

Mount Douglas Park Parking & Access Study



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Draft Report

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TABLE OF CONTENTS

1.0 IN	TRODUCTION	1
2.0 PF	ROJECT BACKGROUND	1
2.1	Beach Parking Lot	3
2.2	Churchill Parking Lot	
2.3	Summit Parking Lot	5
2.4	Cedar Hill Road Parking (undesignated on-street)	6
2.5	Cedar Hill Parking Lot	7
2.6	Glendenning Parking Lot	3
2.7	Mercer Trail Parking (undesignated on-street)	9
2.8	Blenkinsop Parking Lot	10
3.0 M	ETHODOLOGY	10
4.0 Pl	JBLIC CONSULTATION	12
5.0 A	NALYSIS	12
5.1	June 2016	12
5.2	July 2016	15
5.3	August 2016	18
5.4	Undesignated Parking Areas	22
5.5	Summary – Parking Supply and Demand Summer Months (June, July and August)	23
5.6	OBSERVATIONS & RECOMMENDATIONS	25
6.0 Al	ternative Transportation Modes	29
6.1	Bicycle Parking	29
6.2	Pedestrian (Walking, Running, etc.)	30
6.3	Transit	31

APPENDICES

APPENDIX A: Parking Data Collection Packages



1.0 INTRODUCTION

In June 2016, the District of Saanich retained Urban Systems to conduct a parking and access review of the six parking areas at Mount Douglas Park. Recent concerns by park users prompted the need to review the current parking conditions in the Park. Due to the large size and popularity of the park there are a wide variety of park users pursing diverse recreational activities on a day to day basis. Therefore, the purpose of this study is to evaluate how parking demands change throughout the day on both weekends and weekdays during peak summer months (i.e. June, July, August). This analysis will be used to establish a baseline understanding of parking circumstances at Mount Douglas Park in order to make recommendations on potential parking restrictions or access improvements required to increase the ability of people to utilize alternative modes of transportation to access the park (i.e. cycling, walking, transit, etc.). Further, this study also provided a high-level review of contextual parking issues related to bike parking demand and the number of park users opting to parking in undesignated or illegal parking areas to access Mount Douglas Park.

The following report outlines findings and recommendations from the study as well the methodology used to collect and analyze the parking data.

PROJECT BACKGROUND 2.0

The following section provides an overview of the study area and parking circumstances at Mount Douglas Park. This includes a breakdown down of the number of parking spaces available at each of the six parking lots, where bicycle parking is available, accessible parking, and contextual information for each location, including the presence of undesignated and/or illegal parking areas.

The six parking areas studied include:

- 1. Beach Parking Lot (52 designated spaces)
- 2. Churchill Parking Lot (28 designated spaces)
- 3. Summit Parking Lot (12 pm Dusk only) (13 designated spaces)
- 4. Cedar Hill Parking Area (17 designated spaces)
- Glendenning Parking Area (5 designated spaces)
- 6. Blenkinsop Parking Area (9 designated spaces)

In addition, there were two on-street parking areas identified and deemed significant for this study. For these parking areas, number of cars parked at each location was recorded.

- 1. Cedar Hill Road (between Churchill Parking Lot and Cedar Hill Parking Area)
- 2. Mercer Trail Access Area (Blenkinsop Road)

Figure 2.1 - Route Map provided below identifies the six parking lot locations and the two on-street parking areas.





Figure 2.1 – Route Map



2.1 Beach Parking Lot

Beach parking lot, which is located off of Cordova Bay Road, is the largest of the parking lots and contains the most designated parking spaces, 52. The Beach lot has the greatest potential for parking expansion. A bike rack has recently been added but was not present during the data collection stage of this project.



Figure 2.2 – Beach Parking Lot



2.2 Churchill Parking Lot

The Churchill parking lot is located off of Cedar Hill Road, at the base of Churchill Drive. This lot holds 28 parking spaces and includes one bike rack. There are currently no stall lines, but there are concrete wheel stops at each of the stalls provided. Parking is not permitted along the south west side of Churchill Drive.



Figure 2.3 – Churchill Parking Lot



2.3 Summit Parking Lot

The Summit parking lot is located at the top of Mount Douglas on Churchill Drive. Summit has 13 designated parking spaces, which include two accessible parking stalls, and one bike rack. There are painted stall lines at this location and there is a potential to park a motorcycle if desired.

Legend Designated Parking (Record the first 3 digits of license plate) Undesignated Parking (Count # of cars) Illegal Parking (Count # of cars) Bike Rack (Count # of bikes)

Figure 2.4 – Summit Parking Lot



2.4 Cedar Hill Road Parking (undesignated on-street)

The on-street parking area identified along Cedar Hill Road falls between the Churchill Parking Lot and the Cedar Hill Parking Lot. This area was noted by Saanich Staff and the Advisory Committee as an important area to include in the study. It is currently utilized by park users for overflow parking. The area along the north side of Cedar Hill Road has been identified as undesignated parking. The south side of Cedar Hill Road cannot accommodate parking.

Upper Gedar Hill Street Parking Lower Geder Hill Street Parking Legend Designated Parking (Record the first 3 digits of license plate) Undesignated Parking (Count # of cars)

Figure 2.5 – Cedar Hill Road Parking (undesignated on-street)



2.5 Cedar Hill Parking Lot

The Cedar Hill parking lot, located along Cedar Hill Road, has 17 designated parking spaces. This parking lot is unpaved. 13 of the available spots were identified as vertical parking, while the other four spaces were identified for parallel parking. This parking area currently does not permit parking directly at the trail access of the park entrance.



Figure 2.6 – Cedar Hill Parking Lot



2.6 Glendenning Parking Lot

The Glendenning parking lot is the smallest of the six parking lots identified within this report. There are five designated parking spaces and one bike rack at this location. There is no additional parking permitted around or adjacent the Glendenning Parking Lot.



Figure 2.7 - Glendenning Parking Lot



2.7 Mercer Trail Parking (undesignated on-street)

Mercer Trail on-street parking was also noted by Saanich Staff and the Advisory Committee as an important area to collect parking data. This undesignated on-street parking area is located along Blenkinsop Road at the entry of the Mercer Trail. Parking is not permitted on the west side of Blenkinsop near the farm driveway, but there is a small area of undesignated parking on the east and west sides.



Figure 2.8 – Mercer Trail Parking (undesignated on-street)



2.8 Blenkinsop Parking Lot

The Blenkinsop Parking Lot is located off of Blenkinsop Road on the west side of Mount Douglas Park. This lot has nine designated parking spaces and one bike rack.



Figure 2.9 -Blenkinsop Parking Lot

3.0 **METHODOLOGY**

The purpose of the parking study was to collect parking utilization data for all six parking facilities at Mount Douglas Park. Data collection was primarily based on the number of parking stalls within each parking lot. In addition, data was collected for number of bicycles, undesignated parking and/or illegal parking at each of the six parking facilities. The six parking lots identified in this study include: Beach, Churchill, Summit, Cedar Hill, Glendenning and Blenkinsop. Through discussions with the advisory committee, there were two additional areas identified for collection. These areas include on-street parking along Cedar Hill Road (west side) between Churchill Drive and the Cedar Hill Parking Lot. Blenkinsop Road, by the Mercer Trail access, was also identified and both the east and west sides of the road were collected. This section of Blenkinsop was identified as a popular access point for park users.

A data collection package was prepared for Saanich staff, Urban Systems staff and volunteers to assist with the parking data collection. The package included an overview map showing all six parking lot



locations, the two on-street parking areas as well as identifying the route to be taken during data collection. Each of the six parking lots, including the on-street parking, were broken into their own data collection pages. There were four types of data identified for collection including: designated parking, undesignated parking, illegal parking and bicycles.

The following definitions were provided in the package to help differentiate the collection types.

Designated parking: Parking in defined parking areas, often paved with painted lines.

Undesignated parking: Parking in undefined parking areas (i.e. road shoulder, pull-out area, paved area without painted lines (beach).

Illegal parking: Parking in 'no parking' zones, loading zones, anything blocking the roadway from normal use (i.e. on or over a sidewalk, in front of a driveway entrance, within 5 metres of a fire hydrant, on a crosswalk, on or over a bicycle lane).

Bicycle parking: Bikes stored in bike racks.

Each page provided a key map to assist with identifying number of stalls and a table noting the collection hours, an area for designated parking entry and space for number of bicycles, illegal parking and undesignated parking. Designated parking required only the first three digits of the car's license plate. Only the first three digits were identified for collection to protect park user's privacy. Having the first three digits has assisted with data analysis and review of stall usage and also stall turnover.

During the working session with volunteers, and the Project Advisory Committeepeak use times were identified for collection.

The hours identified for collection include:

Morning: 7am, 8am, 12pm, 1pm

Afternoon: 4pm, 5pm, 7pm, 8pm

These times were selected to capture a wide range of peak period park users, including the before work park users, people using the park in the afternoon and during lunch hours, evening and after work users, as well as people accessing the park throughout the day. There were in total six collection days. Two in June, two in July and two in August. One weekday collection and one weekend collection per month.

To avoid special events which can cause an increase in usage or low usage days such as Mondays and potentially Fridays, Tuesdays, Wednesdays or Thursdays were recommended for weekday collection and either Saturdays or Sundays for the weekend collection. It was noted to volunteers that data was not to be collected on long weekends, holidays, special events or rainy days to keep collection days consistent. The days could be broken up between volunteers by Morning and Afternoon, however the collection still had to be on the same day regardless who was collecting. Urban Systems did the first week day and weekend collection in June. Volunteers and Saanich staffed assisted with July and August collections.

Overall, this level of data collection provided more than enough information to conduct an analysis of parking occupancy in Mount Douglas Park and represents an authentic cross-section of the parking situation during periods of peak usage.



4.0 PUBLIC CONSULTATION

Prior to the Mount Douglas Park Parking and Access Study commencing, a Project Advisory Team was assembled to provide support and guidance throughout the project. There were a number of meetings held with the Team including one training session facilitated by Urban Systems as well as separate meetings with Saanich Staff and the Project Advisory Team.

- Project Advisory Team Meeting #1 April 19th
- Project Advisory Team Meeting #2 May 10th
- Data Collection Volunteer Training June 24th
- Project Advisory Team Meeting #3 September 28th

In addition, the District of Saanich released a Park User Survey over the summer of 2016 to receive feedback about park access and facilities. The survey was well received and had 458 responses.

On October 12, 2016 a public open house was held to share the results of the study as well as the survey and preliminary recommendations. The open house was a great opportunity to get feedback from the community and finalize the key recommendations for this study.



5.0 ANALYSIS

The following section provides an overview of the findings from the collection and interpretation of parking data. This summarizes how parking demand changes for each of the six parking locations based on the day of the week, time of day and month.

In this analysis parking occupancies greater than 85% in <u>designated</u> parking areas was used as a threshold for identifying locations with a shortage of parking. This is based on parking management best practices and industry standards.

5.1 June 2016

As shown by **Figure 5.1,** parking observations collected in June showed weekends, on average, had higher parking demand at most times of the day when compared to weekdays.

For weekend observations, peak periods of parking occupancy tended to occur during the early afternoon and early evening, with average parking demand on weekends in all parking lots peaking at 1 pm with 82%. For weekday observations early evenings were the busiest parking periods peaking at 5 pm with 58%. In general, with the exception of observations made in the early afternoon on weekends, parking was ample during most times in June.



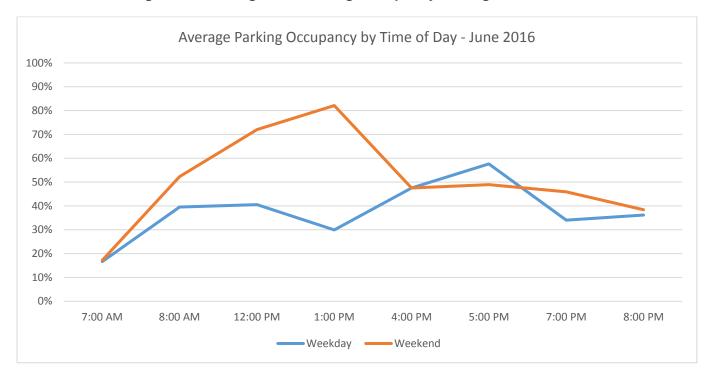


Figure 5.1 – Designated Parking Occupancy Average Combined

On a per lot basis most lots were busier on the weekend than during the week, with the exception of the Churchill Lot. **Figure 5.2** shows the average occupancy for each lot throughout the day. As shown the Churchill and Glendenning Lots are the busiest on both weekdays and weekends.

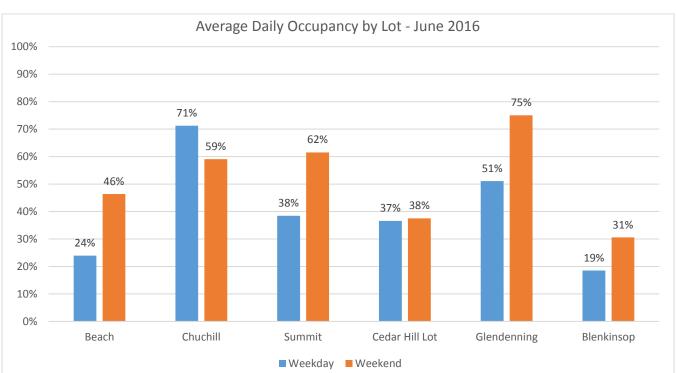


Figure 5.2 – Designated Parking Occupancy Average by Lot



As shown in Table 5.1 and Figure 5.3 peak parking demands that exceed 85% on weekdays in June included the following locations and times:

Churchill Lot (28 spaces) - during the day at 11 am and during evening hours 5 pm to 8 pm;

Table 5.1 - Weekday (June) Parking Occupancy by Lot

Glendenning Lot (5 spaces) - in the evening at 5 pm.

Beach Churchill **Summit Cedar Hill Lot** Glendenning 4% 45% Closed 24% 0%

Occupancy **Blenkinsop** 7:00 AM 11% 8:00 AM 0% 48% Closed 47% 80% 22% 12:00 PM 50% 62% 8% 41% 60% 22% 1:00 PM 24% 31% 45% 38% 20% 22% 4:00 PM 12% 76% 46% 47% 60% 44% 5:00 PM 13% 47% 83% 69% 100% 33% 7:00 PM 23% 97% 15% 29% 40% 0% 8:00 PM 33% 93% 18% 0% 54% 20% **Average** 24% 71% 38% 37% 51% 19% **Occupancy**

Weekday Parking Occupancy 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 7:00 AM 8:00 AM 11:00 AM 12:00 PM 1:00 PM 4:00 PM 5:00 PM 7:00 PM 8:00 PM -Chuchill -Summit -Cedar Hill Lot Glendenning Blenkinsop

Figure 5.3 - Weekday (June) Parking Occupancy by Lot

As shown in Table 5.2 and Figure 5.4 peak parking demands that exceed 85% on weekends in June included the following locations and times:

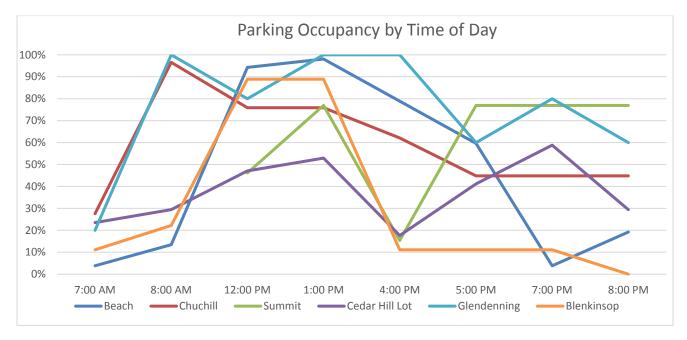
- Beach Lot (52 spaces) during the day noon to 1 pm;
- Churchill Lot (28 spaces) in the morning at 8 am;
- Glendenning Lot (5 spaces) in the morning 8 am, early afternoon 1 pm and early evening 4 pm; and,
- Blenkinsop Lot (9 spaces) in the early afternoon noon to 1 pm.



Occupancy	Beach	Churchill	Summit	Cedar Hill Lot	Glendenning	Blenkinsop	
7:00 AM	4%	28%	Closed	24%	20%	11%	
8:00 AM	13%	97%	Closed	29%	100%	22%	
12:00 PM	94%	76%	46%	47%	80%	89%	
1:00 PM	98%	76%	77%	53%	100%	89%	
4:00 PM	79%	62%	15%	18%	100%	11%	
5:00 PM	60%	45%	77%	41%	60%	11%	
7:00 PM	4%	45%	77%	59%	80%	11%	
8:00 PM	19%	45%	77%	29%	60%	0%	
Average	Average					_	
Occupancy	46%	59%	62%	38%	75%	31%	

Table 5.2 - Weekend (June) Parking Occupancy by Lot

Figure 5.4 - Weekend (June) Parking Occupancy by Lot



In general, parking demand during weekdays and weekends was fairly even, however, parking demand on weekends had more high demand periods where parking was less available in key locations during peak hours. Peak parking demand and parking supply shortages occurred most often during the day in weekend observations. By contrast, parking demand during the week was more spread-out and generally busier in the evening.

5.2 July 2016

As shown by **Figure 5.5**, observations in July showed weekdays and weekends as having similar levels of parking occupancy during the day, with weekday observations having higher average parking demand in the evening when compared to weekends. For weekend observations peak periods of parking occupancy tended to occur during the early afternoon with average parking demand on weekends in all parking lots peaking at 1 pm at 66%. The weekday evenings were the busiest parking period, reaching a peak parking demand of 64% at 7 pm.



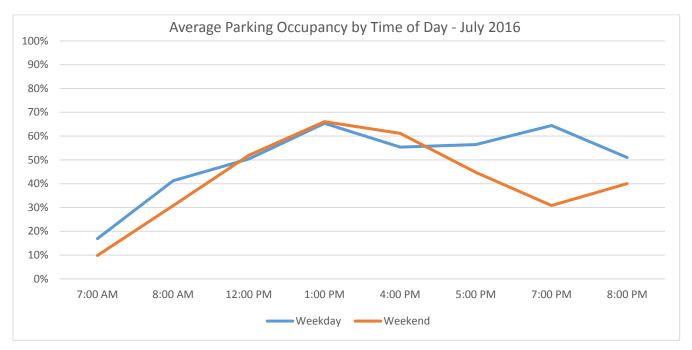


Figure 5.5 – Designated Parking Occupancy Average Combined

On a per lot basis most of the six parking lots in July were busier during the week than they were in June with weekday demands being similar or greater than the weekend. **Figure 5.6** shows the average occupancy for each of the six parking lots throughout the day. As shown the Churchill, Summit and Glendenning parking lots were, on average, the busiest locations on both weekdays and weekend.

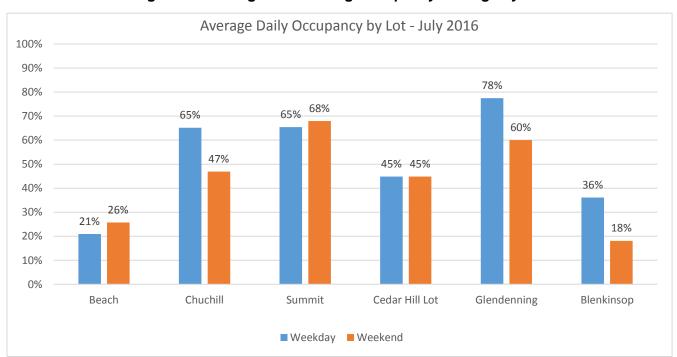


Figure 5.6 - Designated Parking Occupancy Average by Lot



As shown in **Table 5.3** and **Figure 5.7** peak parking demands that exceed 85% on weekdays in July included the following locations and times:

- Churchill Lot (28 spaces) during evening hours 7 pm to 8 pm;
- Summit Lot (13 spaces) during evening hours 7 pm to 8 pm;
- Glendenning Lot (5 spaces) during the day 8 am to 5 pm; and
- Blenkinsop Lot (9 spaces) during the afternoon 1 pm.

Cedar Hill Lot Occupancy **Beach** Churchill Summit Glendenning **Blenkinsop** 7:00 AM 2% 21% Closed 41% 20% 0% 8:00 AM 4% 50% Closed 41% 100% 11% 12:00 PM 15% 75% 15% 41% 100% 56% 1:00 PM 10% 82% 77% 24% 100% 100% 4:00 PM 19% 61% 62% 35% 100% 56% 5:00 PM 27% 61% 71% 100% 11% 69% 7:00 PM 50% 86% 85% 53% 80% 33% 8:00 PM 40% 86% 85% 53% 20% 22% **Average**

Table 5.3 - Weekday (July) Parking Occupancy by Lot

65% **Occupancy** 21% 65% 45% 78% 36%

Weekday Parking Occupancy 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 7:00 AM 8:00 AM 12:00 PM 1:00 PM 4:00 PM 5:00 PM 7:00 PM 8:00 PM Chuchill Summit — Cedar Hill Lot — Glendenning ----Blenkinsop

Figure 5.7 - Weekday (July) Parking Occupancy by Lot

As shown in **Table 5.4** and **Figure 5.8**, peak parking demands that exceed 85% on weekends in July included the following locations and times:

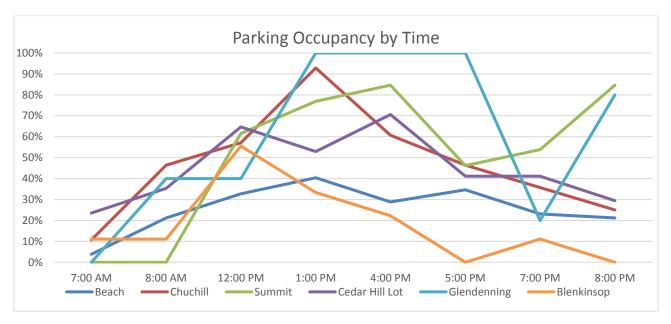
- Churchill Lot (28 spaces) during the afternoon 1 pm;
- Summit Lot (13 spaces) during early evening 4 pm and later evening 8 pm; and
- Glendenning Lot (5 spaces) during the day 1 pm to 5 pm.



Occupancy	Beach	Churchill	Summit	Cedar Hill Lot	Glendenning	Blenkinsop	
7:00 AM	4%	11%	Closed	24%	0%	11%	
8:00 AM	21%	46%	Closed	Closed 35%		11%	
12:00 PM	33%	57%	62%	65%	40%	56%	
1:00 PM 40%		93%	77%	53%	100%	33%	
4:00 PM	4:00 PM 29%		85%	71%	100%	22%	
5:00 PM 35%		46%	46%	41%	100%	0%	
7:00 PM	23%	36%	54%	41%	20%	11%	
8:00 PM 21%		25%	85%	29%	80%	0%	
Average							
Occupancy	26%	47%	68%	45%	60%	18%	

Table 5.4 - Weekend (July) Parking Occupancy by Lot

Figure 5.8 - Weekend (July) Parking Occupancy by Lot



5.3 August 2016

Figure 5.9 shows parking observations recorded during the month of August for both weekends and weekdays. Parking data collected in August show weekdays and weekends as having very similar levels of parking occupancy throughout the daytime and evening parking hours. For both weekdays and weekends the peak periods of parking occupancy tended to occur during the early afternoon with average parking demand on weekends in all parking lots peaking at 1 pm at 56%. Overall, August showed much lower parking demand when compared to June and July.



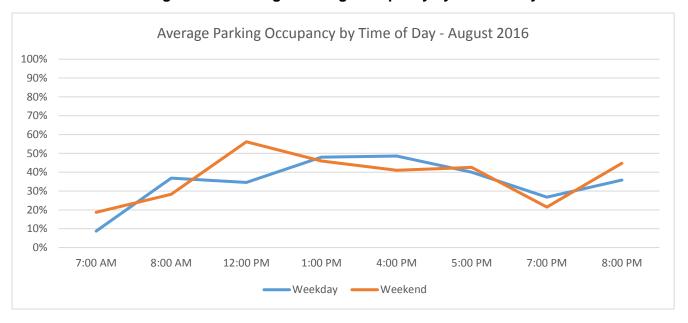


Figure 5.9 - Average Parking Occupancy by Time of Day

On a per lot basis most of the six parking lots were generally quieter during week and weekend than they were in June and July with weekend demands being slightly higher than the weekday in three of the lots. **Figure 5.10** shows the average occupancy for each of the six parking lots throughout the day and evening. As shown in **Figure 5.10** the Churchill, Cedar Hill and Glendenning parking lots were, on average, the busiest locations on both weekdays and weekend.

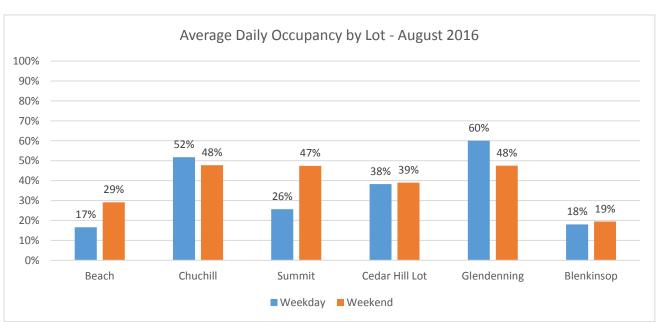


Figure 5.10 - Designated Parking Occupancy Average by Lot



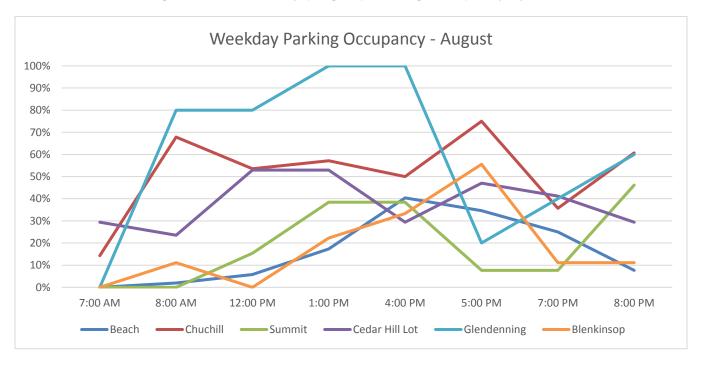
As shown in **Table 5.5** and **Figure 5.11** peak parking demands that exceed 85% on weekdays in August included the following locations and times:

Glendenning Lot (5 spaces) – during the day 1 pm and 4 pm

Table 5.5 - Weekday (August) Parking Occupancy by Lot

Occupancy	Beach	Churchill	Summit	Cedar Hill Lot	Glendenning	Blenkinsop
7:00 AM	0%	14%	Closed	29%	0%	0%
8:00 AM	2%	68%	Closed	24%	80%	11%
12:00 PM	6%	54%	15%	53%	80%	0%
1:00 PM	17%	57%	38%	53%	100%	22%
4:00 PM	40%	50%	38%	29%	100%	33%
5:00 PM	35%	75%	8%	47%	20%	56%
7:00 PM	25%	36%	8%	41%	40%	11%
8:00 PM	8%	61%	46%	29%	60%	11%
Average Occupancy	17%	52%	26%	38%	60%	18%

Figure 5.11 - Weekday (August) Parking Occupancy by Lot



As shown in **Table 5.6** and **Figure 5.12** peak parking demands that exceed 85% on weekends in August included the following locations and times:

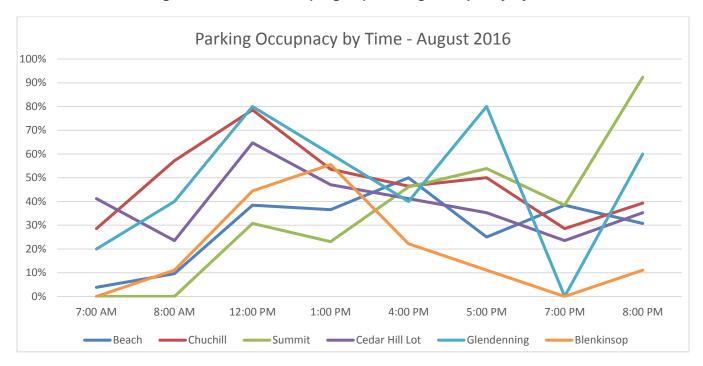
Summit Lot (13 spaces) – during later evening at 8 pm (sunset)



Table 5.6 - Weekend (August) Parking Occupancy by Lot

Occupancy	Beach	Churchill	Summit	Cedar Hill Lot	Glendenning	Blenkinsop	
7:00 AM	7:00 AM 4% 29% Clos		Closed	41%	20%	0%	
8:00 AM	8:00 AM 10% 57%		Closed	24%	40%	11%	
12:00 PM	38%	79%	31%	65%	80%	44%	
1:00 PM	37%	54%	23%	47%	60%	56%	
4:00 PM	50%	46%	46%	41%	40%	22%	
5:00 PM 25%		50%	54%	35%	80%	11%	
7:00 PM	38%	29%	38%	24%	0%	0%	
8:00 PM	31%	39%	92%	35%	60%	11%	
Average							
Occupancy	29%	48%	47%	39%	48%	19%	

Figure 5.12 - Weekend (August) Parking Occupancy by Lot





5.4 Undesignated Parking Areas

The review of parking and access to Mount Douglas Park also included a high level review of undesignated parking areas to determine which locations outside of formal parking areas were being used for vehicle parking. Undesignated parking for this analysis is defined as informal parking areas, including: road shoulders, pull-out areas, paved areas without painted lines. The number of park users parking in undesignated parking areas was reviewed for June, July and August (see Figures 5.13 – 5.15)

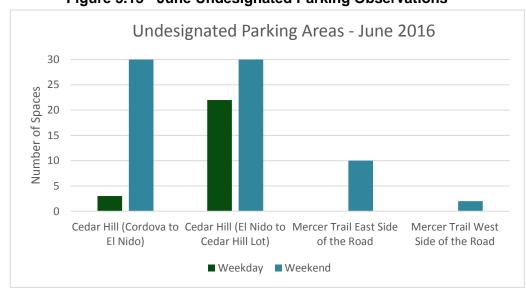
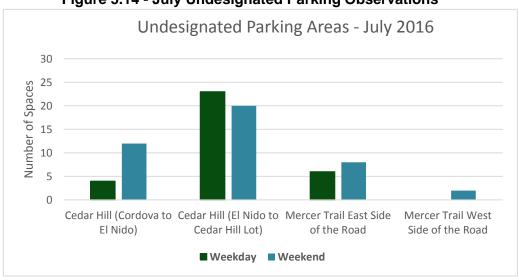


Figure 5.13 - June Undesignated Parking Observations







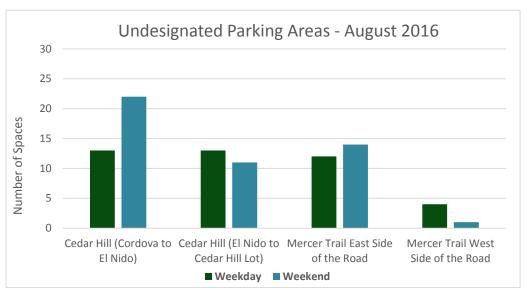


Figure 5.15 - August Undesignated Parking Observations

As shown by **Figures 5.13 – 5.15**, Cedar Hill Road, between the Churchill parking Lot and the Cedar Hill Parking Lot was typically the busiest undesignated parking area. In this location it was observed that many park users choose to park here when either the Cedar Hill or Churchill Parking lots were busy.

5.5 Summary – Parking Supply and Demand Summer Months (June, July and August)

Figures 5.16 - 5.18 (below), provide a summary showing the combined average parking supply and demand throughout the summer and in all six observations.

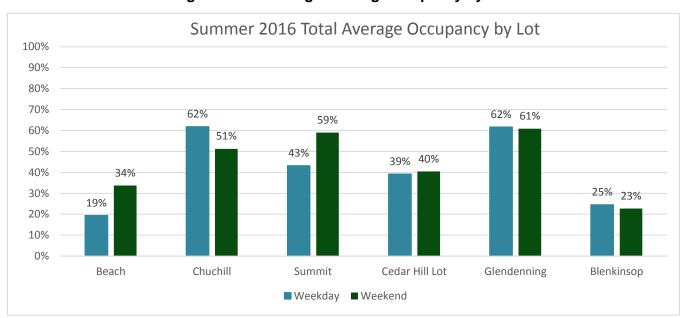


Figure 5.16 - Average Parking Occupancy by Lot



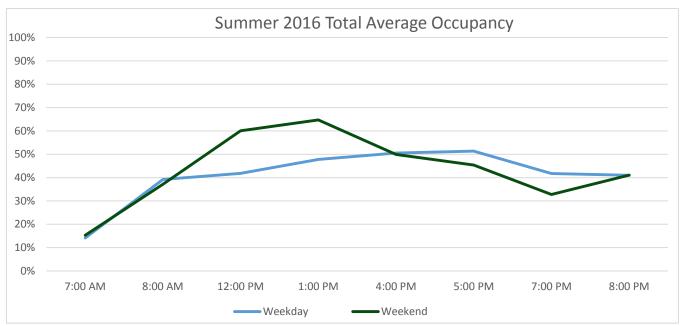
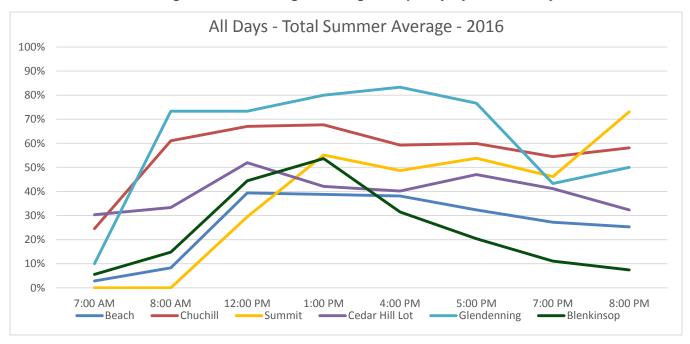


Figure 5.17 - Average Parking Occupancy by Time of Day

Figure 5.18 - Average Parking Occupancy by Time of Day



The summary of parking supply and demand for the summer of 2016 (**Figures 5.16-5.18**), provides an overview of key parking issues observed. Key observations include:

- Glendenning (5 spaces) and Churchill (28 spaces) lots were consistently the locations most likely to exceed 85% occupancy.
- Turnover analysis supports the summer online survey finding that the majority of park visitors stay for less than 2 hours.



- Weekdays were shown to be busiest in the evening.
- Weekends tended to be busiest in the early afternoon.

Overall, parking facilities in Mount Douglas Park are generally sufficient (i.e. <85% occupancy), however, there is room for improvement and opportunities to expand parking availability in key locations.

5.6 OBSERVATIONS & RECOMMENDATIONS

Beach Parking Lot

Generally, parking is sufficient in the beach parking lot, however, parking shortages are possible during special events and hot days in the summer. It is also important to note that the analysis of parking occupancy for the Beach Parking Lot only considers 'designated' parking spots, and that there is a substantial amount of well used legal 'undesignated' parking, which means parking is essentially much lower than what is represented in the analysis. There is space to provide additional designated parking at this lot and a general recommendation of this study is to expand and enhance designated parking areas.

Area closest to the bathroom seems to permit parking but doesn't clearly define it. Same with
area south of stall 1 and north of stall 52. There is room for more designated parking and it is
recommended that the District clearly designate parking spaces and provide clear signage in
areas were parking is illegal. This could include adding additional paint lines for stalls and
freshening old ones up.



- Entering and exiting the Beach Parking lot is difficult due to heavy traffic on Cordova Bay Road
 and under certain conditions could be considered a bit dangerous. Consider working with District
 traffic planners to review the potential of developing calming measures on Cordova Bay Road to
 facilitate safer entry and exit to the beach parking lot.
- Entry signage to the beach parking lot needs to be clearly marked, so it is apparent where the entry point is for vehicles traveling in both directions on Cedar Hill Road and Cordova Bay Road.
- Consider adding a 2 hour maximum parking restriction to a section of the lot to encourage more turnover during busy summer months.
- Consider adding at least two designated accessible parking spaces to better facilitate park access for people with disabilities.



• The Beach Parking lot often has ample parking supply especially during weekdays when other locations tend to be busy. The Beach parking lot is in close proximity to the core trail network in Mount Douglas Park, however, it is likely most people do not consider parking at the Beach lot to access these trails because there is not a safe location to cross Cordova Bay Road. It is suggested that the District investigate opportunities to develop a safe pedestrian crossing on Cordova Bay Road between the Beach lot and the rest of Mount Douglas Park; and direct trail users to the Beach lot during busy parking periods at the Churchill lot.

Additional Recommendations by Saanich Staff and Advisory Committee:

• Improve entrance/exit to Beach parking area complete with pedestrian and bicycle facilities to make safer transitions to the remainder of the park.

Churchill Parking Lot

The Churchill parking lot was observed as having the highest parking demand and was often the busiest of the six lots. In general, there is limited opportunity to expand this parking area with the current space available. However, parking time restrictions and other parking management strategies could be used to encourage more turn-over as to improve parking supply.

- Consider adding a 2 hour maximum parking restriction in this location to encourage more turnover during busy times.
- Current signage on logs adjacent the designated parking area are insufficient and sometimes hidden by the trees and bushes. Consider placing no parking signs along areas adjacent to designated parking areas and in the area after the gate on Churchill Drive to clearly show were parking is illegal.

Additional Recommendations by Saanich Staff and Advisory Committee:

Complete Churchill Drive entrance improvements plan.

Summit Parking Lot

The Summit parking lot becomes open to the public at noon and ranges widely in its use throughout the day. In general, people will park in this location for a shorter period of time to enjoy the view or sunset in the evening, and smaller number of users may park here longer to access to trails. There are also a few areas where the parking area could be expanded slightly to allow motorcycle parking.

- Consider creating a short-term parking area (2-3 spaces, 30 minute maximum time restriction) in this location to encourage more turnover during busy times.
- Provide clear signage in areas were parking is illegal along Churchill Drive.
- There is a non-designated area, which is too small for a car, but could potential be turned into one motorcycle parking stall.

Additional Recommendations by Saanich Staff and Advisory Committee:

Consider Summit park/amenities improvement plan.



Cedar Hill Parking Lot

The Cedar Hill Parking lot is an informal parking area along Cedar Hill Road with no defined parking spaces. Generally, this parking area is well used, but the number of occupied spaces can vary because the spaces are not clearly delineated. This parking area would likely become more effective if the parking area was expanded and designated parking stalls were created.

- Consider paving this parking area and painting lines to clearly designate parking spaces. Through
 this process the District should consider expanding the parking area into other already cleared
 areas near this site.
- Large rocks within the designated parking area present a potential hazard to vehicles and should be removed.
- Provide some indication that parallel parking is permitted in some undesignated areas along Cedar Hill Road.
- Clearly place no parking signs in illegal parking areas along Cedar Hill between the Cedar Hill parking lot and Churchill Drive.
- It was noticed that some neighbouring residents may be using this location for parking (the same car was parked for long periods and during a couple of the collection days). Consider adding parking restrictions that reserve parking in this area for park users only.
- Consider adding bicycle parking to this location.

Glendenning Parking Lot

The Glendenning Parking Lot is the smallest parking lot with 5 spaces. For this reason it is more likely to be full or have limited space for parking. The Glendenning Parking Lot is connected by trail to Winchester Street. This area is generally very narrow and is likely to become congested if too many cars were to park in illegal or undesignated spaces.

- There is space to create a few additional parallel parking spaces in the road allowance. The
 District should consider adding these spaces and designating them as legal parking spaces or
 otherwise define them clearly as no parking.
- Provide clear signage in areas where parking is illegal along Glendenning Road.
- Consider adding a 2 hour maximum parking restriction in this location to encourage more turnover during busy times.

Additional Recommendations by Saanich Staff and Advisory Committee:

 Consider adding a few additional parallel parking spaces where space permits on Glendenning near the trail entrance and improve the road side trail as required.



Blenkinsop Parking Lot

The Blenkinsop Parking Lot provides trail access to more advanced hiking trails on the western side of the park. As this is a smaller lot there are times when the parking lot is full or is near full.

- It was observed that it is difficult to exit this location as roadside vegetation impedes drivers' ability
 to see oncoming traffic on Blenkinsop without pulling into the roadway. Consider reducing speeds,
 posting signage, and trimming vegetation around the parking lot entrance from Blenkinsop to
 improve safety and improve visibility of entry signage.
- Consider placing entry signage closer to the road to improve visibility.
- Mercer Trail access: A small area directly across from the Mercer Trail access on the west side of Blenkinsop permits parking, however, it is difficult for pedestrians to cross in this location. The District should consider placing a no parking sign across the street (west side of Blenkinsop). Further, the District may also want to consider whether or not a couple spots on the east side of Blenkinsop Road at the Mercer Trail access should be dedicated for trail users. This could be done through shoulder/sidewalk improvements along Blenkinsop Road between Mercer Trail and Blenkinsop Trail.

General Observations and Recommendations:

- The District should provide more information about parking options in Mount Douglas Park. It is recommended that the District develop maps and an information tool that will help direct park users to alternate parking areas during periods of peak parking demand. This would include installing signs about next closest parking.
- Generally, parking turn-over was high and it was observed that most park users visited the park for 1-2 hours or less.
- Summit is the only lot with accessible parking stalls. The District should consider adding accessible stalls in other parking areas.
- District of Saanich to review Right of Way agreements with park neighbours to allow more access.
- Consider parking restrictions on Cedar Hill Road to protect Douglas Creek and improve safety for pedestrians and motorists.
- Consider adding time restrictions in popular areas to encourage more turnover. For example a 2
 hour maximum at Glendenning parking area.



6.0 Alternative Transportation Modes

6.1 Bicycle Parking

Through the analysis of parking supply and demand, the amount of bicycle parking was also recorded for all six observation periods. **Tables 6.1- 6.3** (below) highlight the number of bikes parked in each location and each time for both weekdays and weekends.

Churchill Summit Glendenning Blenkinsop Occupancy June Weekday Weekend Weekday Weekend Weekday Weekend Weekday Weekend 7:00 AM Closed Closed 8:00 AM Closed Closed 12:00 PM 1:00 PM 4:00 PM 5:00 PM 7:00 PM 8:00 PM

Table 6.1 - June Bicycle Parking

Table 6.2 - July Bicycle Parking

Occupancy	Churchill		Summit		Glendenning		Blenkinsop	
July	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
7:00 AM	0	0	Closed	Closed	0	0	0	0
8:00 AM	1	0	Closed	Closed	0	0	0	0
12:00 PM	0	2	0	1	0	0	0	0
1:00 PM	0	0	0	0	0	0	3	0
4:00 PM	1	0	1	0	0	0	0	0
5:00 PM	1	2	0	0	0	0	0	0
7:00 PM	3	0	2	0	0	1	0	0
8:00 PM	4	0	1	0	0	0	1	0

Table 6.3 - August Bicycle Parking

Occupancy	Churchill		Sun	Summit		Glendenning		Blenkinsop	
August	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	
7:00 AM	0	0	Closed	Closed	0	0	0	0	
8:00 AM	0	0	Closed	Closed	0	0	0	0	
12:00 PM	2	0	0	0	0	0	0	0	
1:00 PM	2	3	0	0	0	0	0	0	
4:00 PM	0	1	0	0	0	0	0	1	
5:00 PM	5	0	0	0	0	0	0	0	
7:00 PM	1	0	0	0	0	0	0	0	
8:00 PM	0	0	0	0	0	1	0	0	

As shown by **Tables 6.1 – 6.3**, the number of bicycles parked in the park was fairly low, however, this did indicate a reasonable number of people did access the park by cycling. The Churchill Parking Lot was the most frequently utilized bicycle parking area, but it rarely approached maximum occupancy. The other bicycle parking areas saw substantially less demand.



Key Observations:

The following observations were supplemented by the results of a survey conducted by the District of Saanich in parallel with the vehicle and bicycle parking portion of the access study.

- Bike racks were never full;
- Safety improvements will encourage more riders;
- Cedar Hill is very narrow and difficult for bicycles to navigate;
- Bike racks could be added to other locations (e.g. the Cedar Hill Lot); and
- Bike lanes would improve cycling access to the Park.

Based on observations of the study and the results of the survey, the following recommendations have been developed:

- Provide additional bike racks at key trail entrances;
- Consider adding bike lanes on Cedar Hill Road between Shelbourne Street and Ash Road;
- Investigate creating a welcome sign to alert drivers about speed limits and pedestrian/cycling traffic on Churchill Drive;
- Review road speed of traffic on roads through the park and consider calming measures if warranted; and
- Ensure next printing of park maps include all bike rack locations.

6.2 Pedestrian (Walking, Running, etc.)

Over the course of the study several observation were made in regards to pedestrian access and mobility within and around the park. The following observations were supplemented by the results of a survey conducted by the District of Saanich, in parallel with the vehicle and bicycle parking portion of the access study.

Key Observations:

The following observations were supplemented by the results of a survey conducted by the District of Saanich in parallel with the vehicle and bicycle parking portion of the access study.

- Roads do not feel comfortable to walk on;
- Maintenance level of trails should be a higher standard;
- · Add more refuse containers;
- Trim vegetation at road crossing and trail access points to improve pedestrian visibility;
- Add washrooms to high frequency areas; and
- Increasing accessibility for people with mobility issues.

Based on observations of the study and the results of the survey the following recommendations have been developed:

- Review traffic speed limits and consider adding calming measures if warranted;
- Upgrading the Douglas Trail from Ash Road to Shelbourne to a 'Green' or easy trail;
- Add washrooms to high frequency areas;



- Consider adding crosswalks connections on key pedestrian routes (e.g. Ash Road, Cordova Bay Road, Cedar Hill Road, etc.); and
- Increasing accessibility for people with mobility issues.

6.3 Transit

Over the course of the study several observation were made in regards to transit access and mobility within and around the park. The following observations were also supplemented by the results of a survey conducted by the District of Saanich, in parallel with the vehicle and bicycle parking portion of the access study.

Key Observations:

The following observations were supplemented by the results of a survey conducted by the District of Saanich in parallel with the vehicle and bicycle parking portion of the access study.

- Poor service to Mount Douglas Park;
- Dogs not allowed on bus;
- Takes too long to get to the park by bus;
- Location of bus stops; and
- Would like better facilities.

Based on observations of the study and the results of the survey the following recommendations have been developed:

- Saanich Engineering to relay concerns to BC Transit;
- Move transit stops closer to the park;
- Provide shelters where possible; and
- Improve park trails to transit stops.

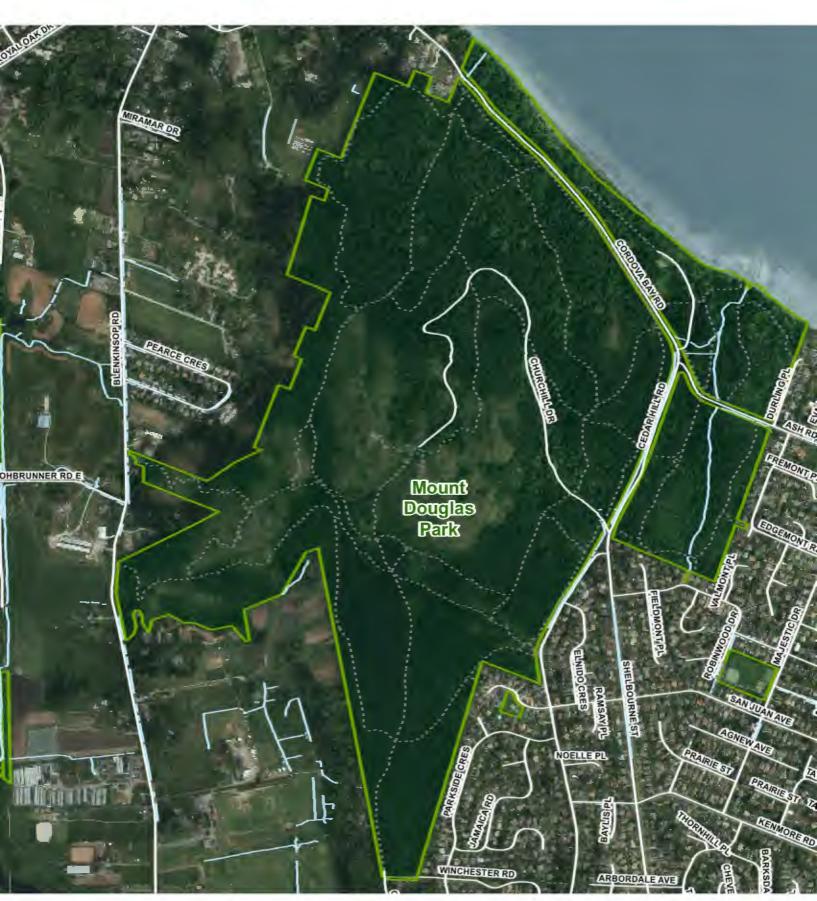


APPENDIX A

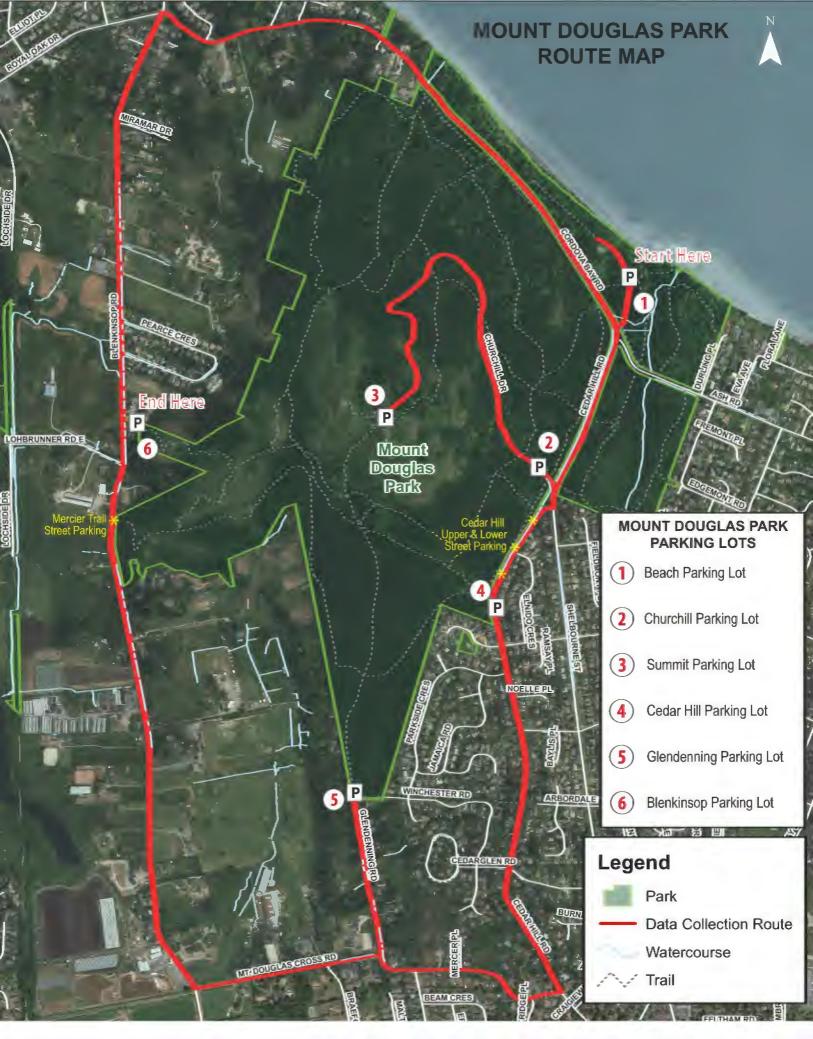
Parking Data Collection Package



Mount Douglas Park Parking Data Collection Package



Date: July 2016



Mount Douglas Park Parking Data Collection Overview

OVERVIEW

The purpose of this assignment is to collect parking utilization data at all six parking facilities at Mount Douglas Park. The data collection effort will be based on the number of parking stalls within each parking lot and also collecting bicycles and undesignated or illegal parking. The six parking lots that will have parking data collected include:

Beach
 Churchill
 Glendenning
 Summit
 Blenkinsop

There are two areas of street parking that will also be included in the inventory. These areas include:

- 1) Cedar Hill Road between Churchill Drive and the Cedar Hill Parking Lot
- 2) Blenkinsop Road (east and west side) by the Mercier Trail Access

A map and data collection form has been provided for each of the six parking lots and the two street parking areas to capture Morning and Afternoon peak times. The data collector should follow the order

shown on the Mount Douglas Park Route Map, starting at the Beach Parking Lot and ending at Blenkinsop Parking Lot. Before starting data collection, recorder should fill out the weather, recorders name and date.

Data should only be collected on Tuesdays, Wednesdays or Thursdays during the weekdays and Saturdays or Sundays on weekends. Data **should not** be collected on long weekends, holidays, special events and rainy days.

There are four types of data being collected: designated parking, undesignated parking, illegal parking and bikes.

Designated parking requires only the first **three** digits of the car's license plate occupying the parking space. Undesignated, illegal and bikes will be captured by counting the number of cars or bikes that are there at that time and recording the number on the data sheet.

DEFINITIONS

Route: Direction to follow when driving between parking lots.

Beach

Churchill

Summit

Cedar Hill Road

Cedar Hill

Glendenning

Blekinsop Road (Mercier Trail)

Blenkinsop

Designated parking: Parking in defined parking areas, often paved with painted lines.

Undesignated parking: Parking in undefined parking areas (i.e. road shoulder, pull-out area, paved area without painted lines (beach).

Illegal parking: Parking in 'no parking' zones, loading zones, anything blocking the roadway from normal use (i.e. on or over a sidewalk, in front of a driveway entrance, within 5 metres of a fire hydrant, on a crosswalk, on or over a bicycle lane).

Bicycle parking: Bikes stored in bike racks.

PARKING LOT DETAILS P

Beach Parking Lot:

This parking lot holds 52 designated parking spaces. The first stall starts near the entrance and is noted as the first painted stall on the Beach Parking Lot Map. There is not a bike rack at this location.

Churchill Parking Lot:

There are 28 parking spaces and one bike rack at this parking lot.

Summit Parking Lot:

There are 13 designated parking spaces and one bike rack at this parking lot. Data collection will start at 12:00pm for this lot when the gate opens.

Cedar Hill Parking Lot:

There are 17 designated parking spaces at this location. There are no parking stall lines. 13 of the designated parking stalls are vertical and start closest to the park entrance and the remaining 4 are parallel parking spaces.

Glendenning Parking Lot:

There are 5 designated parking spaces and one bike rack at this parking lot.

Blenkinsop Parking Lot:

There are 9 designated parking spaces and one bike rack at this parking lot.







			Beach Park	ing Lot (Morn	ning)
Date:		Recorde	r:		Weather:
Designated Parking Stalls (Start at tall cedar tree and first painted line)	7am	8am	12pm	1pm	NOTES
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4					
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12					
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14					
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16					
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46					
47					
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49					
50					
51					
52					
of Cars)					
Illegal Parking (# of Cars)					



			Beach Parkir	ng Lot (Aftern	oon)
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Designated Parking Stalls (Start at tall cedar tree and first painted line)	4pm	5pm	7pm	8pm	NOTES
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13 14					
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31		-			
22			No P	arking Area	
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		Cl	orning)			
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14			No Pa	arking Area		
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22						_
23						Т
24						
25						
26						
27						
28						
Bike Rack (# of Bikes)						
(of)						
Illegal Parking (# of Cars)						
NOTES:						



		Chu	ternoon)		
Date:		Recorde	r:	Weather:	
Designated Parking Stalls	4pm	5pm	7pm	8pm	NOTES
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7					
			No P	arking Area	
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28					
Bike Rack (# of Bikes)					
(in of Lam)					
Illegal Parking (# of Cars)					
NOTES:					





		Summit	(Morning)	
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12				
13 (Accessible Parking)				
Bike Rack (# of Bikes)				
Undesignated Parking (# of Cars)				
Illegal Parking (# of Cars)				
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			Summit	fternoon)	
Date:		Record	er:		Weather:
Designated					
Parking Stalls	4pm	5pm	7pm	8pm	NOTES
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8	1				
9					
10					
		-		No Parking Area	
11 (Accessible Parking)					
12					
13 (Accessible Parking)					
Bike Rack (# of Bikes)					
Undesignated Parking (# of Cars)					
Illegal Parking (# of Cars)					
NOTES:					

CEDAR HILL STREET PARKING AND PARKING LOT



Weather:_ Date: _ Recorder:_ **UPPER CEDAR HILL NOTES CHURCHILL DRIVE** 7am 8am 12pm 1pm **PARKING LOT TO ELNIDO CRES** LOWER CEDAR HILL **NOTES ELNIDO CRES TO** 7am 8am 12pm 1pm **CEDAR HILL PARKING LOT**



			Cedar Hill S	treet Parking	(Afternoon)	
ate:		Record	der:		Weather:	
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					NOTES	
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Undesignated Parking (# of Cars)						
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ELNIDO CRES TO CEDAR HILL PARKING LOT	4pm	5pm	7pm	8pm	NOTES	
Undesignated Parking (# of Cars)						



			rning)		
Date:		Record		Weather:	
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Illegal Parking (# of Cars)					
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		•	king Lot (Afte	rnoon)		
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Designated					NOTES	
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Illegal Parking (# of Cars)						
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te: Weather:								
		Inccord			weather			
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Parking Stalls	7am	8am	12pm	1pm	NOTES			
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2								
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4								
5								
Bike Rack (# of Bikes)								
Illegal Parking (# of Cars)								



ate:			er:		Weather:	
Designated Parking Stalls						
	4pm	5pm	7pm	8pm	NOTES	
1						
2						
3						
4						
5						
Bike Rack (# of Bikes)						
Illegal Parking (# of Cars)						

BLENKINSOP STREET PARKING AND PARKING LOT







Blenkinsop Parking Lot (Morning)									
Date:			er:		Weather:				
Designated Parking Stalls	7am	8am	12pm	1pm	NOTES				
1									
2									
3									
4									
5									
6									
7									
8									
9									
Bike Rack (# of Bikes)									
NOTES:									



Blenkinsop Parking Lot (Afternoon)								
Date:			ler:		Weather:			
Designated Parking Stalls	4pm	5pm	7pm	8pm	NOTES			
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2								
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4								
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6								
7								
8								
9								
Bike Rack (# of Bikes)								
NOTES:								