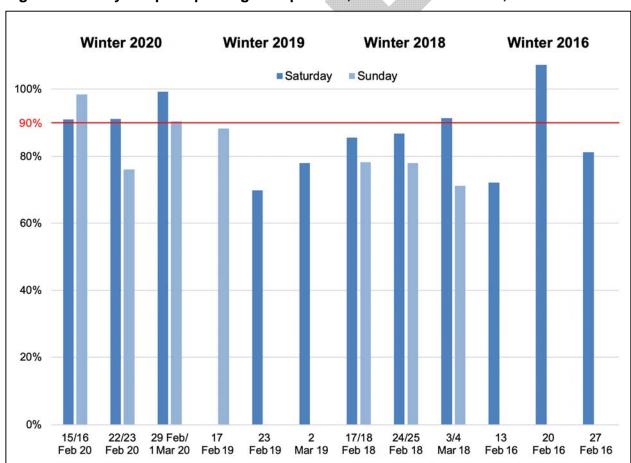


Figure 2.4 - Day Lot peak parking occupancies, winter 2020 vs. 2019, 2018 and 2016

Table 2.3 compares average peak occupancies for winter 2019-20 and the previous winters when parking surveys were undertaken. The overall parking occupancy increased from 56% in winter 2015-16 to 72% in winter 2019-20. Figure 2.5 illustrates average peak occupancies in the Day Lots for winter 2019-20. These percentages are calculated as the average of the observed peak occupancies in each lot on each day over the ski season (28 November 2019 through 14 March 2020).

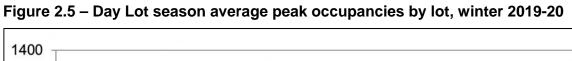
One of the objectives in the Transportation Action Plan was to make better use of existing parking facilities by shifting the demand for the most convenient parking from Day Lots 1 through 5 in the Village to the Day Lots at Base 2 and the parkade at Whistler Creekside. The results in Table 2.3 indicate that in previous winters (2018 and 2019) this was successful, but in winter 2020 an overall increase in parking activity negated these changes:

- Lot 1 averaged 96% occupancy, exceeding the target 90% occupancy over the winter season for the first time.
- Lot 4 averaged 80% occupancy in 2016 when parking was free. Occupancy dropped to 53% after pay parking was introduced, and has steadily increased to 69% in winter 2020.
- Lot 6 at Base 2 averaged 73% occupancy in 2016, and has increased to 100% in winter 2020.
- Creekside averaged 56% occupancy in 2016, increasing to 72% in winter 2020.

Lots 1 through 3 continued to be well-used, with significantly higher average occupancies in 2020 than in 2016. As discussed below, this is the result of a high number of general parking passes in use in winter 2019-20.

Table 2.3 – Day Lot season average peak occupancies, winter 2019-20 vs. 2015–2019

			Average Peak Occupancies					
Lot		Capacity* Winter 2020	Winter 2020	Winter 2019	Winter 2018	Winter 2016		
Village	Lot 1	210 vehicles	96%	89%	86%	83%		
	Lot 2	268	81%	80%	74%	64%		
	Lot 3 E/W	289	57%	34%	37%	24%		
	Lot 4	624	69%	53%	53%	80%		
	Lot 5	126	59%	31%	29%	48%		
	Subtotal	1,517	72%	56%	54%	61%		
Base 2	Lot 6	380	100%	99%	93%	73%		
	Lot 7	360	82%	76%	76%	56%		
	Lot 8	340	59%	59%	47%	34%		
	Subtotal	1,080	89%	82%	79%	56%		
Creekside**		1,357	68%	63%	58%	52%		
All Lots		3,954 vehicles	72%	63%	62%	56%		



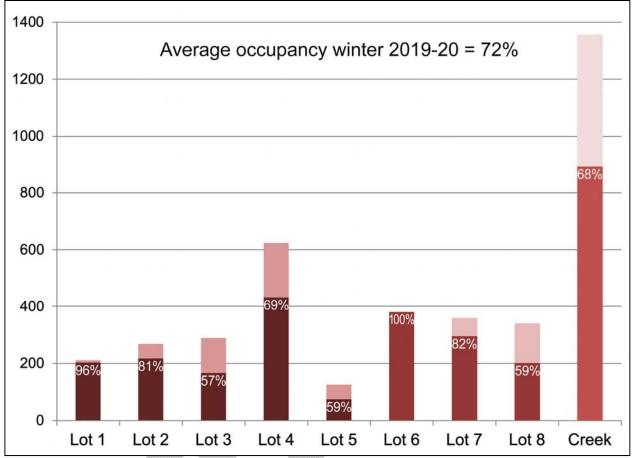




Figure 2.6 illustrates average peak occupancies in the Day Lots (including Base 2 and Creekside) by day of the week for winter 2019-20. The weekday average occupancy was 66%, and the weekend average occupancy was 88%.

Figure 2.6 – Day Lot season average peak occupancies by day, winter 2019-20

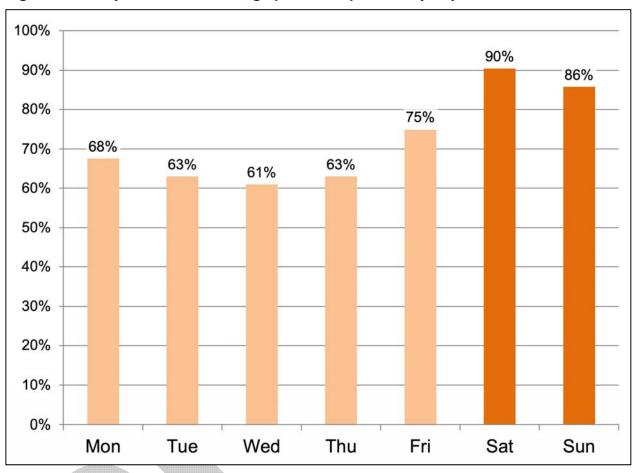


Figure 2.7 illustrates peak parking occupancies in the Village Day Lots on the six survey days in winter 2020. Significant results include:

- Occupancies consistently exceeded the 90% target in Day Lots 1, 2 and 3. A key reason for this is the number of general parking passes that were sold during winter months (discussed in detail below).
- Occupancy only exceeded the 90% target on some days in Day Lots 4 and 5, and was well below 90% on other days.



Figure 2.7 – Day Lots 1–5 peak parking occupancy by lot, winter 2020

One of the factors affecting occupancy in the Day Lots is the numbers of parking passes in use, which are summarized in Table 2.4. A general parking pass is priced at \$60 per month and is valid in all Day Lots (and is the only pass valid in Lots 1, 2 and 3). A pass for employees and residents to park in Lots 4 and 5 is priced at \$30 per month.

Table 2.5 summarizes pass sales for the past three winters. A significant number of general parking passes are purchased during winter months, up to 620 passes in December 2019 (although this is a reduction from December 2018, likely as a result of the increase in the pass price from \$50 to \$60, it is greater than in December 2017). There are only 743 parking stalls in Lots 1, 2 and 3, and

with more than 500 passes in circulation in February when the parking surveys were conducted it is not surprising that peak occupancies in Lots 1, 2 and 3 were 100%, as illustrated in Figure 2.7.

A parking pass creates an incentive that is counter to the municipality's objective of shifting trips to other modes. For someone who drives to work five days a week and purchases a \$60 pass, the average daily cost of parking is only \$3, less than a third of the day rate for parking in Lots 1, 2 and 3. If they also ski one day a week, the price drops to \$2.50 per day. More importantly, once someone has bought a parking pass they are incentivized to drive and park as much as possible to get their money's worth, and are less likely to consider transit or other modes.

Table 2.4 – Parking passes sold in winter 2019-20

	Lots 1–3	Lots 4–5		
	General		Employees/	
	Parking	Carpool	Residents	Totals
	743 stalls	740 :	stalls	1,483 stalls
November	279	7		279
December	620	40	538	1,198
January	565	46	490	1,101
February	536	42	540	1,118
March	104	4	109	217
Totals	2,104	139	1,677	3,913
Avg. Dec-Feb	573/mo	43/mo	523/mo	1,139/mo

Table 2.5 – Winter parking pass sales, 2017 to 2020

	Lots 1–3			Lots 4–5				
	2019-20	2018-19	2017-18	2019-20	2018-19	2017-18		
December	620*	704	578	578	595	344		
January	565*	760	523	536	529	560		
February	536*	560	451	582	450	399		
* New rate of \$60/month								

2.3.2 Village Results

This section presents the results of surveys of the parking lots and street parking in the Village operated by the municipality.

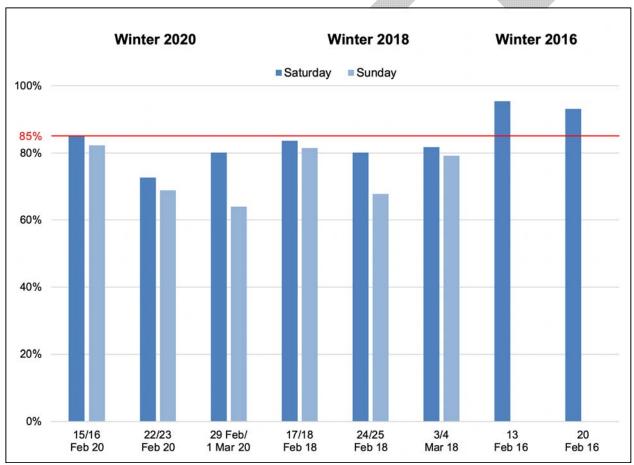
2.3.2.1 Municipal Parking in the Village

There was a total of 369 parking stalls available in municipal lots and street parking in the Village during winter 2019-20 (excluding accessible parking). This includes underground parking at the Conference Centre and Library, but does not include parking at Marketplace, which is privately-operated. It also does not include the 25 parking stalls on Blackcomb Way in the Upper Village.

Figure 2.8 provides a comparison of peak parking occupancies in the Village in winter 2020 compared to the previous two years when parking surveys were undertaken. In winter 2020 the maximum occupancy of Village parking lots did not exceed the target 85% on any of the six survey days. This is comparable to the results for winter 2018, when parking occupancies also did not exceed the 85% target. In comparison, occupancies reached 93% and 95% in winter 2019. These results demonstrate that the Transportation Action Plan has had the desired effects on parking demand in the Village, and has successfully achieved the parking availability target.

Figure 2.9 illustrates parking occupancies in the Village by time of day. Only on one day (the Saturday of the Family Day/Presidents Day long weekend) did the parking occupancy slightly exceed the 85% target, and then only for one hour. At all times and on all days it would not have been difficult for a motorist to find available parking in the Village.

Figure 2.8 - Village peak parking occupancies, winter 2020 vs. 2018 and 2016



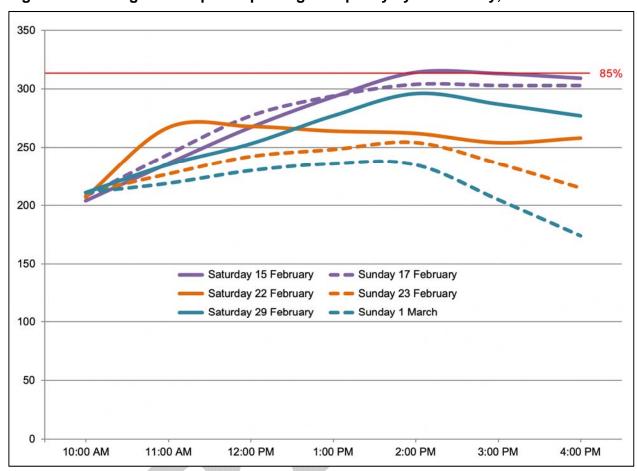


Figure 2.9 - Village municipal lot parking occupancy by time of day, winter 2020

A parking counting system was installed in the Conference Centre underground parking in summer 2019, displaying the number of available parking stalls. The system incorporates a vehicle counter on the ramp between levels P1 and P2, and a second counter on the ramp between level P3 and the bottom level P4, which is reserved for monthly passes. The system counts and displays the total number of vehicles parked on levels P2 and P3, and separately counts vehicles parked on level P4. Although parking stalls on level P1 are not counted, at times when there are few parking stalls available on levels P2 and P3 there are likely few or no stalls available on level P1, and therefore there is no need to include them in the displayed count of available stalls. Not counting level P1 simplifies the equipment requirements and reduces the potential for miscalculations.

Figure 2.10 illustrates average occupancies from 9:00 am to 9:00 pm each day over the winter season from 28 November 2019 to 14 March 2020. The total capacity of levels P2 and P3 is 66 vehicles, and the capacity of level P4 is 50 vehicles. The green, yellow and red colours indicate days when the average occupancy was less than 50% occupied (green), 50% to 80% occupied (yellow) or over the target 85% occupancy (red).

Level P2+P3 General Parking 66 60 Average Occupied Parking Stalls 9am - 9pm 55 50 45 40 35 30 25 20 15 10 5 0 Thu 28 Nov Sat 30 Nov Sat 7 Mar Sat 7 Dec Sat 14 Dec Sat 28 Dec Sat 15 Feb Sat 22 Feb Sat 29 Feb Sat 21 Dec Sat 4 Jan Sat 11 Jan Sat 18 Jan Sat 25 Jan Sat 1 Feb Sat 8 Feb Sat 14 Mar ■50%-80% Occupancy ■< 50% Occupancy Level P4 Monthly Passes Average Occupied Parking Stalls 9am - 9pm 50 45 40 35 30 25 20 15 10 5 Thu 28 Nov Sat 30 Nov Sat 8 Feb Sat 21 Dec Sat 18 Jan Sat 25 Jan Sat 1 Feb Sat 15 Feb Sat 22 Feb Sat 29 Feb Sat 7 Dec Sat 14 Dec Sat 28 Dec Sat 11 Jan Sat 14 Mar Sat 4 Jan

Yellow = 50%-85% occupancy

Figure 2.10 – Conference Centre underground parking occupancy, winter 2019-20

Green < 50% occupancy

Red > 85% occupancy

Key results regarding underground parking at the Conference Centre include:

- The average occupancy on levels P2 and P3 (general parking) was 58%. The average occupancy on level P4 (monthly passes) was 53%.
- The occupancy on levels P2 and P3 (general parking) exceeded the 85% target 27% of the time, whereas the occupancy on level P4 (monthly passes) only exceeded the 85% target 2% of the time.
- Parking demand on levels P2 and P3 (general parking) was highest on Saturdays when occupancies exceed 85% for the majority of the day.

The imbalance between occupancies on levels P2 and P3 and level P4 suggests that reserving level P4 for monthly passes results in under-utilization of the 50 parking stalls on the bottom level. The municipality should consider opening part of level P4 to general parking, or could consider eliminating parking passes for the Conference Centre.

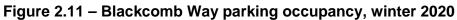
2.3.2.2 Street Parking on Blackcomb Way

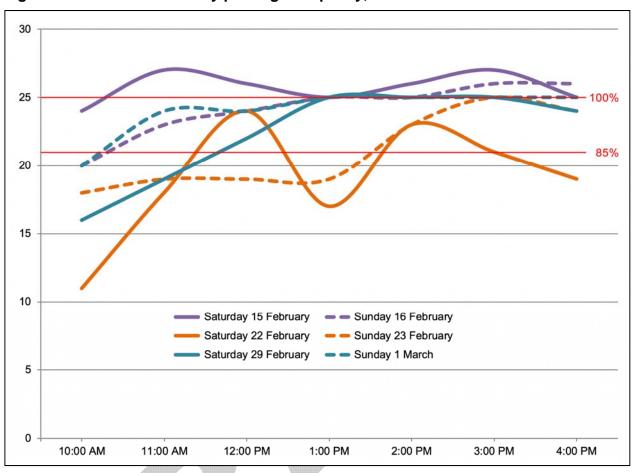
There are 25 parking spaces on Blackcomb Way in the Upper Village, on the west (southbound) side of the road across from the Glacier Lodge and Le Chamois hotels. Parking on Blackcomb Way is limited to two hours, and is priced at \$2 per hour, the same as in the Village.

Parking occupancy on Blackcomb Way is illustrated in Figure 2.11. By late morning the occupancy had exceeded the 85% target on all survey days. The maximum occupancy was 108% on the Saturday of the long weekend and 104% on the Sunday, when there was a maximum of 27 and 26 vehicles parked on Blackcomb Way, respectively (additional vehicles typically park beyond the ends of the 2-hour zone in an area signed as "no parking").

These high occupancies are in part due to vehicles parked for more than the two-hour limit. Last winter almost one-fifth of vehicles were parked overtime beyond the 2-hour time limit, with an average duration for overtime parkers of 3 hours and 51 minutes, and a maximum of 7 hours (parking duration data were not collected this winter).







2.3.2.3 Private Lots in the Village

Approximately 1,100 parking stalls were surveyed in private parking lots with publicly-accessible parking:

- Hotels Pan Pacific Village Centre/Peak Lodge and Westin (683 stalls total).
- The Brewhouse lot (48 stalls).
- The Town Plaza lot (92 stalls).
- Marketplace parking lot (276 stalls)

Prices in most private parking lots are significantly higher than in municipal parking lots, up to \$4.25 per hour and up to \$42.50 for 24 hours. The exception is the Pan Pacific Village Centre/Peak Lodge lot where parking costs \$11 per 12-hour day, which is only \$1.00 more than Day Lots 1 through 3, and \$6 more than Lots 4 and 5. Parking at Marketplace is limited to two hours, and is free for the first hour and \$3.00 for the second hour.

Significant results of the parking surveys regarding private parking lots include:

- Daytime parking occupancies in hotels ranged from 46% to 83%.
- Maximum occupancies in the Town Plaza lot ranged from 40% to 91%, and in the Brewhouse lot it ranged from 21% to 91%. Not only is parking in both these lots more expensive than in municipal lots, the lots are not well signed nor prominently identified, and as a result they may be overlooked by many motorists.



2.4 Results Summer 2020

Figure 2.12 indicates daily parking revenues for municipal parking lots in the Village and the Day Lots on weekends and holidays during the summer from 1 July through 15 September 2020 (the time period when pay parking was in effect in Day Lots 4 and 5). Days on which parking surveys were undertaken are indicated in Figure 2.9 with dark green columns. One of the survey days was the Sunday of the BC Day long weekend, when parking revenues were the second highest day during the summer (only the Sunday of the Labour Day weekend was higher). It is important to note that there is no direct correlation between daily parking revenues and daily parking demand, as parking passes are not reflected in daily revenues, yet they account for a significant proportion of parking activity (as discussed in detail later in this section).

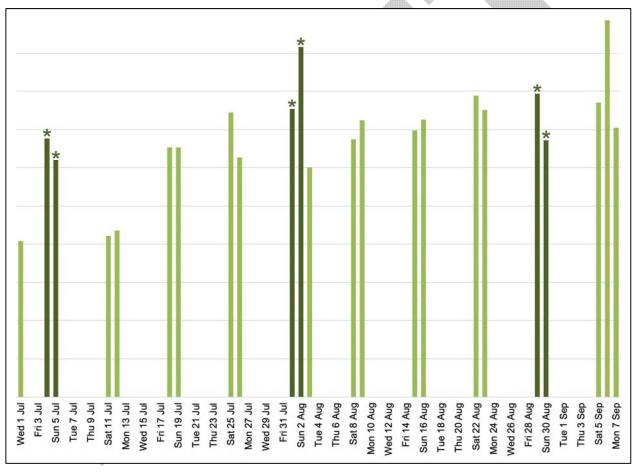


Figure 2.12: Village and Day Lot municipal parking revenue, summer 2020

Table 2.6 and Figure 2.13 summarize peak parking occupancies on the six survey days during summer 2020. Significant results include:

- The overall peak parking occupancy in the Village did not exceed the 85% target on any of the survey days.
- In Day Lots 1 through 5, the overall peak parking occupancy only exceeded the 90% target on one of the six survey days, the Sunday of the BC Day long weekend (2 August).
- The peak parking occupancy on Blackcomb Way in the Upper Village exceeded the 85% target on all of the six survey days.
- Day parking at Creekside (levels P1 and P2 plus overheight parking on the top level) reached a maximum of 18% occupancy on the survey days.
- Private lots were only partially full, with peak occupancies ranging from 37% to 60% overall.

Table 2.6 – Peak parking occupancies, summer 2020

	Annual						
	Capacity	Sat 4 Jul	Sun 5Jul	Sat 1 Aug	Sun 2 Aug	Sat 29 Aug	Sun 30 Aug
Village*							
 Main Street 	78	76%	76%	77%	88%	86%	92%
 Conf Centre** 	223	65%	50%	70%	75%	72%	52%
 Other Village 	76	55%	49%	50%	63%	61%	58%
All Village*	377	64%	52%	67%	74%	66%	59%
Blackcomb Way	25	100%	100%	88%	100%	96%	100%
Day Lots 1–5*	1,449	79%	70%	72%	98%	87%	75%
Creekside	869	n/a	n/a	14%	13%	18%	15%
Private lots	1,095	52%	45%	37%	60%	60%	46%
* Excludes accessible parking stalls **Surface and underground parking							

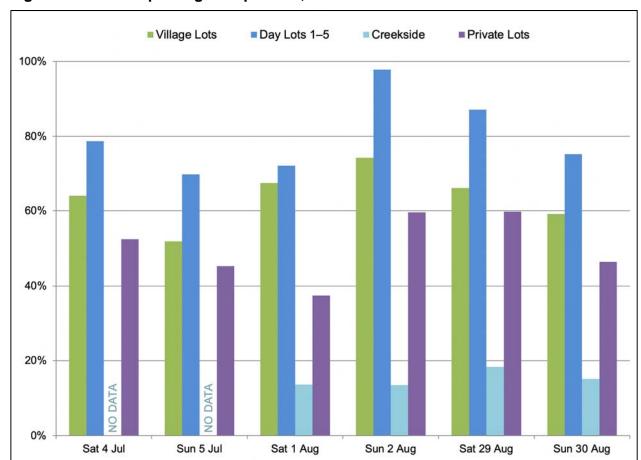


Figure 2.13 – Peak parking occupancies, summer 2020

2.4.1 Day Lot Results

There was a total of 1,480 parking spaces available in the Day Lots in the Village (Lots 1 through 5) during summer 2020. Figure 2.14 provides a comparison of peak parking occupancies in the Day Lots in summer 2020 compared to the three previous summers. In summer 2020, parking occupancies were lower than in any of the previous four years. The peak parking occupancy exceeded the 90% target on only one day, the Sunday of the BC Day long weekend. In contrast, in summer 2019 the maximum occupancy of the Day Lots exceeded the 100% on all survey days. Although the COVID-19 pandemic suppressed parking demand this summer, it can be expected that without additional actions, the parking demand will return to 2019 levels when the pandemic ends, and will exceed the 90% target on summer weekends.



Figure 2.14 – Day Lot peak parking occupancies, summer 2020 vs. 2016–2019

Figure 2.15 illustrates peak parking occupancies in Day Lots 1 through 5 on the six survey days in summer 2020. Lot 3 appears to have the highest occupancy, and this is due to the small numbers of RVs in Lot 3 East, which resulted in two automobiles parked in each of the remaining double-length RV parking stalls, thereby increasing the calculated occupancy of Lot 3.

As in previous summers, Lots 1 through 3 were full or nearly full all days but there was still parking available in Lots 4 and 5, even though the price in Lots 4 and 5 is half the price in Lots 1 through 3. This imbalance in the parking demand can be attributed to the large number of parking passes sold for Lots 1 through 3. This summer, as discussed later in this section, the number of passes sold for Lots 1 through 3 was less than in previous years, but the number of passes was sold for Lots 4 and 5 remained high.

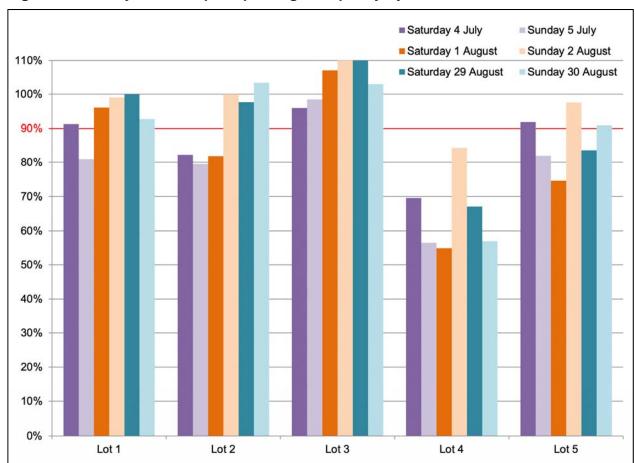


Figure 2.15 – Day Lots 1–5 peak parking occupancy by lot, summer 2020

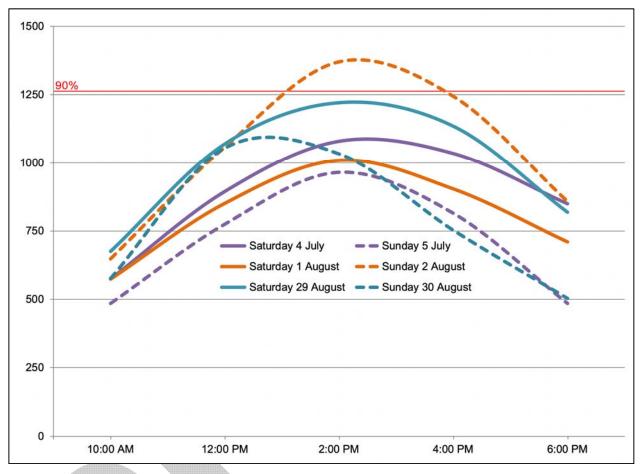
Figure 2.16 illustrates occupancies in the Day Lots by time of day. The significant difference in summer 2020 as compared with previous summers is that there were fewer vehicles in the Day Lots at the beginning and ends of the day. Figure 2.17 compares the total numbers of vehicles in Lots 1 through 5 on the BC Day long weekend. On Sunday 2 August 2020, although the peak occupancy reached 98% at midday, it was only 46% at 10 am and had decreased to 63% at 6 pm. On the same Sunday in 2019, the occupancy was 86% at 10 am and 84% at 6 pm. This indicates that many people parking in the Day Lots this summer arrived later and did not remain in the Village in the evenings, and likely reflects a higher proportion of day visitors in summer 2020.

Figure 2.18 and Figure 2.19 illustrate average peak occupancies in Day Lots 1 through 5 and Creekside by lot and by day of the week for summer 2020 (from Thursday 23 July through to Tuesday 15 September, the last day that parking prices were in effect in Lots 4 and 5). Key results include:

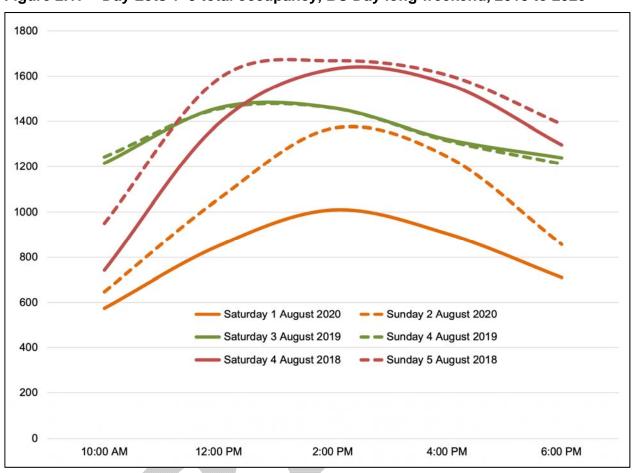
• Seasonal average peak occupancies in Day Lots 1 through 5 ranged from 45% to 76%, and averaged 14% at Creekside.

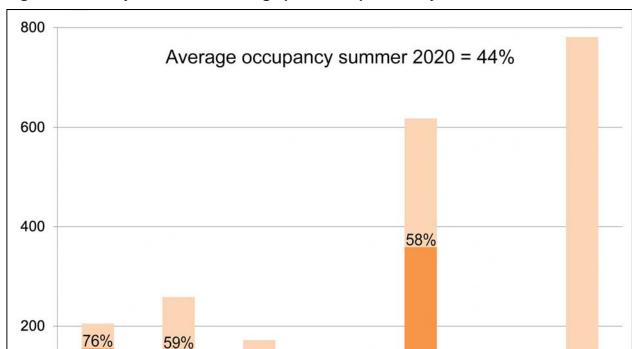
• The demand for parking in the summer does not vary as much throughout the week as in the winter. The summer weekday average occupancy was 41%, and the weekend average occupancy was 58%.











45%

Lot 3E

Lot 4

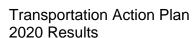
59%

Lot 2

65%

Lot 3W

Figure 2.18 – Day Lot season average peak occupancies by lot, summer 2020



0

Lot 1

14%

Creek

60%

Lot 5

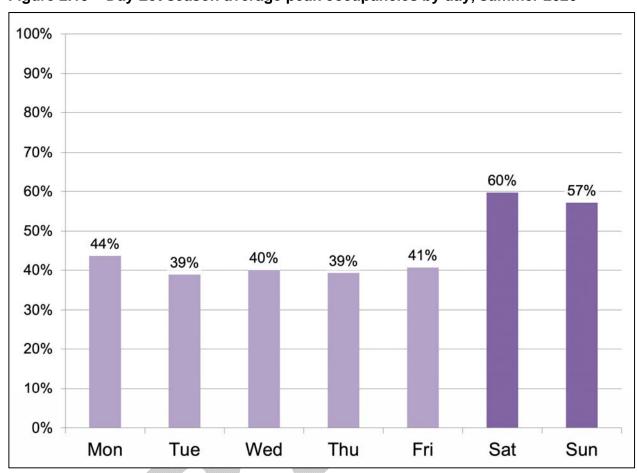


Figure 2.19 – Day Lot season average peak occupancies by day, summer 2020

A key factor affecting occupancy is the numbers of parking passes sold for the Day Lots, which are summarized in Table 2.7 and Table 2.8. In previous summers a significant number of 1-month general parking passes were purchased, up to 500 passes in one month, representing two-thirds of the number of parking stalls in Lots 1 through 3. In summer 2020, the number of general parking passes was much lower, averaging 100 passes per month, likely as a result of the COVID-19 pandemic as well as the removal in March of the option to buy parking passes at ticket machines in Day Lots 1 through 3.

A large number of parking passes were purchased in summer 2020 for Lots 4 and 5, for employees, residents and carpools, over 500 passes in July. This number is consistent with the previous summer when there were more than 500 parking passes sold for Lots 4 and 5 in June and July 2019. There is a total of 740 parking stalls in Lots 4 and 5, and the number of parking passes in use amounts to two-thirds of the capacity of these lots.

A parking pass creates an incentive that is counter to the municipality's objective of shifting trips to other modes. For someone who drives to work five days a week and purchases a \$60 pass, the average daily cost of parking is only \$3, less than a third of the day rate for parking in Lots 1, 2 and 3. More importantly, once someone has bought a parking pass they are incentivized to drive

and park as much as possible to get their money's worth, and are less likely to consider transit or other modes.

Table 2.7 – Parking passes sold in summer 2020

	Lots 1–3	Lots	s 4–5	
	General Parking	Carpool	Employees/ Residents	Totals
	709 stalls	740	1,449 stalls	
July	97	20	526	643
August	103	16	343	462
Totals	200	36	869	1,105
Averages	100/mo	18/mo	435/mo	553/mo

Table 2.8 – Summer parking pass sales, 2018 to 2020

		Lots 1-3			Lots 4–5					
	2020	2019	2018	2020	2019	2018				
June	n/a	429	356	n/a	541	153				
July	97*	500	406	546	554	168				
August	103*	449	351	359	449	112				
* New rate of \$60	* New rate of \$60/month, only available for purchase on-line or in-person at Municipal Hall									

Free parking is available in the parkade at Whistler Creekside, where there are 703 stalls for day parking on levels P1 and P2 (levels P3 and P4 are closed during the summer), plus 78 stalls on the top surface level for day parking for overheight vehicles (there are also 101 surface stalls for 15-minute, 1-hour and 2-hour parking). Figure 2.20 shows peak parking occupancies at Creekside for day parking stalls (levels P1 and P2 plus overheight parking) on weekends and holidays. The four days that parking surveys were undertaken in the Village are indicated in dark green. Figure 2.20 indicates that there is still considerable parking capacity available at Creekside during the summer. The Transportation Action Plan has been effective in shifting the demand for free parking from the Village Day Lots to Whistler Creekside (and Base 2) during the winter. Additional actions should be considered to replicate this effect in the summer.

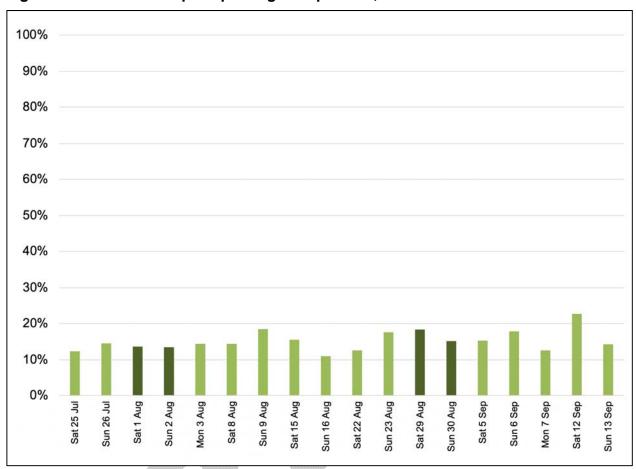


Figure 2.20 – Creekside peak parking occupancies, summer 2020

2.4.2 Village Results

This section presents the results of the parking surveys in the Village, including parking lots and street parking operated by the municipality, and publicly-accessible parking in hotels and other private lots.

2.4.2.1 Municipal Parking in the Village

There was a total of 377 parking stalls available in municipal lots and street parking in the Village during summer 2020 (excluding accessible parking). This includes underground parking at the Conference Centre and Library, but does not include parking at Marketplace, which is privately-operated. It also does not include the 25 parking stalls on Blackcomb Way in the Upper Village.

Figure 2.21 provides a comparison of peak parking occupancies in the Village in summer 2020 compared to the previous four years. In summer 2020 the maximum occupancy of Village parking lots remained below the target 85% on all six survey days. This is a reduction from the previous summer when the peak occupancy reached 92%, and is a result of the COVID-19 pandemic. Overall, since the Transportation Action Plan was first implemented in 2017, parking availability in Village lots has been at or below the 85% target on most days and at most times.



Figure 2.21 - Village peak parking occupancies, summer 2020 vs. 2016-2019

Figure 2.22 illustrates the total occupancy in all Village municipal lots on the six survey days, and Table 2.9 summarizes peak occupancies by location on each day. The overall parking occupancy did not exceed the 85% target on any of the survey days, and only exceeded the 85% target in a few locations for short periods of time. This means that at most times and in most locations it would not have been difficult to find an available parking space in the Village.

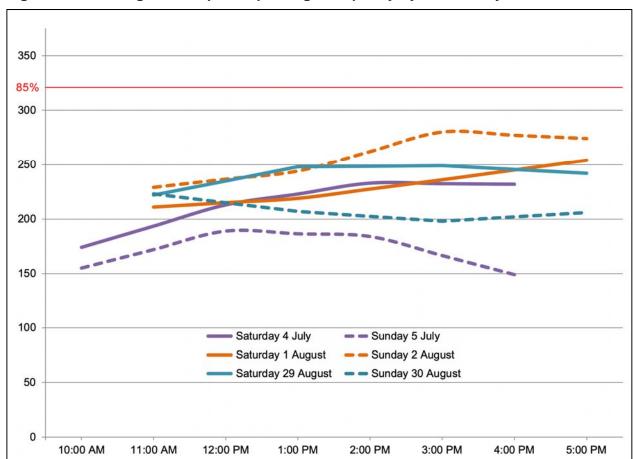


Figure 2.22 – Village municipal lot parking occupancy by time of day, summer 2020

Table 2.9 - Village municipal lot peak parking occupancies, summer 2020

	Sat 4 Jul	Sun 5 Jul	Sat 1 Aug	Sun 2 Aug	Sat 29 Aug	Sun 30 Aug
3.5.1. 0.4	THE .				8	
Main Street	76%	76%	77%	88%	86%	92%
Library	76%	82%	94%	100%	82%	76%
Municipal hall	43%	43%	25%	36%	43%	36%
Conference Surface	66%	44%	51%	73%	69%	69%
Centre Underground	63%	51%	79%	77%	73%	56%
Gateway Loop	15%	31%	46%	92%	43%	46%
Visitor centre/credit union	100%	100%	83%	100%	82%	100%
Village Green	113%	75%	100%	100%	100%	100%
Sundial	100%	100%	100%	100%	100%	100%
All Village municipal lots	64%	52%	67%	74%	66%	59%

The parking counting system in the underground parking below the Conference Centre displays the number of available parking stalls. The system incorporates a vehicle counter on the ramp between levels P1 and P2, and a second counter on the ramp between level P3 and the bottom level

P4, which is reserved for monthly passes. The system counts and displays the total number of vehicles parked on levels P2 and P3, and separately counts vehicles parked on level P4. Although parking stalls on level P1 are not counted, at times when there are few parking stalls available on levels P2 and P3 there are likely few or no stalls available on level P1, and therefore there is no need to include them in the displayed count of available stalls. Not counting level P1 simplifies the equipment requirements and reduces the potential for miscalculations.

Figure 2.23 illustrates average occupancies from 9:00 am to 9:00 pm each day from Canada Day 1 July through to Labour Day 7 September. The total capacity of levels P2 and P3 is 65 vehicles, and the capacity of level P4 is 50 vehicles. The green, yellow and red colours indicate days when the average occupancy was less than 50% occupied (green), 50% to 80% occupied (yellow) or over the target 85% occupancy (red). Key results include:

- From late July through Labour Day, the parking demand on levels P2 and P3 (general parking) in summer 2020 was consistent with summer 2019. The demand is highest on Fridays, Saturdays and Sundays. Levels 2 and 3 were 100% occupied from 9:00 am to 9:00 pm on Saturday 25 July and the Sunday of the BC Day long weekend (2 August).
- The occupancy on level 4 (which is reserved for monthly passes) averaged only 22% over the summer. The low level of demand among pass-holders is a result of the COVID-19 pandemic.

Although the COVID-19 pandemic exaggerated the imbalance between occupancies on levels P2 and P3 and level P4, an imbalance was also observed in winter 2019-20 and summer 2019. This imbalance suggests that reserving level P4 for monthly passes results in under-utilization of the 50 parking stalls on the bottom level. The municipality should consider opening part of level P4 to general parking, or could consider eliminating parking passes for the Conference Centre.

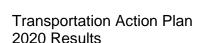
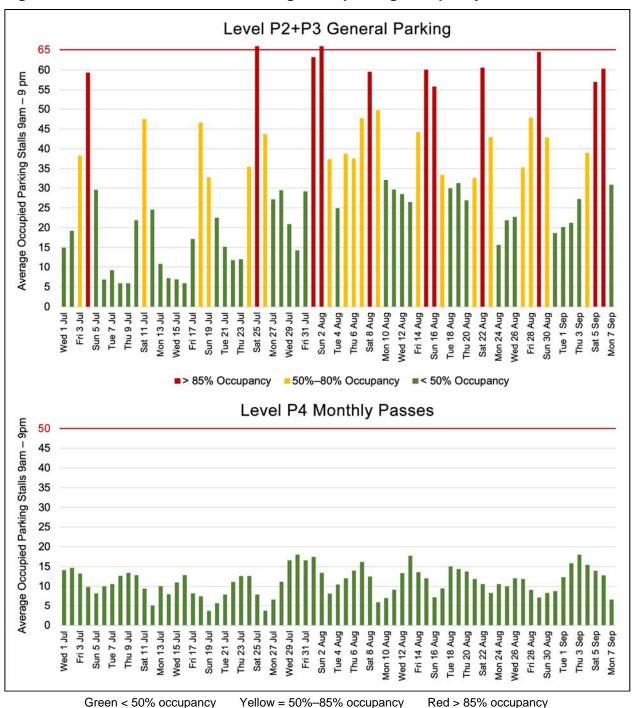


Figure 2.23 – Conference Centre underground parking occupancy, summer 2020



2.4.2.2 Street Parking on Blackcomb Way

There are 25 parking stalls on Blackcomb Way in the Upper Village, with a time limit of two hours, priced at \$2 per hour, the same rate as in the Village. Figure 2.24 illustrates occupancies on the six survey days in summer 2020. The occupancy exceeded the 85% target much of the time, and reached 100% on four of the six surveys days.

These high occupancies are in part due to vehicles parked for more than the two-hour limit. Last summer, 33% of the time parking stalls were occupied by vehicles parked overtime, with an average duration for overtime parkers of 3 hours and 16 minutes, and a maximum of more than 6 hours (parking duration data were not collected this summer).

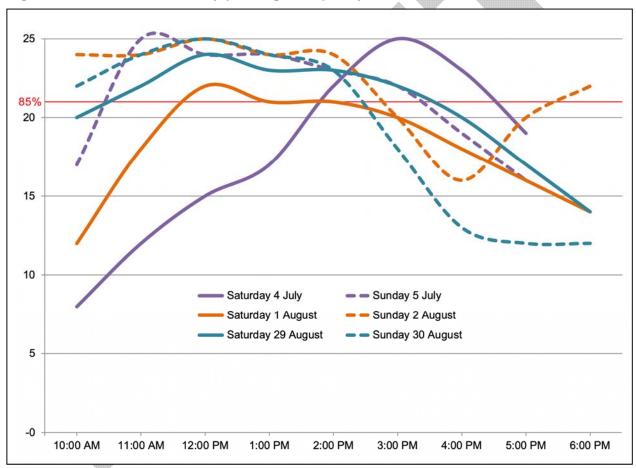


Figure 2.24 – Blackcomb Way parking occupancy, summer 2020

2.4.2.3 Private Lots in the Village

Approximately 1,100 parking stalls were surveyed in private parking lots with publicly-accessible parking:

- Hotels Pan Pacific Village Centre/Peak Lodge and Westin (683 stalls total).
- The Brewhouse lot (48 stalls).

- The Town Plaza lot (92 stalls).
- Marketplace parking lot (276 stalls)

Prices in most private parking lots are significantly higher than in municipal parking lots, up to \$4.25 per hour and up to \$42.50 for 24 hours. The exception is the Pan Pacific Village Centre/Peak Lodge lot where parking costs \$11 per 12-hour day, which is only \$1.00 more than Day Lots 1 through 3, and \$6 more than Lots 4 and 5. Parking at Marketplace is limited to two hours, and is free for the first hour and \$3.00 for the second hour.

Significant results of the parking surveys regarding private parking lots include:

- Daytime parking occupancies in hotels ranged from 27% to 95%. The highest occupancies were observed on Saturday 1 August (the BC Day long weekend) and Saturday 29 August.
- Occupancy in the Town Plaza and Brewhouse lots ranged from 15% to 80%. Not only is parking in both these lots more expensive than in municipal lots, the lots are not well signed nor prominently identified, and as a result they may be overlooked by many motorists.



3 Other Transportation Actions

This section presents the results of other actions implemented as part of the Transportation Action Plan, including free transit service on summer weekends and holiday Mondays, a free bicycle valet parking service, carpool parking passes and parking for commercial buses. Additional parking in neighbourhoods and locations near popular trailheads and parks is also examined.

3.1 Transit

This section discusses transit ridership, pass-ups and the new high school transit pass program.

3.1.1 Ridership

Table 3.1 summarizes transit ridership for fiscal years 2018-19 and 2019-20. Transit ridership increased 3% overall in 2019-20, with all of the increase due to fare-paying rides.

Table 3.1 – Transit ridership April 2018 to March 2020

	April 2019 – March 2020	April 2018 – March 2019
Time period	12 months	12 months
Paid rides	1,867,000	1,751,000
Free rides	1,323,000	1,337,000
Total rides	3,190,000	3,088,000
Avg. monthly rides	266,000/mo	257,000/mo
Average rides per day	8,740/day	8,460/day

The COVID-19 pandemic began in mid-March. Figure 3.1 compares average daily transit ridership in 2019 and 2020 to the end of September (the midpoint of the fiscal year). Ridership for the first half of the 2020-21 fiscal year was only 40% of the previous year. During the first weeks of the pandemic from 20 March through 31 May 2020, transit was free with rear door boarding only, and the maximum bus capacity was reduced to 20 passengers (compared to the normal capacity of 70 passengers). During this period, transit ridership was only 20% to 45% of ridership during the same time period in 2019. Transit fares and front door boarding were reinstated on 1 June 2020 (passes purchased prior to the COVID-19 pandemic were extended for up to 73 days) and the maximum bus capacity was increased to 40 passengers. Face coverings were encouraged during the spring and summer, and were mandated on 24 August. Ridership was higher after 1 June, but remained well below previous years, ranging from 40% to 60% of 2019 ridership.

Transit service on all bus routes was free in the summer on peak days (Saturdays, Sundays and holiday Mondays) from 1 July through to Labour Day on 7 September 2020. Transit service is free at all times on route 5 (the Upper Village shuttle) and route 8 (the Lost Lake shuttle), so in practice the peak day free transit service only affects routes 6, 7 and 10 through 32.

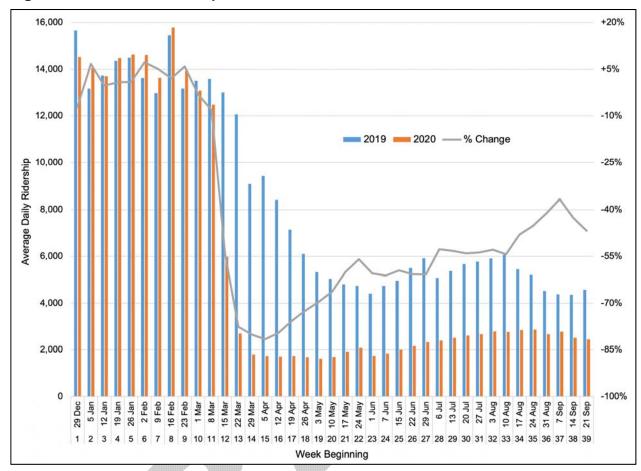


Figure 3.1 - Transit ridership 2019 vs 2020

The peak day free transit service began with a pilot project in summer 2016, when transit was free on six Saturdays from the BC Day long weekend through to Labour Day. In 2017 the peak day free service was expanded to Saturdays, Sundays and holiday Mondays from Canada Day through Labour Day. In 2018 the free service was extended two weeks earlier and two weeks later, to coincide with changes to the dates when parking charges were in effect in Lots 4 and 5, and the free bike valet service was provided at the farmers' market on Sundays. In 2019 the service period was shortened to remove the two weekends after Labour Day. In 2020 the free transit services was planned to begin on 15 June, but was delayed to 1 July due to the COVID-19 pandemic.

Table 3.2 summarizes average daily ridership in summer 2016 through 2020 (Canada Day through Labour Day), on Saturdays, Sundays and holiday Mondays when transit was free, and on weekdays when fares were paid. The most significant result prior to 2020 is the increase in ridership on Saturdays, from just over 3,000 rides per day in the first part of summer 2016 before free transit was introduced, to an average of 5,400 rides per day in summer 2019, 2018 and 2017, amounting to an increase of 77%. Sunday ridership similarly increased from 3,000 rides per day in 2016 and 2017 to an average of 4,750 rides per day on free Sundays. It is also interesting to note that average weekday paid ridership was 9% higher in 2017 than in 2016, 6% higher in 2018 than in 2017, and

10% higher in 2019 than in 2018, suggesting that some people trying the free service on weekends continued to use transit on weekdays as well.

Ridership on the free transit service in summer 2020 was less than half of previous years, due primarily to the COVID-19 pandemic but also because extra service was not added in 2020 to provide 15-minute service from 7:00 am to 7:00 pm, and the free service was not widely advertised. There were also no scheduled events in the Village in summer 2020 as there were in previous years, and major events such as Crankworx were cancelled. Weekday paid ridership was also less than half of the weekday ridership in previous years.

Table 3.2 – Average daily summer ridership on transit routes with weekday fares

	Summer 2020		Summe	er 2019	Summe	er 2018	Summe	er 2017	Summe	er 2016
	Pay	Free ¹	Pay	Free ¹	Pay	Free ¹	Pay	Free ¹	Pay	Free ¹
Saturday		2,050	$3,850^2$	5,360	$3,470^2$	5,400	$3,470^2$	5,390	3,070	4,680
Sunday		1,940	$4,090^2$	4,840	$3,350^2$	4,780	$3,020^2$	4,650	2,970	_
Holiday		1,660		3,960		3,580		3,930	2,060	_
Weekday	1,770		3,970		3,610		3,390		3,110	
1:	Canada L	ay throug	h Labour	Day 2	: Average	June ride	rship prio	r to free w	eekends	

3.1.2 Pass-Ups

"Pass-ups" occur when a bus "passes up" people waiting at the bus stop. Pass-ups were a problem in previous summers due to the popularity of the free transit service and the overall increase in transit ridership. Pass-ups also occurred in summer 2020, but to a lesser extent. Table 3.3 compares pass-ups in summers 2020, 2019 and 2018. Key results include:

- 87% of pass-ups in summer 2020 occurred because the bus was full and no additional passengers could board, and the remaining 13% of pass-ups involved cyclists who were left behind because the bike rack on the bus was already full.
- There were half the number of pass-ups in summer 2020 due to buses being full than in 2019. Transit ridership from May through September was 54% less in 2020 than in 2019, however, indicating a similar rate of pass-ups (0.30 pass-ups per 1,000 passengers in 2020 vs. 0.27 in 2019).
- There were more pass-ups in previous years due to bike racks being full than in summer 2020, likely due to the greater number of bicycles carried on buses in previous years (a total of 8,950 bicycles were carried on buses from 1 May to 30 September 2020 as compared to 12,700 bicycles during the same period in 2019 and 10,950 bicycles in 2018). This result reflects lower transit ridership in summer 2020 due to the COVID-19 pandemic and cancellation of events such as Crankworx, which was a significant contributor to numbers of pass-ups in previous years.

Table 3.3 - Transit passenger pass-ups summer 2020 vs. 2019 and 2018

		2020			2019			2018	
	Bike Rack Full	Bus Full	Total	Bike Rack Full	Bus Full	Total	Bike Rack Full	Bus Full	Total
May	3	2	5	15	37	52	28	134	162
June	0	6	6	17	7	24	8	0	8
July	10	87	97	16	96	112	16	6	22
August	3	0	3	60	57	117	21	245	266
September	0	15	15	6	17	23	12	18	30
Totals	16	110	126	114	214	328	85	403	488

3.1.3 High School Transit Pass

The High School Bus Pass Pilot Program began in January 2020. The main goals of the pilot program are to reduce "parent chauffeur" trips within Whistler, thereby reducing highway congestion and GHG emissions, and improve affordability for families in Whistler. The program provides free access to transit for students in grades 8 through 12.

Phase 1 of the program operated from 6 January through to 30 September 2020, and Phase 2 began in late September and will continue to 15 October 2021. The program includes 500 students at Whistler Secondary School and the Waldorf School. Surveys were conducted of pass users in March 2020 prior to the COVID-19 pandemic, and in September and October 2020 when schools had resumed. The key findings of the surveys include:

- Students live in all neighbourhoods throughout Whistler, with the highest numbers in Alpine Meadows (19% of students), Rainbow Estates (9%) and Cheakamus Crossing (9%). Approximately 6% of students live in Pemberton.
- Prior to Phase 1 of the program, only 12% of students bought a bus pass, and more than half (52%) paid with cash.
- Almost two-thirds (63%) of students used transit at least once a week prior to the free bus pass program, and 15% used transit 5 days per week. In Phase 2 of the program, almost three-quarters (74%) of students reported using transit at least once a week, and 20% reported using transit 5 days per week.
- In Phase 2, 58% of students reported using transit more as a result of the High School Bus Pass Pilot Program. Less than 1% reported using transit less, and 3% reported that they stopped using transit due to the COVID-19 pandemic.

Table 3.4 summarizes monthly transit rides with high school bus passes, from January through October (data for April and May are not included in the table as transit was free during these months). Average daily ridership during Phase 1 (from mid-January when all passes had been distributed through to mid-March when the COVID-19 pandemic began) was approximately 180 rides per day. During the first six weeks of the new school year in September and October, average

daily ridership was approximately 145 rides per day, equivalent to 80% of the pre-pandemic ridership level.

Table 3.4 – High School Bus Pass Pilot Program ridership

		Average Daily Rides*	Notes
Phase 1	January 2020	117	Passes distributed by mid-January
	February 2020	183	
	March 2020	175	Pandemic began in mid-March
	June 2020	92	No in-person school in June
	July 2020	141	
	August 2020	177	
Phase 2	September 2020	160	In-person school resumed
	October 2020	138	
* Excludes f	ree transit days, weekends	and holidays 1 July t	hrough 7 September

3.2 Secure Bicycle Parking

Recognizing that concerns regarding bicycle theft are a significant deterrent to cycling, the municipality offered secure bicycle parking:

- A free bicycle valet parking service during the summer to encourage people to travel to the Village by bicycle. This was a continuation of the service first offered in 2017.
- A secure bicycle enclosure in the parking area below the Library with capacity for 30 bicycles.

The bicycle valet service operates like a coat check service. As shown in Figure 3.2, a secure fenced area is provided for bicycle storage, and is always supervised by at least one attendant. To minimize the risk of transmitting COVID-19, attendants spray all bicycles with disinfectant when they are checked in. Cyclists are issued numbered tickets that they later use to reclaim their bicycles, which are identified with corresponding tags as shown in Figure 3.3.

In previous summers the bicycle valet service operated in three locations; in Olympic Plaza on Saturdays, at the farmers market on Sundays, and at Crankworx. In summer 2020 the bike valet was in Olympic Plaza on Saturdays and Sundays, as the farmers market relocated to the Squamish Lil'wat Cultural Centre due to COVID-19 and there was not sufficient space for the bike valet, and Crankworx was cancelled. Signs were posted in the Village promoting the bike valet, as shown in Figure 3.4, and many users commented that they learned of the bike valet service from the signs.

Figure 3.2 – Bicycle valet attendants, summer 2020



Figure 3.2 – Bicycle valet tagged bicycles, summer 2020





Figure 3.4 – Bicycle valet signs in the Village, summer 2020

Table 3.5 summarizes the numbers of bicycles checked in at the bike valet in summer 2017 through summer 2020, and the residences of people who used the bicycle valet service. Significant results include:

- The bike valet operated on 21 days during summer 2020. A total of almost 1,400 bicycles were checked in, an average of 67 bicycles per day. This average is a lower than in 2017 and 2019, but slightly higher than in 2018.
- The highest demand occurred on Saturday 5 September on the Labour Day long weekend, when 127 bicycles were checked in. The Saturday of the Labour Day weekend was also the busiest day in 2019, when 211 bicycles were checked in.
- Demand for the bike valet correlated with the weather. Rain reduced demand as expected, but temperature also had an effect, with demand highest on days with temperatures between 18 and 26 degrees, and lower on days that were colder or warmer.
- Almost two-thirds of persons using the bike valet in summer 2020 were from Greater Vancouver, while 30% were from Whistler. This represents a reversal from previous years when almost half of users were from Whistler. Less than 7% of users were from elsewhere in B.C. and none were from elsewhere in Canada or the world. These results for summer 2020 reflect a higher number of day visitors and the effects of COVID-19 travel restrictions, and are supported by anecdotal reports of more local visitors and more families.

Table 3.5 – Bike valet statistics, 2017 to 2020

	2020	2019	2018	2017
Days	21	28	25	16
Bicycles	1,396	2,610	1,556	1,385
Bicycles per day	67/day	93/day	62/day	87/day
e-Bikes	6%	9%	n/a	n/a
Whistler	30.3%	49.4%	50.5%	38.6%
Pemberton	0.2%	0.6%	0.5%	0.4%
Squamish	0.2%	2.0%	0.7%	1.2%
Metro Vancouver	63.0%	27.2%	23.3%	39.6%
Other British Columbia	6.3%	4.4%	4.7%	2.6%
Other Canada	0%	2.2%	2.3%	2.3%
United States	0%	9.8%	10.2%	8.4%
Elsewhere in the world	0%	4.4%	7.8%	6.9%

3.3 Accessible Parking

There is a total of 50 accessible parking stalls in municipal parking lots in the Village and in Day Lots 1 through 5.

Table 3.3.6 and Table 3.3.7 summarizes the number of accessible stalls in each location, and the maximum occupancies observed on the survey days in winter and summer (three accessible stalls on Sundial Crescent that are not pay parking are not included in Table 3.4). It is important to note that the totals indicated in italics and bold reflect the maximum number of vehicles observed parked in accessible stalls in the Village and in the Day Lots at the same time, and are not the sum of the numbers above, as the maximum numbers of vehicles in each location were observed at different times.

				Ma	aximum	Occupar	ісу	
		Number	Sat	Sun	Sat	Sun	Sat	Sun
Loc	cation	of Stalls	4 Jul	5 Jul	1 Aug	2 Aug	29 Aug	30 Aug
Conference C	Centre (surface)	4	0	0	0	1	1	0
Visitor Centr	re	1	1	1	0	1	1	0
Village Gree	n	1	0	0	0	0	1	0
Sundial (pay 1	parking stalls only)	2	1	0	1	1	2	0
Main Street		3	1	1	1	1	2	3
Library		2	0	0	0	0	0	0
Municipal H	all	2	0	0	0	0	0	0
Village acce	ssible parking	15	2	2	1	2	6	3
Day Lots	Lot 1	5	1	2	1	2	2	0
	Lot 2	9	2	1	0	2	2	2
	Lot 3 West	10	1	0	2	1	2	1

Lot 4	6	1	0	1	1	2	1
Lot 5	3	0	0	0	0	0	0
Day Lot accessible parking	33	5	2	3	5	6	2
All accessible parking	48	7	4	4	7	8	5

Figure 3.2 and Figure 3.3 illustrates the number of vehicles parked in accessible stalls in the Village and the Day lots over the course of each survey day in winter and summer 2020. During winter, the peak demand for accessible parking amounted to 43% of the 15 stalls in the Village, and 18% of the 34 stalls in the Day Lots. Results were similar in the summer, when the peak demand was 40% of the 15 stalls in the Village, and 18% of the 33 stalls in the Day Lots



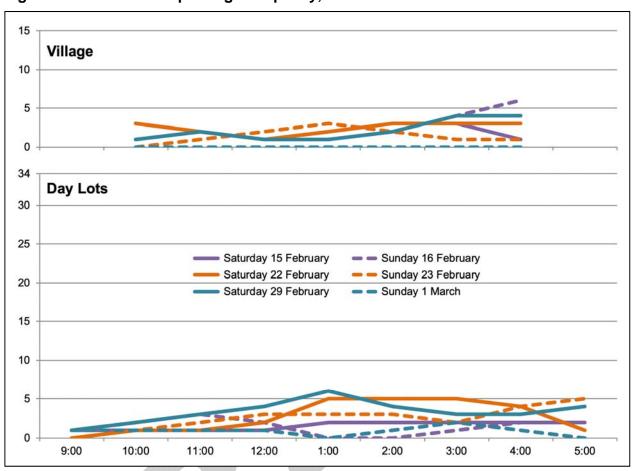
Table 3.3.6 – Accessible parking, peak occupancies, winter 2020

			Ma	aximum	Occupar	ісу	
T 4*	Number	Sat	Sun	Sat	Sun	Sat	Sun
Location	of Stalls	15 Feb	16 Feb	22 Feb	23 Feb	29 Feb	1 Mar
Conference Centre (surface)	4	0	2	2	0	2	0
Visitor Centre	1	0	0	1	1	0	0
Village Green	1	1	1	1	1	1	0
Sundial (pay parking stalls only	2	2	2	1	1	0	0
Main Street	3	1	2	2	1	1	0
Library	2	1	0	0	0	1	0
Municipal Hall	2	1	0	0	0	0	0
Village accessible parking	15	3	6	3	3	4	0
Day Lots Lot 1	5	2	1	2	3	4	0
Lot 2	9	0	1	3	1	1	1
Lot 3 West	10	0	1	1	2	0	2
Lot 4	6	0	0	0	0	2	0
Lot 5	4	0	0	0	0	1	0
Day Lot accessible parking	34	2	3	5	5	6	2
All accessible parking	49	5	8	8	6	7	2

Table 3.3.7 – Accessible parking, peak occupancies, summer 2020

				Ma	aximum	Occupar	ncy	
		Number	Sat	Sun	Sat	Sun	Sat	Sun
Loc	cation	of Stalls	4 Jul	5 Jul	1 Aug	2 Aug	29 Aug	30 Aug
Conference C	Centre (surface)	4	0	0	0	1	1	0
Visitor Centr	re	1	1	1	0	1	1	0
Village Gree	n 🚺	1	0	0	0	0	1	0
Sundial (pay p	oarking stalls only)	2	1	0	1	1	2	0
Main Street		3	1	1	1	1	2	3
Library		2	0	0	0	0	0	0
Municipal H	all	2	0	0	0	0	0	0
Village acces	ssible parking	15	2	2	1	2	6	3
Day Lots	Lot 1	5	1	2	1	2	2	0
	Lot 2	9	2	1	0	2	2	2
	Lot 3 West	10	1	0	2	1	2	1
	Lot 4	6	1	0	1	1	2	1
	Lot 5	3	0	0	0	0	0	0
Day Lot accessible parking		33	5	2	3	5	6	2
All accessibl	le parking	48	7	4	4	7	8	5





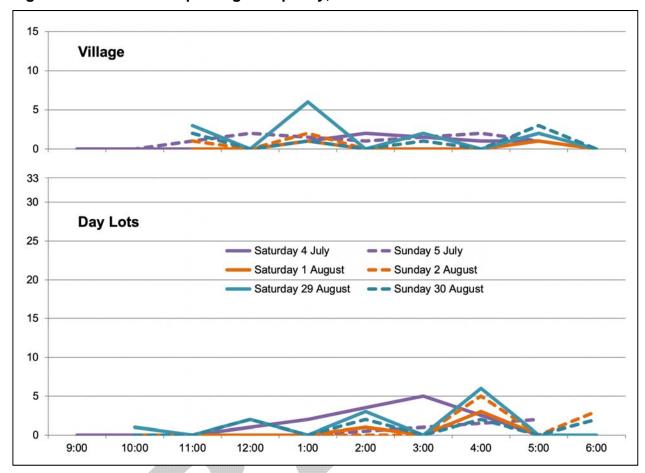


Figure 3.3 – Accessible parking occupancy, summer 2020

3.4 Motorcycle Parking

Designated parking for motorcycles is provided in the following three locations:

- Conference Centre surface parking lot
- Day Lot 3 East
- Day Lot 4

Table 3.3.8 summarizes observed numbers of motorcycles in the designated parking areas during summer 2020. The designated motorcycle parking at the Conference Centre was well-used, with a maximum occupancy of 5 to 7 motorcycles on five of the six dates, amounting to approximately two-thirds of the capacity of this parking area. In contrast, the motorcycle parking area in Lot 3 East and Lot 4 was not as well used, remaining empty much of the time and with maximums of only three and four motorcycles, respectively.

Table 3.3.8 – Motorcycle parking occupancy, summer 2020

	-	9:00 am	11:00 am	1:00 pm	3:00 pm	5:00 pm
Location	Date	10:00 am	12:00 pm	2:00 pm	4:00 pm	6:00 pm
Conference	Saturday 4 July	4	0	0	6	n/a
Centre	Sunday 5 July	2	6	5	4	11/ a
	Saturday 1 August	n/a	0	0	0	0
	Sunday 2 August	11/a	1	7	4	0
	Saturday 22 August	n/a	1	3	5	6
	Sunday 23 August	11/a	4	6	4	3
Day Lot	Saturday 4 July	0	0	0	0	0
3 East	Sunday 5 July	0	0	0	0	0
	Saturday 1 August	0	0	2	0	0
	Sunday 2 August	0	0	0	0	0
	Saturday 22 August	0	0	0	3	0
	Sunday 23 August	0	0	_1	0	0
Day Lot 4	Saturday 4 July	0	0	0	0	0
-	Sunday 5 July	0	0	2	0	0
	Saturday 1 August	0	2	3	0	1
	Sunday 2 August	0	0	0	0	1
	Saturday 22 August	2	4	0	0	0
	Sunday 23 August	1	0	0	0	0

3.5 Carpool Parking Passes

Carpool parking passes are valid in Day Lots 4 and 5, and allow residents and employees to attach up to five license plates to a single pass (only one vehicle can be used at a time). The intent in introducing the passes was to encourage carpooling and reduce traffic and parking demand in the Village.

There are two types of carpools using the program:

- "Conventional" carpools, with different vehicles registered in different households. In a "conventional" carpool, the driver stops at one or more locations along the way to pick up other members of the carpool.
- "Convenience" carpools, with different vehicles all registered to the same household. "Convenience" carpoolers are not constrained to using the same vehicle every day, and can use different vehicles as desired. Examples of "convenience" carpools include a husband and wife, roommates, and in some cases one person who owns multiple vehicles. Approximately 90% of carpool passes are "convenience" carpools with all vehicles in the same household.

There were 128 carpool passes sold in December 2019, January and February 2020, an average of 43 passes per month. This is a reduction from the previous winter, when there was an average of 62 passes per month sold in December 2018 through February 2019. Only 36 carpool passes were sold in July and August 2020, an average of 18 passes per month, also a reduction from the previous summer when there was an average of 29 passes per month sold in July and August 2019.

3.6 Commercial Buses

Parking for commercial buses is available in six locations, illustrated in Figure 3.4:

- 1. The BC Transit yard on Nesters Road. This is a secure facility, for which an annual contract with BC Transit is required, and an associated cost to use the facility.
- 2. Mons Road. Bus parking is permitted on the shoulder on the west side of the road in designated areas only, and overnight parking is permitted for free.
- 3. Nesters Road. Bus parking is permitted on the shoulder on the east side of the road in the Nesters Crossing industrial area, and overnight parking is permitted for free.
- 4. Day Lot 4. Parking for full-size buses (35 or more seats) is permitted in the designated "bus parking area." Pay parking is in effect during summer and winter at \$5 per hour to a maximum of \$25, and overnight parking is permitted.
- 5. Day Lot 3 East. Parking for minibuses (under 35 seats) is available on request during the winter only. Pay parking is in effect at \$5 per hour to a maximum of \$20 per day. Overnight parking is prohibited.
- 6. Spruce Grove Park. On busy event weekends, buses are directed to park in Lot 4 at Spruce Grove Park, and in Lot 3.

Figure 3.4 – Commercial bus parking locations



The designated bus parking area in Lot 4 has a capacity of up to 14 buses. During winter 2019-20 the average number of buses in Lot 4 during the daytime was 5 buses. The maximum of 14 buses was observed on only 8 of the 108 days of the winter season (which ended early on 14 March).

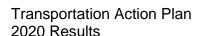
During the COVID-19 pandemic in summer 2020 there were almost no buses in Lot 4. A maximum of 2 buses was observed in Lot 4 on three days over the summer season.

3.7 Parking at Parks and Trailheads

Another transportation issue in the summer is parking activity at popular parks and trailheads, some of which are in residential neighbourhoods. To measure the extent of the issue, parking surveys were conducted at 14 trailheads, two parks and the playing fields at Meadow Park (the main parking lot at the Meadow Park Sports Centre was not surveyed). Surveys were undertaken at midday and in early afternoons on 12 weekdays and weekends from late June through mid-September 2020. It is important to note that the numbers of vehicles observed in each location does not necessarily represent the peak parking demand, which may have occurred at a different time than the survey.

Of the 17 survey locations, the data indicate that parking capacity is a recurring issue at four locations, where the number of parked vehicles frequently exceeded the target of 85% occupancy. These locations are illustrated in Figure 3.5 and are described below:

- The Rainbow Falls trailhead (also known as the 21 Mile/Rainbow Lake trail). The parking area on the north side of Alta Lake Road at 21 Mile Creek has a capacity of 20 vehicles. Occupancy exceeded the 85% target on all 12 survey days. Additional vehicles were parked in the lot to the east on the south side of Alta Lake Road, where the occupancy only exceeded 85% on one day. Additional vehicles were sometimes parked nearby on the shoulders of Alta Lake Road east of the trailhead, and in the Whistler Cemetery.
- Rainbow Park. The parking lot was filled to capacity on 9 of the 12 survey days, and on 5 days exceeded 100% capacity due to vehicles parked in locations within the lot not designated for parking. Overflow parking occurred on the shoulders on Alta Lake Road north and south of Rainbow Park, except on the BC Day long weekend when temporary parking restrictions on Alta Lake Road appeared to redirect overflow parking into the residential area to the south (these parking restrictions were later reduced in scope and limited to the section of Alta Lake Road near Rainbow Park).



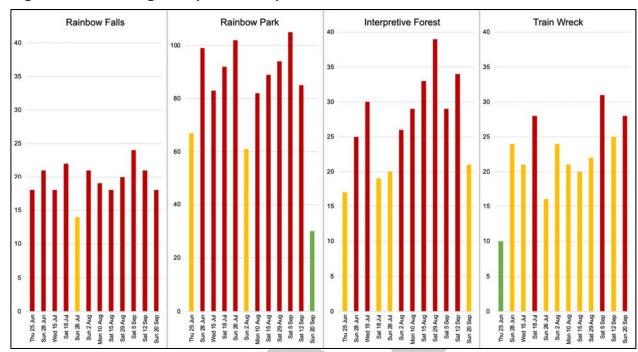


Figure 3.5 – Parking occupancies at parks and trailheads, summer 2020

Green < 50% occupancy

Yellow = 50%-85% occupancy

Red > 85% occupancy

- The Whistler Interpretive Forest main parking lot on Cheakamus Lake Road east of Highway 99. The paved parking lot has a capacity of 29 vehicles, and occupancy exceeded 85% on 8 of the 12 survey days, and on 4 of those days exceeded 100% due to vehicles parked in the unpaved area at the end of the lot, despite it being signed as "no parking." Additional vehicles were sometimes parked nearby on the shoulders of Cheakamus Lake Road.
- The Sea to Sky Trail/Train Wreck trailhead in Cheakamus Crossing. The parking lot was doubled in size this year to 30 vehicles, yet occupancy exceeded the 85% target on 3 of the 12 survey days. Overflow parking occurred frequently on the shoulders of Whistler Quarry Road and Jane Lakes FSR.

There were no significant issues at trailheads in residential areas in summer 2020. Reported issues on Mountainview Drive were addressed in 2019 with signage and outreach. Surveys conducted in summer 2020 indicate that parking problems have been reduced as a result. This is consistent with findings from Bylaw Services' regular patrols and a reduced number of complaints.

4 Conclusions and Recommendations

The Transportation Action Plan has made a significant difference in parking demand and congestion, and on winter and summer weekends it is now possible to find a parking space in the Village without difficulty. Increasing transit ridership and the popularity of the bike valet service demonstrate that the Action Plan has encouraged residents and visitors to travel by transit and bicycle instead of by automobile.

This success has been tempered by recent increases in parking occupancy in the Day Lots, where prior to the COVID-19 pandemic the parking occupancy on weekends in winter and summer consistently exceeded the 90% target. When the pandemic ends, the parking demand is likely to return to pre-pandemic levels and exceed the 90% occupancy target.

Parking is not the only transportation issue. Highway congestion remains a significant challenge, and the pandemic has reduced transit ridership by 50%. These remaining issues can be addressed by further actions undertaken through the Transportation Action Plan.

This section summarizes key conclusions from summer and winter 2020, and provides recommendations regarding further actions that could be undertaken in 2021 or later to achieve the objectives of the Transportation Action Plan.

4.1 Conclusions

Winter 2019-20:

- Highway congestion at peak times is the primary transportation problem
- Parking availability is a secondary issue
- Parking availability targets were achieved in the Village lots
- Parking availability targets were not achieved most days in the Day Lots, due to the popularity of monthly parking passes, particularly in Lots 1–3
- An increase in regional traffic to/from Whistler has been offset by reductions in local traffic on Highway 99 within Whistler
- The new high school bus pass was wellreceived, with an average of 180 rides per day.

Summer 2020:

- Parking was less of a problem in the Village due to the COVID-19 pandemic
- Parking availability targets were achieved in the Village on all days, and in the Day Lots on most days
- The Creekside parkade remains underutilized
- Parking congestion is primarily an issue at Rainbow Park, the Interpretive Forest, and the Rainbow Falls and Train Wreck trailheads
- Transit ridership declined due to the pandemic
- Route 10 ridership increased in proportion to service increases
- The free bike valet continues to be a popular and valued service

4.2 Recommendations

Key recommendations to improve parking availability and address parking management issues in 2021 and beyond, based on the conclusions highlighted above, include:

- **Parking prices:** The municipality should increase prices in the Day Lots to \$12/day and \$6/day in winter 2020-21 (as was originally planned for summer 2020).
- Parking passes: The municipality should substantially increase the prices of parking passes to address availability problems in the Day Lots. Relative to the costs of hourly and daily parking, general parking passes (Lots 1–3) should be priced at more than \$100 per month and employee/resident passes (Lots 4 and 5) should be priced at more than \$50 per month. In addition, the municipality should investigate other pass options that would encourage employees and residents to use other transportation modes on peak days (Fridays through Sundays and holidays) rather than driving and parking.
- Conference Centre: The municipality should undertake a pilot program allowing general parking on weekends in half of the parking stalls on the bottom level P4 at the Conference Centre. Currently, level P4 is less than half full almost all the time on weekends in the summer and winter, while the occupancy on other levels often exceeds the 85% target. This pilot program would increase the available parking at the Conference Centre during peak times.
- Parking enforcement is an essential component of a successful parking management program. Without adequate enforcement, it is more difficult to achieve the targets of 10% or 15% availability. In particular, increased enforcement (more personnel, more frequent patrols and enhanced technologies) is needed to discourage overtime parking in high-demand lots in the Village and on Blackcomb Way, at high-demand times (particularly weekends), and to mitigate potential neighbourhood parking complaints.
- **Creekside:** To encourage more people to park at Whistler Creekside during the summer and make use of the free transit service to the Village, additional means of providing information regarding parking and free transit options at Creekside should be considered, including online information and signs on Highway 99 northbound.
- Information: To make better use of under-utilized facilities and avoid congestion in high-demand areas, more information about parking should be provided, for motorists in the Village looking for parking, and for visitors before they travel to Whistler. Such information includes (but is not limited to) signs directing motorists to parking, printed and electronic maps of parking lots with information about prices and time limits, and expanded search, information and other features in the municipality's website parking app. The municipality, Tourism Whistler and the Chamber of Commerce should also work with private parking operators to include all publicly available parking and keep information up to date.

Recommendations regarding other transportation services and facilities include:

• Free transit: The success of the peak day free transit service on weekends and holiday Mondays demonstrates that it is a key component of the Transportation Action Plan, and should be continued in summer 2021 and beyond. The municipality should expand free transit to Fridays (as was originally planned for summer 2020) to capture all weekend users (consistent

with the winter definition of weekends) and to other popular holiday weekends at other times of the year, such as Victoria Day and Thanksgiving. Additional means of advertising and promoting the free transit service should be considered, including signs on the outside of the buses and at major bus stops.

- Route 10 express service. Increases in service on the Route 10 express bus in fall 2020 resulted in proportionate increases in ridership, indicating the potential for more ridership with further service increases. The municipality should continue to improve the frequencies and hours of service, and should improve access to and amenities at Route 10 bus stops, including accessible shelters, pathways and lighting.
- **Increased summer transit service.** To address capacity problems that result in full buses leaving riders behind at bus stops, and to encourage more people to use transit, the frequency of service should be increased on weekends and event days during the summer, particularly on bus routes operating between Whistler Creekside and Whistler Village.
- High school bus pass. The pass program has increased transit ridership among high school students, and should be continued beyond the current end date in October 2021. The municipality should also consider ways to expand the program to include Whistler residents who attend school elsewhere (passes would be used when students are home from school on holidays and during the summer).
- **Bicycle valet parking:** The bicycle valet parking service provides secure bicycle parking, and is popular and well-used. To avoid confusion and enhance the appeal of the bike valet, the municipality should expand the bike valet hours to match the days and times when free transit service is provided (including Fridays and other popular holiday weekends if free transit is expanded to these days). The municipality should consider integrating the bike valet with the Village Host program to reduce the number of attendants needed to operate the bike valet, which would allow for extended days and hours on the same budget. Where arrangements can be made with event operators, the service should also be offered at special events.
- **Secure bicycle parking:** In addition to the bicycle valet parking service, there is a need for secure bicycle parking that is available to employees and others in the Village on a daily basis, during the daytime and in the evening. The municipality should promote the new bicycle enclosure at the Library, and implement other types of secure parking facilities, including partnering with the private sector to build or convert automobile parking stalls to secure bike parking facilities for their staff, customers and guests.
- Parking at parks and trailheads: The municipality should consider options to manage parking at Rainbow Park, the Interpretive Forest, and the Rainbow Falls and Train Wreck trailheads.