PARKSVILLE DOWNTOWN CORE PARKING STUDY

CITY OF PARKSVILLE, BC

Project no. 989 / 1316

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1.0 INTRODUCTION

Parking plays an integral role in the shaping of a city. A person's decision of where to live, shop and work are influenced by the provision of parking, and its related management and costs. Parking management can influence travel mode choice and therefore can be instrumental in achieving emissions-reduction targets and environmental objectives. If not carefully planned, constructed, and maintained, parking can also be a considerable blight in the overall aesthetic performance of a city. It is also an opportunity for a community to gain revenues toward community-enriching improvements.

Parking demand is very fluid and influenced by such things as weather, convenience, price, time of day etc. This fluidity challenges parking management to be accommodating for shoppers and yet influencing and encouraging the use of other modes for employees. Therefore balancing parking demand with supply is as much an art as it is a science and parking management goals should include, among other items, reducing environmental impacts, encouraging alternative modes of transportation, and ensuring user safety and security.

By evaluating current parking conditions, the City of Parksville can determine if the existing resource is meeting the demand by different user groups within the Downtown Core, including residents, employees and visitors; and examine whether this resource will be able to meet the demand from these groups upon future redevelopment and expansion. Differing demands include time of day, day of week, and duration. As each user group generates a different type of parking demand, it is important that long term and short term parking needs are met within different types of facilities in the Downtown Core, Community Park, and in surrounding residential areas. Having a solid understanding of how the transportation system, namely parking, is functioning, will give the City a tool to plan for future change and ensure that Parksville remains a highly liveable community.

1.1 Downtown Parking Management 101

Parking management is the essential balancing act of supply and demand, where sufficient supply is necessary to ensure demand is met. In situations where supply does not meet demand, parkers are unable to find a parking space and are liable to shop, live, or pursue their activities elsewhere. However, where supply significantly exceeds demand, automobile travel is the overbearing mode of travel, urban environments are filled with unnecessarily large paved areas, and lands are reserved for parking where they might otherwise be put to better use. This balancing act between supply and demand is the focus of parking management.

However, parking management is not that simple. There are a significant number of external factors that influence parking demand, and which must be accounted for in considering parking supply. For example, the density and mixture of land uses in a Downtown influence parking demand. An area of mixed residential and commercial land uses will require a smaller parking supply than an area with equal floor area of only residential or commercial land use. Parking pricing and restrictions have the ability to increase or decrease parking demand depending on rates, as does the extent and quality of alternative transportation infrastructure and programs. Current land and parking development practices shape parking demand now and in the future.

Comprehensive parking management is more than just supply and demand; it presents an opportunity to work toward broad community objectives, such as sustainability, land use, urban design, and economic development. Each of these objectives must be considered and parking management strategies designed to address these objectives.

1.2 Goals + Objectives

The Downtown Core Area Parking Study will provide strategies to ensure Downtown parking conditions that maintain the economic viability of Downtown businesses and encourage travel via sustainable transportation modes.

The specific goals of the Downtown Core Parking Study are to:

- Assess existing parking characteristics to better understand how Downtown Core parking functions, including a review of parking demand, peak occupancy, average duration and vehicle turnover;
- Consider existing parking supply and forecast future parking demand, including the implications of future development in the Downtown Core, to determine future parking supply needs;
- Identify transportation demand management (TDM) options to encourage sustainable transportation and decrease future parking demand;
- Review policies, regulations, and zoning requirements that affect parking conditions to identify opportunities for change to better address policies and objectives;
- Consult the community to better understanding existing strengths and weaknesses, and to work cooperatively to identify potential parking management solutions;
- Review rates, restrictions, enforcement, and other management techniques for on- and off-street parking, and consider opportunities to improve management to better address corporate policies and objectives; and
- Develop an implementation plan that prioritizes recommended actions and provides cost estimates for City budgeting purposes.

1.2 Content + Organization

This document is organized as follows:

- Section 2.0 "**Background**" is an introduction to Parksville's Downtown Core, and includes a clear definition of the study area, identifies relevant community planning documents, and an overview of parking management and its relationship with broader community objectives.

- Section 3.0 "**Existing Parking Conditions**" identifies the existing parking inventory, including on-street, off-street and private spaces, and provides an assessment of existing parking conditions including occupancy rates, peak occupancy periods, and average duration.

- Section 4.0 "**Community Feedback**" provides a summary of feedback received from the community through an open house and community surveys.

- Section 5.0 "**Strategies for On-street Parking**" explains current demand and supply of on-street parking and proposes changes in time restrictions to encourage turnover in high demand spaces and help satisfy all-day demand. Potential future pay parking scenarios are explored.

- Section 6.0 "**Strategies for Off-street Parking**" explains the currently demand for off-street public parking and anticipates future demand. Recommendations are made for pay parking in off-street lots and expanding supply into the future in order to meet all-day parking demand.

- Section 7.0 "**Transportation Demand Management**" explains how TDM and parking management can reduce parking demand in the Core by encouraging use of alternative modes.

- Section 8.0 "**Enforcement and Monitoring**" highlights current enforcement practices and strategies to improve enforcement, particularly in light of proposed new on-street and off-street management practices.

- Section 9.0 "**Policies and Development Regulations**" reviews existing City policies and regulations related to parking.

- Section 10.0 "**Summary and Implementation**" outlines all recommended strategies in a coordinated plan to guide the City.

1.3 Terminology

Parking terms are used throughout this document, definitions are provided for clarity.

- **Inventory** – the total number of parking spaces contained within the study area.
- **Supply** - the total number of available parking spaces.
- **Demand** – the number of parking spaces needed to accommodate the vehicles; often associated with a particular land use(s).
- **Duration** - the length of time that a particular vehicle occupies a parking space.
- **Occupancy** – the number of vehicles observed parked in a given area as a percentage of the total number of spaces available.
- **Turnover** – the total number of vehicles that occupy a particular space over the course of an observed period (typically a day).
- **Peak Period** - the time period when parking demand is highest, typically expressed as the peak hour.
- **Mode Split** - the percentage of all transportation trips attributed to each travel mode.
- **Shared Parking** – situations where a parking supply may be used by more than one group of parkers and/or more than one land use.
- **Transportation Demand Management (TDM)** – policies, programs and infrastructure aimed at shifting travel habits to make use of existing capacity, typically encouraging non-vehicular travel mode.
- **GHG Emissions** – Greenhouse Gas (GHG) emissions are those that contribute to global warming, consisting primarily of carbon dioxide (CO2).

2.0 BACKGROUND

2.1 Study Area

For the purposes of this study, the Downtown Core is bound by McMillan Street (west), Jensen Avenue (south), Bagshaw Street (east), and the Island Highway (north), see **Figure 1**. This is the same area included in the Downtown Core Development Permit Area (DPA), except the DPA's eastern-most boundary is McVickers Street rather than Bagshaw Street. Areas beyond the Downtown Core have also been considered in this study as they influence parking conditions in the Core.

Figure 1 – Study Area

2.2 About the Downtown Core

The Downtown Core is the economic, social, and cultural hub of the City. It attracts a significant portion of the City's employment, consists of some of its most important civic buildings, and is central to tourism and recreational activities.

The following is a summary of Downtown Core land uses:

- Retail land uses are concentrated on the Alberni Highway, Craig Street, south side of Hwy 19A and to a lesser extent Hirst Avenue, Memorial Avenue, Harrison Avenue, and Morison Avenue.

- Larger commercial-retail uses are located along the Island Highway, concentrated at Bagshaw Street and McVickers Street to the east.

- Residential land use is predominantly single-family and is located on Weld Street and Corfield Street, south of Jensen Avenue, and west of McMillan Street.

- The Parksville Civic and Technology Centre (PCTC) is located at Jensen Avenue and Craig Street, and includes City offices, a public library, Vancouver Island University (VIU) classrooms, and community-use space.

- Community Park is located immediately to the north, across the Island Highway, and is a prominent destination for residents and tourists.

- A number of resort hotels are located at the northwest of the Downtown Core, near the intersection of the Island Highway (Hwy 19A) and McMillan Street.

- Most importantly, the seashore is just to the north of Island Highway

2.3 Community Plans/Policies

2.3.1 Previous Parking Studies

The City has undertaken two (2) previous parking studies that provide background for this study. The Downtown Core Area Parking Utilization Survey (1995) assessed parking conditions in the Downtown Core, but did not provide recommended actions. The Parking Task Force Report (2000) provides seventeen (17) recommended actions to improve parking conditions in the Downtown Core Area. Primary recommendations from these reports included:

- Parking requirements (or cash-in lieu) should be removed in the Core and increased for areas further away, with a full parking exemption granted to sites less than 575 square meters. Cash-in-lieu should be changed to allow 100% cash-in-lieu, rather than only 30%.

- Zoning should be amended to ensure outdoor seating does not require additional parking and to eliminate the parking requirement for businesses operating outside typical business hours (i.e. after 6:00pm).

- There is not believed to be a seasonal, special event, or recreational vehicle parking problem that needs to be addressed.

- The location of existing City-owned lots is acceptable. There is no immediate demand for another City lot, but one should be purchased to address future need at less cost and while land is available. Property should be purchased near the Civic and Technology Centre.

- To prevent employee parking in prime on-street spaces, solutions include increased enforcement and increasing awareness of alternative modes. The City's bike rack installation initiative should be promoted to Downtown property owners. Over time, consideration should be given to changing some parallel parking to angle parking to increase supply.

2.3.2 Existing Community Plans

The context in which this study was undertaken is related to the vision, goals, and objectives of the City's existing community plans. Community plans considered throughout this plan include the following:

- Official Community Plan, 2002
- Downtown Revitalization Strategy, 2007
- Community Park Master Plan, 2006

3.0 EXISTING PARKING CHARACTERISTICS

Downtown parking surveys were conducted on Tuesday May 5, 2009 and Tuesday September 20, 2011 to gather data on parking conditions in Parksville. The 2009 survey date was overcast while the 2011 survey date was sunny with clear skies. A team of six (6) parking surveyors conducted observations in one-hour intervals between 9:00am and 4:00pm. Each parking space was recorded as (1) empty, (2) occupied or (3) occupied by the same vehicle as the previous hour.

3.1 Parking Inventory

The City's parking inventory is considered for two (2) geographic areas – the Downtown Core and the Study Area. As described in Section 2.1, the Downtown Core is the area bound by McMillan Street (west), Jensen Avenue (south), Bagshaw Street (east), and the Island Highway (north). The Study Area includes the Downtown Core and approximately one block east and west of the Core, areas north of the Island Highway and as far south as Stanford Avenue.

3.1.1 Study Area Inventory

Parking in the Study Area consists of City-owned public spaces and privately owned spaces. The full study area contains about 1,200 public parking spaces. To better understand how public parking in Parksville is used two parts of the Study Area have been excluded because they have a large number of spaces with very low occupancy. These areas are Community Park and the residential streets south of Jensen Avenue between Alberni Highway and Craig Street. These two areas make up 490 of the public spaces in the Study Area. In the remaining portion of the Study Area there are approximately 750 public parking spaces. An additional 1,200 (approx.) private off-street parking spaces were noted in the Study Area. See **Table 1** and **Appendix A – Parking Inventory**.

Table 1 –Study Area Parking Inventory

Type	2009	2011
Public, on-street (excluding south residential streets)	551	613
Public, off-street (excluding Community Park)	64	137
Private, off-street (approx)	1,240	1,130
Total	**1,855**	**1,880**

In general, the inventories from 2009 and 2011 are quite similar, however the following changes should be noted. In 2009, there were 64 public off-street parking spaces in the Downtown Core. In 2011 one additional off-street lot was developed – an approximately 57-space gravel lot on the southwest corner of Jensen Avenue and Craig Street. The completion of construction at the Beach Club Resort also formalized a 15-space parking lot at the north end of McMillan Street with access to the

boardwalk and beach, which had not previously been included. Some additional small changes account for the remaining changes in supply.

3.1.2 Downtown Core Inventory

Within the Study Area, the Downtown Core includes 308 public on-street spaces, 64 public off-street spaces, and approximately 1,100 private off-street spaces. See **Table 2**. Figures are based on the 2011 survey and are slightly less than observed in 2009. All public off-street lots are owned by the City, are free of charge, and do not have restrictions on use.

Table 2 – Downtown Core Inventory

Type	2009	2011
Public, on-street	333	308
Public, off-street	64	64
Private, off-street (approx)	1,100	1,100
Total	**1,497**	**1,472**

3.2 Parking Analysis and Survey

The Study Area was divided into ten (10) zones for the analysis portion of this study. Zones were identified that include parking that serves similar land uses and exhibit similar characteristics so that parking conditions can be analyzed by geographic location. The focus of the study is on the Downtown Core (Zones C, D, E, and F), but also includes zones in the remainder of the Study Area. See **Figure 3.** A description of each zone is as follows:

- **A: Community Park -** Is the largest zone and comprised of Community Park.
- **B: Beach Club Resort** - Located between Highway 19 and the waterfront, west of Community Park. Includes the existing resort uses on Beachside Drive.
- **C: NW Core** – The northwest of the Core, comprises mostly retail and office uses.
- **D: SW Core -** Located south of Zone C in the Downtown Core with the majority of land uses commercial with some residential uses.
- **E: Central Core** - The centre of the Downtown Core, consisting of retail and office land uses and a significant supply of private parking.
- **F: East Core** - The east portion of the Downtown Core, comprised mostly of retail and office land uses.
- **G: City Hall** - Located south of Zones E and F and on the south edge of the Study Area boundary. Includes the Parksville Civic and Technology Centre, and residential uses.
- **H: East Commercial** - Located at the east of the Study Area, comprised of a mixed commercial land uses, and bisected by Highway 19.

- **I: Southeast Residential** – On the south of Zone H consisting of residential land uses.
- **J: Southwest Residential** - At the south of the Study Area consisting of residential land uses.

Figure 3 – Study Area Zone Boundaries

3.2.1 Public Parking Occupancy Rate

The occupancy rates for all public parking spaces were analyzed to determine the peak hour parking demand. In the 2009 study, it was determined that the peak hour was between 10:00-11:00am with 61% of all parking spaces in the Study Area (excluding Zones A and J) occupied. In 2011, the peak hour shifted to 11:00am-12:00 noon with a peak occupancy of 60%. See **Figure 4**.

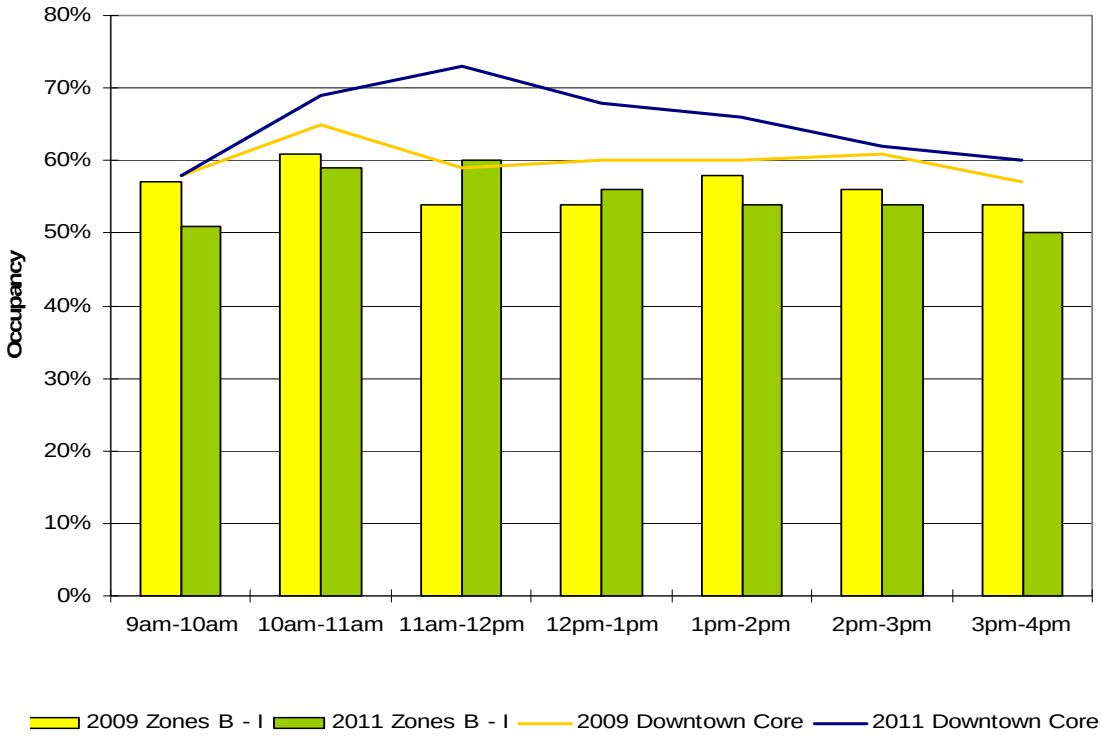


Figure 4 – 2009/2011 Study Area (Excluding Zones A + J) and Downtown Core occupancy rate for public parking, by time of day

The Downtown Core public parking was examined separately. The 2009 survey determined that 65% of parking spaces are occupied during the peak hour, which was from 10:00 – 11:00am. Analysis from the 2011 survey shows that the peak has shifted to 11:00am -12:00 noon and has risen to 73% occupancy. See **Figure 4 and Table 3**. Zones C, D + F experienced their peak between 10:00am-11:00am in 2009; in 2011, their peak had shifted. Zones C and D peak between 11:00am and 12:00noon and Zone F experiences its peak at 9:00am-10:00am. Zone C in 2011 has the highest peak in the Downtown Core with 84% of its parking occupied at 11:00-noon. In 2009 Zone E experienced peak demand from 1:00pm-2:00pm at a rate of 64% the highest of any peak period, in 2011 Zone E experienced peak period from 12:00pm-2:00pm with a peak of 66%.

In 2009, all the Downtown Core zones experienced peak period occupancy rates between 60%-72%. In 2011, these zones have seen increases and now the peak period rates are between 66%-84%.

Table 3 – Peak Occupancy, by zone

Zone	Spaces	Peak Hour	Occupied Spaces	Occupancy Rate
2009				
A	286	10:00-11:00am	18	6%
B*	No Data	No Data	No Data	No Data
C	164	10:00-11:00am	105	64%
D	97	10-00-11:00am	70	72%
E	87	1:00-2:00pm	56	64%
F	49	10:00-11:00am	30	61%
G	57	10:00-11:00zm	36	63%
H	51	3:00-4:00pm	20	39%
I	46	9:00-10:00am	28	61%
J	206	10:00-11:00am	19	9%
2011				
A*	286	No Data	No Data	No Data
B	20	9:00 – 10:00am	18	90%
C	135	11:00 – 12:00pm	114	84%
D	86	11:00–12:00pm	68	79%
E	85	12:00pm – 2:00pm	56	66%
F	67	9:00 – 10:00am	45	67%
G	78	2:00 – 3:00pm	44	56%
H	54	10:00-11:00am	27	50%
I	33	9:00-12:00pm	2	6%
J*	206	No Data	No Data	No Data

*In 2009 Zone B data was not obtained due to construction of the Beach Club Resort at the time of the survey, in 2011 Zone A and Zone J data was not collected.

While occupancy rates for each zone indicate that occupancy rates in 2009 were generally 64% or lower, these rates have risen in 2011. In both analysis processes, there are individual areas within the zones that experience particularly high occupancy rates in the peak period, especially in the Downtown Core. See **Appendix A – 2009 and 2011 Peak Period Occupancy**. The following areas experience particularly high occupancy rates in the peak hour.

- Sections on the north side of Morison Avenue between McMillan Street and Alberni Highway experience occupancy rates of up to 90% during the peak hour in both 2009 and 2011. The south side also experiences moderate occupancies of up to 78% in 2009 and up to 90% in 2011. Morison Avenue remains well occupied for the majority of the day.

- Alberni Highway, from Highway 19 to Hirst Avenue, experienced occupancies up to 50% in 2009 and have increased to 67% in 2011. Occupancy rates are consistent throughout much of the day.

- The north side of Harrison Avenue between McMillan Street and Alberni Highway was observed at an occupancy rate of 86% in 2011, up from 67% in 2009.

- Craig Street between Highway 19 and Jensen Avenue experienced occupancies less that 75% in both 2009 and 2011.

- McCarter Street between Hirst Avenue and Jenson Avenue on the west side experienced 100% occupancy, however, the rest of McCarter Street did not experience occupancy rates above 73% in 2009. In 2011, the peak parking on all of McCarter Street has declined with a peak of 71% for the whole street and only the east side from Hirst Avenue to Jensen Avenue nearing 87% in its peak hour.

- The east side of Craig Street between Jenson Avenue and Stanford Avenue experienced an occupancy rate of 73% during the peak hour in 2009, which increased to 77% in 2011.

- The public parking lots located on Memorial Avenue and Hirst Avenue experienced peak occupancy rates of 92% in 2009. Peak occupancy increased to over 100% in 2011 (vehicles parked in unmarked spaces), and occupancy remained high for the majority of the day.

- The 2011 survey of the new gravel lot at Craig Street and Jensen Avenue had a peak occupancy of 98% and experienced a high occupancy rate over much of the day. The new lot at the north end of McMillan Street had a peak occupancy of 86% and is well used over much of the day.

3.2.2 Occupancy Rates for Private Lots

While not the primary subject of this document, private off-street spaces were surveyed to understand how they influence conditions. The survey of private parking lots was a one-time observation of each parking area at the peak period of the day, which provides only a "snapshot" of parking occupancy rather than a comprehensive, day-long observation. Private lots are owned by private land owners and are typically reserved for the customers and employees of adjacent businesses.

The peak occupancy for private parking lots is considered for each zone. The highest occupancy rate was observed at 73% in 2009 in Zone F, which decreased considerably in the 2011 observation. Zone C was observed at 70% occupancy in 2009, with a small decrease in 2011. Overall, private parking was observed at between 45% and 70% occupancy in both the 2009 and 2011 surveys. See **Figure 6**.

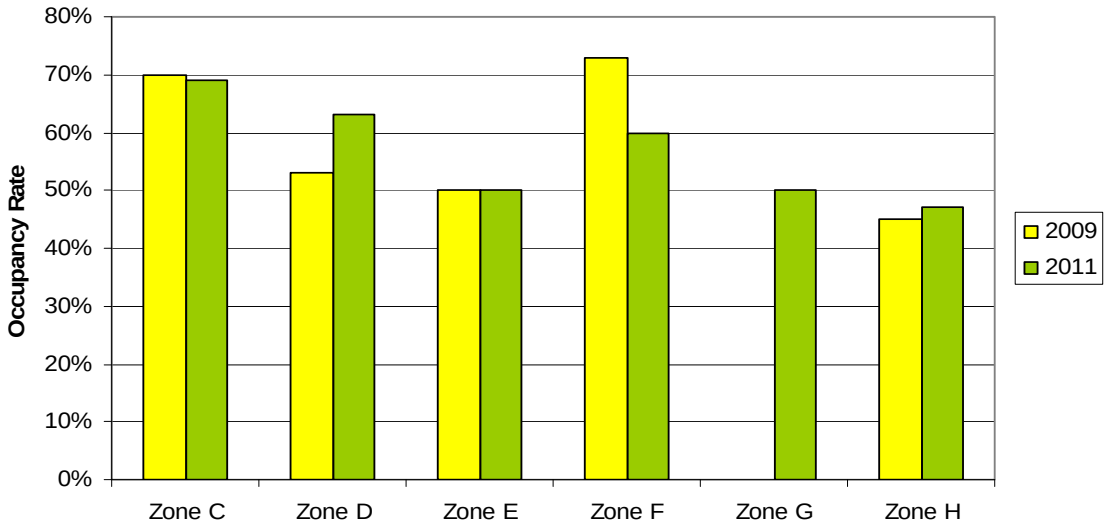


Figure 6 – Peak Hour Occupancy Rate for Private Off-street Lots

3.2.3 Duration Lengths

Duration is the length of time that a particular vehicle occupies a parking space. Calculated for a group of spaces, average duration suggests where turnover rates are high and where parking time restrictions may be needed to reduce average duration.

Generally, average duration is low in the Downtown Core, suggesting that 1-hour and 2-hour time restrictions are being adhered to. A detailed summary of average duration is included in **Appendix A – Average Duration**. Specific areas experiencing a high average duration are as follows:

- **Alberni Highway** - Alberni Highway between Highway 19A and Jensen Avenue consists of 1-hour parking on both sides of the street. Evaluation of parking data suggested that most parkers between Harrison Avenue and Hirst Avenue are parking for between 1-2 hours. It is expected that the high occupancy rate in this area is due to shoppers, not all-day parkers.

- **Pioneer Crescent** - Pioneer Crescent experienced durations over 5 hours in the Hospital Parking spaces and on the unrestricted areas along the street.

3.2.4 Duration Lengths for Public Parking Lots

Public parking lots were analyzed to determine their daily average duration. It become clear that users were using the parking lot located on Memorial Avenue and Hirst Avenue to park for longer periods, as 49% of vehicles in 2009 and 54% of vehicles in 2011 were parked for 4+ hours. The new gravel lot at Craig Street and Jensen Avenue had 68% of vehicles parked for 4+ hours suggesting people are parking in this lot for the day. The 3-hour parking lot at Beachside Drive and McMillan Street had no vehicles parked for longer than the parking restriction and had an average duration of 1.2 hours. The public lots in Zone A (Community Park) appeared to contain a variety of duration lengths with the major lots servicing Community Park having a duration length of less than 1 hour, similar observations were made in 2011. These lots also had very low occupancies. It is expected that these lots fill during the summer when the majority of Parksville's tourism occurs.

4.0 COMMUNITY FEEDBACK

This study included two (2) open houses, hosted in coordination with the Transportation Master Plan, Tuesday, June 23, 2009 at the Parksville Civic and Technology Centre and Thursday, November 12, 2009 at the Knox United Church (on Pym St). The open houses offered an opportunity for the public to review information related and provide feedback to the project team.

Each of the open houses included a feedback form that attendees were asked to complete as input to the study. In total there were 40 feedback forms completed. Below is a summary of feedback received.

Parking Supply

The community was asked to indicate which statement best describes Downtown Core parking. 57% of responses indicated that there is the *right amount* of parking, 16% indicated that there is *not enough* parking, while 24% indicated there is *not nearly enough* parking. Only 2% of responses suggested there is *too much* parking. See **Table 4** for further details.

Table 4 – Community Perception of Parking Characteristics

	Reponses		Rank
"There is not nearly enough parking"	9	24%	2nd
"There is not enough parking"	6	16%	3rd
"There is the right amount of parking"	21	57%	1st
"There is too much parking"	1	2%	4th
"There is far too much parking"	0	0%	5th

Parking Availability

The survey asked respondents to indicate those areas where it is easy and difficult to find available parking. Survey responses (stated below) indicate that the perception of parking availability is somewhat inconsistent. Responses indicate that the following areas have the least available parking (most commonly stated first):

- Alberni Highway;
- Craig Street;
- The entire Downtown Core;
- Around the Medical Centre and SOS; and
- Parksville Civic and Technology Centre (PCTC).

Responses indicate that the following areas have the most available parking (most commonly stated first):

- Private parking lots;
- Anywhere (!);
- Parksville Civic and Technology Centre (PCTC);
- The gravel lot adjacent the PCTC; and
- Nowhere (!).

Walking Distance

The survey asked respondents to indicate a reasonable walking distance after parking a vehicle to reach a destination. Responses suggest that two (2) to three (3) blocks is acceptable walking distance, less than a 5-minute walk. See **Table 5**.

Table 5 - Acceptable Walking Distances

	< 1 block	1 block	2 blocks	3 blocks	4 blocks	> 4 blocks
Responses	5	19	59	46	12	7
Percentage	3%	13%	40%	31%	8%	5%

General Comments

A number of more general comments were received relative to Downtown Core parking, as follows:

- Numerous comments suggested a need for a parkade in the Downtown area, with the Jensen Avenue/Craig Street intersection being the preferred location.

- Feedback suggests that on-street parking is needed on Highway 19A to accommodate parking demand from adjacent businesses and (potentially) Community Park.

- Community members stated that parking metres would put Downtown businesses at a competitive disadvantage and encourage locals to shop in suburban areas or in Nanaimo.

- Additional bicycle parking is needed in the Downtown.

- Streetscape improvement options presented with the Downtown road network plan proposed reverse angle on-street parking. Reverse angle parking was not supported by the community.

5.0 STRATEGIES FOR ON-STREET PARKING

Generally, on-street parking is intended to satisfy the demand for short stay parking, attributed to customers in the Downtown Core. In this sense, on-street parking conditions have a significant influence on the customer's Downtown shopping experience and need to be given primary consideration when developing parking management strategies.

Analysis from 2009 and 2011 shows similar trends in on-street parking in the Downtown Core. There are about 308 on-street parking spaces in the Downtown Core. Downtown Core on-street spaces were observed occupied at 68% during the peak hour in 2011, an increase from 60% in 2009. This means that approximately 98 on-street parking spaces are unoccupied during the busiest time of the day, all of which are located in relative proximity to one another. This would suggest that the existing on-street parking supply as a whole is sufficient for the overall demand for short-term parking.

Further analysis of the 2009 and 2011 survey data revealed that occupancy rates for on-street spaces in the northwest end of the Downtown Core - Alberni Highway, Harrison Avenue, and Morison Avenue – are particularly high. The remaining areas of the Downtown Core generally experience occupancy rates below 70% during the peak hour, and less during the remainder of the day. Areas of high occupancy were found to have relatively low average duration consistent with the two-hour time restriction in the area, suggesting that long-term parkers (i.e. employees) occupying these spaces is not an issue. Still, community feedback revealed a mixed perception of on-street parking availability. Approximately 40% of those surveyed suggest that there is "not enough parking" or "not nearly enough parking." Craig Street and Alberni Highway were specifically identified as areas where it is difficult to find parking.

Adding on-street parking along Hwy 19A has been an on-going debate. The south side of Hwy 19A is fronted by retail-commercial land uses that typically seek on-street parking, however this study finds that no additional on-street parking supply is required to meet demand for short-term parking. There may also be traffic and safety implications of locating parking on Hwy 19A that require careful consideration.

On-street parking supply is more or less static; there is limited ability to increase the supply of on-street spaces. There are opportunities to alter management techniques to address public perception issues and to ensure effective functioning in future. The following sections highlight recommended parking management strategies for on-street parking.

5.1 Time Restrictions

Time restrictions place a maximum on the period of time that a vehicle may remain parked in a certain space or group of spaces to encourage a more frequent turnover of vehicles in high demand areas, typically adjacent commercial land uses. Time restrictions are typically applied where multiple user groups compete for the same supply. Parking enforcement is critical time restrictions are in place, as is ensuring long-term parking supply is available for parkers who would exceed the time restriction.

Downtown Core on-street spaces are restricted to 2-hour maximum in most places, with 1-hour maximums on Alberni Highway and Jensen Avenue, adjacent the PCTC. It is recommended that existing time restrictions be altered to increase the number of 1-hour restricted spaces in high demand areas, and add 4-hour restricted spaces. See **Figure 8**. Rationale for each restriction is as follows:

- One-hour maximums on spaces that currently experience high demand and are adjacent short-stay commercial land uses. This will encourage a shorter length of stay and allow these spaces to satisfy the needs of more parkers. Two-hour and four-hour restricted spaces will be available within close proximity to these areas to accommodate longer duration parkers.

- Two-hour maximums will remain for spaces that are centrally located, but experience a moderate parking demand. Two-hour spaces will meet the needs of the majority of customers and encourage a reasonable vehicle turnover.

- Four-hour maximums are placed on spaces that experience low demand, are located at the periphery of the Downtown Core, and have adjacent residential, institutional, or longer stay commercial land uses. These spaces will permit long stay customers to park in the lower demand areas and have the option to walk to the Core. It will also relieve demand from the Downtown off-street lots, which currently experience high demand (explained in *Section 6.0*).

Figure 8 – Recommended On-Street Time Restrictions

Parking enforcement needs will increase because of the altered time restriction, particularly due to the increase in 1-hour spaces. Parking enforcement is addressed in *Section 8.0*. It is also important that the City monitor parking conditions after restrictions are altered, as there is potential for a shift in demand to residential areas surrounding the Downtown Core.

5.2 Pay Parking

All public parking in Parksville is free. This is a philosophical approach to providing on-street parking that is shared with many British Columbia communities of a similar size, but not all. See **Table 6**.

Table 6 – BC Communities with Free / Paid Parking, by population

Free	Paid
Campbell River (30,000)	Vernon (33,000)
Courtenay (22,000)	Penticton (32,000)
Port Alberni (18,000)	Fort St John (17,000)
Squamish (15,000)	Prince Rupert (13,000)
Powell River (13,000)	Dawson Creek (11,000)
Comox (12,000)	Sidney (11,000)
Summerland (11,000)	Nelson (9,000)
Parksville (11,000)	Creston (5,000)
Quesnel (9,000)	
Qualicum Beach (9,000)	
Ladysmith (8,000)	
Merritt (7,000)	
Revelstoke (7,000)	
Hope (6,000)	
Duncan (5,000)	
Smithers (5,000)	

At a philosophical level, the pay parking discussion is not about whether parking is free or paid, it is whether the user pays directly or indirectly. When parking is free, costs are subsidized by the community as a whole, primarily through taxes, and provides parking for a fraction of its true cost to the individuals who choose to use it. When parking is priced, the individuals that choose to park incur costs and the wider community subsidizes their parking to a lesser extent. This provides direct financial incentive to travel via alternative modes and reduce parking demand in the Downtown Core. The primary disadvantage of pay parking is that it puts the Downtown at a competitive disadvantage to suburban businesses where parking is typically offered free. Generally, communities who have implemented pay parking are recovering some costs and generating parking revenue.

Implementing pay parking is typically a political decision made in consideration of parking management objectives, but more often in consideration of larger Downtown business, economic development, or revitalization objectives. Parking management rationale for pay parking is as follows:

- Shift parking demand away from a location or time period with especially high demand;
- Reduce vehicle travel to/from an area, reducing congestion and parking demand;
- Recover costs related to parking or transportation infrastructure; or
- Generate revenue for Downtown improvements/revitalization.

5.2.1 Consideration for Pay Parking

It is suggested that current on-street parking conditions do not necessitate pay parking and that *pay parking is not implemented at this time*. However, there are conditions where the City may consider pay parking in the future. The timing and extent of pay parking will ultimately be a political decision or a direction taken with a comprehensive Downtown revitalization effort, rather than a parking management decision. Potential scenarios for pay parking are presented in the following sections.

Scenario 1: Reduce Parking Demand

On-street parking demand will increase as development in the Downtown Core continues. Pay parking may be implemented as a strategy to decrease on-street demand so occupancy levels are acceptable. This will require sufficient parking supply off-street to ensure access to the Downtown, and should be coordinated with improvements to alternative travel options to encourage shift in travel demand.

Scenario 2: Generate Revenue

In future, there may be significant Downtown revitalization projects that require funding. Pay parking presents an opportunity to generate revenues to pay for such improvements. It is suggested that pay parking is only implemented once improvements have been made, as using this rationale to implement pay parking without having the improvements to show for it is likely to prove unpopular with the community. On-street pay parking may also help finance future off-street parking facilities.

Scenario 3: Reduce Travel Demand

Pay parking presents an opportunity to significantly influence travel mode choice to decrease vehicle trips and increase walking, cycling, and transit. Should the City take a more aggressive stance on environmental sustainability in the future, implementing pay parking in the Downtown Core would result in significantly improved sustainable transportation.

5.2.2 Pay Parking Details

If the City chooses to implement pay parking in the future, the following details should be considered.

Rates

Small to mid-sized British Columbia communities that have priced on-street parking typically price it at $0.50 per hour. It is suggested this would also be an appropriate rate for Parksville. Parking should be charged Monday through Saturday, from 9:00am to 5:00pm.

Technologies

Conventional parking meters only accept coins for on-street parking. However, more recent pay-and-display and pay-by-space kiosks are a more efficient and cost-effective means for accepting payment[1]. Conventional meters are approximately $1,000 per meter head, while kiosks are approximately $10,000 but cover between six and ten spaces. The kiosks also provide options for credit card payment for improved user convenience, require fewer resources for collections, can be coordinated with cellular phone and smart card payment options, provide improved data collection and monitoring capabilities, and offer improved aesthetics and less sidewalk clutter than conventional meters. The newer kiosk technologies should be used if the City pursues pay parking in the future.

Programs

There are a number of parking programs that lessen the negative perception of pay parking and improve the user convenience. The following programs should be considered if pay parking is pursued.

- **Parking smart cards** are a debit payment system that allows a parker to purchase credits in bulk and use them at parking kiosks. Unused parking minutes may be debited back to the smart card at the end of the trip. Smart cards also eliminate the need for cash.

- **First hour free** programs offer a voucher for Downtown customers who shop at a sponsor business to receive their first hour free. These programs help address business owner concerns that pay parking will hurt their business.

- **Courtesy ticket** programs give a grace period to parkers (i.e. 10-minutes), where they are only issued a warning citation if parked illegally for 10 minutes or less.

- **Eco vehicle parking** passes offering free or reduced rate parking for low-emission vehicles.

[1] *Aparc Systems and Digital Payment Technologies offer parking systems similar to those described here.*

6.0 STRATEGIES FOR OFF-STREET PARKING

Off-street parking is intended to satisfy the demand for long-term parking in the Downtown Core, generally attributed to employees and long stay customers. These spaces do not occupy the most sought-after parking areas adjacent businesses and are more appropriate for long duration, low turnover parking. While it is necessary to accommodate the parking needs of employees in the Downtown Core, they are the user group that is most likely to shift travel behaviour with the introduction of improved alternative transportation options.

In the vicinity of the Downtown Core there are now four (4) public off street parking lots. The two (2) public off-street lots on Memorial Avenue and Hirst Avenue consist of 64 parking spaces with no charge. See **Figure 9**. Their combined peak period occupancy was observed at 92% in 2009 and 100% in 2011. Occupancy rates remain above 80% for most of the day. A number of 4-hour parkers were also observed in on-street spaces, many exceeding the maximum time restriction. The additional lots on the periphery of the Downtown Core are at the north end of McMillan Street and a gravel parking lot at Jensen Avenue and Craig Street. The McMillan Street parking lot is primarily used by walkers/joggers and for access to the waterfront, and has therefore been omitted from detailed consideration in this study. The gravel parking lot at Craig Street and Jensen Avenue on the outside edge of the Downtown Core was observed in 2011 with a peak occupancy rate of 98% and rates in excess of 82% throughout much of the day. These figures suggest that the off-street public parking supply is not meeting demand and that all-day parkers are seeking parking elsewhere in the Downtown Core. Community feedback also suggested that generally there is not enough parking in the Downtown Core, although this is considered more an issue of demand not being met rather than a lack of supply.

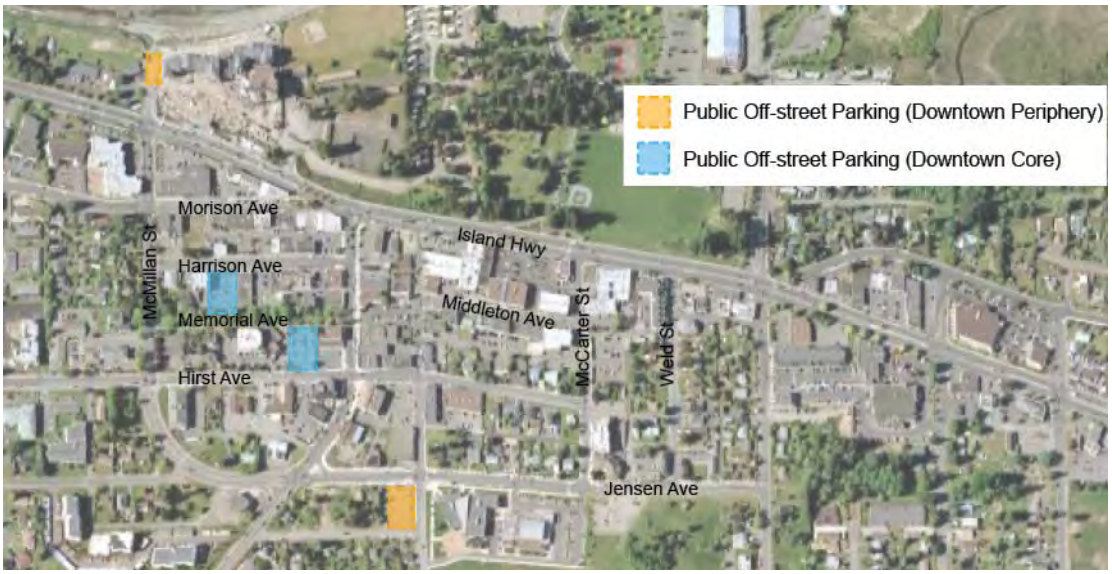


Figure 9 – Public off-street parking lots

The following sections include management solutions to address the challenge of meeting long-term parking demand in the Downtown Core. Opportunities include increasing public parking supply by acquiring new facilities and arranging for access to under-utilized private parking areas, altering restrictions to satisfy a portion of off-street demand in on-street spaces, and using pricing and transportation demand management (TDM) to reduce the demand for parking in the Core. Each of these strategies are explored in the following sections. An approach to coordinated implementation of each strategy is of great importance, and explained in *Section 10.0*.

6.1 Address Parking Demand

Through data collection and consultation with the community, it is apparent that the demand for off-street parking (i.e. all day parking) is not being met at present. Conventional parking management practices would suggest an increase in off-street parking supply consistent with the estimated shortfall. While this would result in off-street demand being met, it would facilitate increase vehicle travel and negatively address sustainability, health, equity, and economic objectives. This study recommends an integrated approach to meeting off-street parking demand through a combination of new supply, reallocation of existing supply, and transportation demand management. This integrated approach will not only address off-street parking demand needs, it will decrease the number of vehicle trips, reduce vehicle-related GHG emissions, facilitate active travel habits, and enhance travel options available to all community demographics. The following sections identify specific actions to better accommodate off-street parking demand, with a coordinated implementation plan presented in *Section 10.0*.

6.1.1 Manage Travel Demand

Transportation demand management (TDM) is the practice of influencing travel behaviour to shift demand to underutilized modes, which in Parksville and most North American communities is walking, cycling, transit, and supporting modes. Above all, investment in TDM will reduce the number

of vehicle trips made, resulting in a reduced parking demand in the Downtown. These strategies are particularly effective in influencing employee travel habits and therefore in reducing off-street parking demand. TDM also presents cost savings by using existing capacities in under-used systems rather than requiring new vehicle-oriented infrastructure, result in fewer GHG emissions, ensures equitable spending on programs/infrastructure accessible to all community demographics, and enhances opportunities for active, healthy living.

It is recommended that the City aggressively pursue TDM as a means to address long-term parking demand in the Downtown, among other things. Suitable TDM strategies are identified in *Section 7.0*.

6.1.2 New Public Parking

The current occupancy rates of 100% for the two public off-street lots in the Downtown and the 98% occupancy rate for the gravel lot at Craig Street and Jensen Avenue are not a desirable scenario. The results of the survey suggest there is additional demand for all-day parking. Currently, the high occupancy rates result in all-day parkers using on-street parking spaces for long-term parking and encourages unauthorized parking on private property and in surrounding residential areas. It is recommended that the City work toward providing a new public parking lot to address Downtown Core parking demand.

Location

The location of a new parking facility may be more important than the number of parking spaces contained in the lot. It is strongly recommended that a new lot is located at the periphery of the Downtown Core, but not within the Core. This will retain the most valuable central properties for land uses that increase the Core's vitality, enhance its aesthetics, and minimize vehicles travelling through the Core to access the lot. Conversely, the lot should be within walking distance of the Core to be attractive to a variety of Downtown employees. Suitable locations are shown in **Figure 10**.

Quantity

The number of parking spaces included in a new off-street lot should largely depend on the size of the properties available. Building a centralized parking facility in the Core will encourage more vehicles to enter into the Core whereas building one (or more) smaller lots on the periphery reduces vehicle travel into the Core allowing it to retain a pedestrian focus and parking function for short term stays. These smaller lots are also lower in cost than building one large parking facility and more flexible for changes in conditions into the future.

Figure 10 – Suitable Areas for Future off-Street Parking

Design

The new facility should be designed considering best practices for green parking lot design, (i.e. City of Toronto Design Guidelines for 'Greening' Surface Parking Lots[2]) which will enable Parksville to build a new parking facility that provides a positive aesthetic impact on the community and reduces the negative environmental impact of off-street parking lots.

Timing

Developing new off-street spaces is not deemed immediately urgent. Consideration should first be given to existing City-owned properties and their suitability for use as parking. If no suitable properties exist, the City should explore options to purchase suitable private properties. This will require on-going budgeting, perhaps through revenues generated through priced parking in the existing public lots (explained in *Section 6.2*), parking violations, and cash in-lieu contributions.

Rate

Off-street parking pricing is addressed in *Section 6.2*. It is recommend that a new lot located on the periphery is priced at a discounted rate from the proposed daily price for the existing lots on Memorial

[2] *http://www.toronto.ca/planning/urbdesign/greening_parking_lots.htm*

Avenue and Hirst Avenue, reflecting its less central location The periphery lot should be priced similarly to the proposed price of $2.00 per day for the Craig Street and Jensen Avenue lot.

6.1.3 Community Park Lots

Community Park consists of approximately 300 parking spaces divided among four parking areas. Community Park is a popular recreation and tourist destination in the summer and these spaces are assumed to be occupied at high rates at this time. However, the parking survey for this study was conducted in April and Community Park experienced a peak occupancy rate of 6%, leaving over 280 parking spaces unoccupied. Spot surveys during the 2011 parking survey also concluded that the parking lots in Community Park during the off-season are underutilized experiencing very low occupancies. These results are assumed to be typical of the non-summer months (i.e. 8 months per year). There may be an opportunity to encourage use of these spaces in the winter months to help address off-street parking demand.

Parking facilities in Community Park are located approximately 350m from the Craig Street / Island Highway intersection at the north end of the Downtown Core and approximately 500m from the Memorial Avenue / Alberni Highway intersection at the centre of the Core. See **Figure 11**. If 350-400m is considered equivalent to three blocks, the survey results suggest that 44% of people are willing to park their vehicle in Community Park and walk to the northern edge of the Downtown Core. To facilitate this, pedestrian connections between the Park and the Core should be strengthened, with consideration for the following:

- Improved pedestrian facilities between the Island Highway and the centre of the Park
- Reviewing pedestrian crossing locations on Island Highway
- Pedestrian wayfinding signage between the Park and the Core[3]
- Installation of rain shelters along the route to protect pedestrians during inclement weather

[3] *Refer to 2007 Downtown Revitalization Strategy for signage examples.*

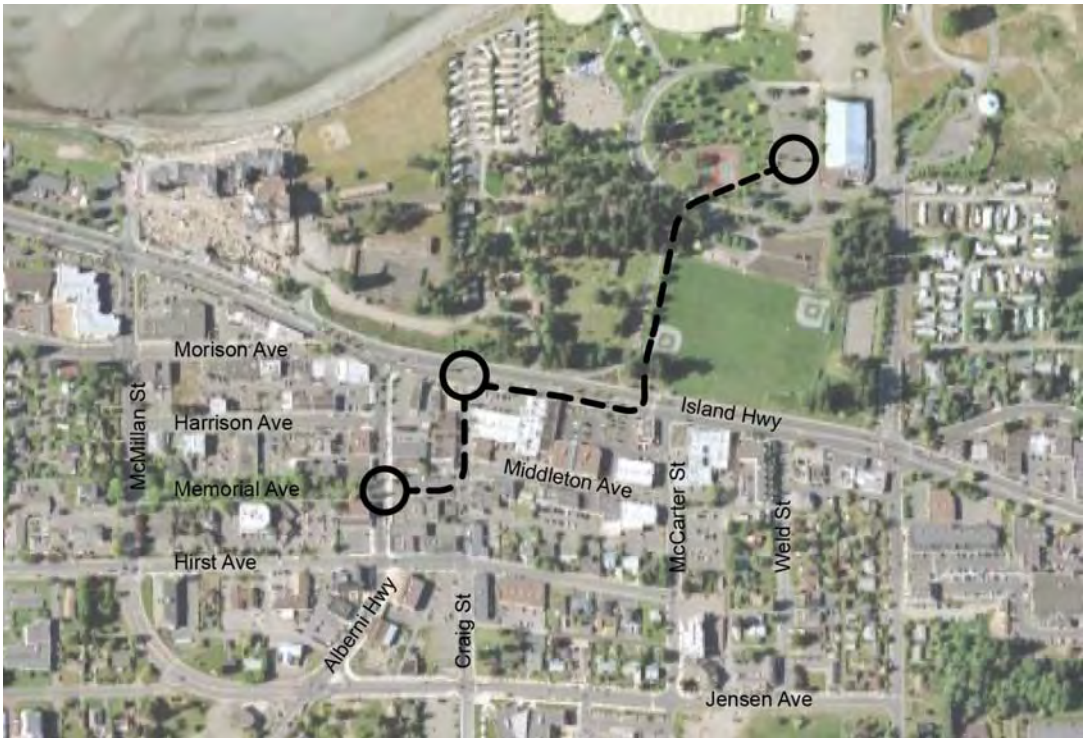


Figure 11 – Pedestrian connection from Community Park to Downtown Core

It is recommended that all parking in Community Park remain unpriced. This will create incentive for all-day Downtown parkers to use this parking supply to avoid pay parking in the Downtown, which will increase use of Community Park and better distribute demand in the Downtown.

As mentioned, parking in Community Park is well used in the summer months and should not be used by Downtown employees during the summer. The City should consider strategies to discourage employee parking in these areas from mid-May through mid-September. Such strategies may include the following:

- Information made available to Downtown parkers indicating the availability of Community Park and the seasonal conditions of use
- Signage indicating parking is for Park users only during the summer
- Enforcement, only if delinquent parkers are a reoccurring issue

General seasonal parking demand trends work in favour of this strategy. Downtown employees are generally more willing to use transit and commute by bicycle in the summer due to improved weather. Employees also tend to concentrate their vacation time-off during the summer, which also reduces overall demand.

Transportation demand management strategies are identified in *Section 7.0*. The City should consider TDM-related events and infrastructure in advance of the summer months to coincide with the shift in employee vehicles out of the Community Park lots.

6.1.4 Craig Street / Jensen Avenue Parking Lot

In order to increase off-street public parking spaces the City could install curb stops in the Craig Street and Jensen Avenue parking lot to encourage more consistent parking patterns during the 2011 survey this lot was observed as being full with 57 vehicles parked. Based on preliminary calculations installing curb stops could increase the number of parking spaces by up to ten (10). Making this improvement to the parking lot should be done if price parking is introduced as outlined in *Section 6.2*.

6.1.5 Under-used Private Lots

The City also has the opportunity to secure public access to parking facilities on private properties. These would be situations where under-utilized private properties are identified and a lease arranged that permits public use. It is important that an agreement is in place that ensures the private parking resource have the same characteristics in place as a public parking lot, including a tiered daily rates consistent with public facilities, a daily permit system rather than monthly parking, proper enforcement, and appropriate signage. Utilizing these opportunities will help the City address off-street parking needs, if only temporarily.

6.2 Price Parking

Pricing off-street parking is an effective means of shifting travel demand toward more sustainable travel modes, such as cycling and transit, and to generate revenues to fund parking management and sustainable transportation improvements in the community. It is recommended that pay parking is implemented for the two off-street parking lots in the Core and for any future public parking lots provided. The following outlines recommended rates, rate structure, and use of revenue streams.

6.2.1 Rates

Considering appropriate parking rates requires careful consideration of both the objectives of pricing and the threshold the community is willing to accept. The goal of pricing, after all, is to improve parking management for the overall benefit of the community.

The most obvious approach is to determine a parking lot's land value, construction cost, maintenance costs, and administration/enforcement costs over an expected life span (i.e. 30 years), then set a parking rate structure that results in recovery of up-front and on-going costs over the lot's lifespan.

This is an approach taken where a new parking facility is being planned, but is not relevant for the existing lots in Parksville. It also fails to account for impacts on the community, influencing travel habits, and the lack of an established "pay parking culture" in Parksville.

Another approach is to consider the cost of alternative commuting options to driving and parking. Modes such as walking and cycling incur indirect costs and cannot be compared to parking. However, transit requires daily or monthly costs, as follows:

- The daily commute by transit costs $4.50, two one-way trips of $2.25 each. On a day-by-day basis, the cost to park should be $4.50 per day to remain on par with transit.

- A monthly adult transit pass is $60.75. Assuming the typical commuter works 20 days per month and only uses their pass for commute purposes, a monthly transit pass costs approximately $3.00 per day. Under this scenario, parking should be offered at $3.00 per day to remain on par with transit.

Established parking rates in other communities also provide an indication of the rates that may be acceptable in Parksville. While not all communities offer public off-street parking, those that do are as low as $3.00 per day and increase to as much as $9.00. See **Table 7**. Larger communities such as Victoria and Vancouver offer daily rates significantly greater, but are not comparable to Parksville.

Table 7 - Downtown Off-Street Parking Costs in Other Communities

	Cost (per day)
Kelowna, BC	$3.00 / 4.00
Kamloops, BC	$4.00
Kitchener, ON	$4.00
Moncton, NB	$4.00
Penticton, BC	$4.00
Prince George, BC	$3.00
Red Deer, AB	$8.00
Saskatoon, SK	$9.00

It is recommended that $3.00 per day is an appropriate rate for off-street parking the Downtown Core, and $2.00 per day for the gravel lot at Craig Street and Jensen Avenue, a tiered rate structure is recommended for Parksville (*Section 6.2.2*). This puts rates the same as the daily cost of a monthly transit pass and is consistent with costs in similar small communities. Parking should be priced

Monday to Friday, from 9:00am to 5:00pm. All other times should be free. Over time, the City should consider increasing rates to $4.50 per day to be on par with the cost of a transit two-way cash fare.

6.2.2 Structure

When considering priced parking, there are supporting strategies that should be used to encourage sustainable commuting habits and better achieve parking management objectives. The following options should be considered.

Pay-by-day

Many communities offer off-street parking using a monthly permit system. The monthly permit requires a considerable investment at the beginning of each month, but once it is purchased there is little incentive to travel by alternative modes on a given day. This gives the notion that once the initial purchase is made; parking from that point on is "free". However if parking is paid on a daily basis, commuters must consider the cost of parking each day relative to the cost of transit, cycling, walking, or carpooling. In this sense they are more inclined to choose an alternative travel mode on a given day, thereby reducing parking demand and encouraging more sustainable travel.

It is recommended that all future priced parking is offered on a daily permit system. The City might also consider approaching the operators of the private off-street lot on McCarter Street to alter their lot from monthly to daily permits.

Tiered Rates

Off-street parking rates should be on a tiered system according to their location. Parking on the most valuable, centrally located, and convenient locations should be priced at a premium rate. Those in less valuable, peripheral, and less convenient locations should be priced at a lower rate.

The existing lots on Memorial Avenue and Hirst Avenue are in central Downtown locations and should be priced at the full $3.00 per day. The parking lot at Jensen Avenue and Craig Street should be priced at $2.00 per day as it is on the periphery of the Downtown Core. The following section refers to the need for additional off-street parking lots at the periphery of the Downtown Core. These lots should be priced at a discounted rate of $2.00 per day to reflect their peripheral location and provide financial incentive to use them. Off-street parking is provided in Community Park free of charge and should continue to be free as it is more of a recreation and tourist asset than a contributor to meeting Core commuter parking demand. Collection and enforcement of private parking lots is the responsibility of the individual landowner, however the City may pursue agreements with the landowners where enforcement of the private lots is done by the same staff as City parking with a

contract for payment and collection. This option allows private parking to function in the same manner as public parking.

6.2.3 Revenues

Implementing pay parking for off-street lots will result in new revenue streams for the City. Where they are used responsibly, parking revenues provide an opportunity to improve the community through infrastructure upgrades and new sustainability projects that would otherwise lack funding. However, without responsible accounting and a public awareness campaign, it is expected that priced parking will be perceived as a "cash grab" and met with resistance, particularly by Downtown merchants.

It is strongly recommended that parking revenues are not committed to general revenues. Revenues should first be used to cover the on-going costs of providing public parking in the Downtown Core. This includes expenses such as facility maintenance, metering equipment, and enforcement. The need for enforcement will increase as priced parking is implemented and enforcement of on-street restrictions becomes more important, as explained in *Section 8.0*.

Revenues beyond those needed for on-going parking management should be used to directly fund either transportation demand management (TDM) programs or general improvements in the Downtown Core. Funding for TDM initiatives will help manage parking demand in the Downtown and reduce the need for additional Downtown parking supply. Specific TDM strategies are identified in *Section 7.0*. Funds used to generally improve the Downtown Core may include infrastructure projects such as signage, landscaping, public art, or sidewalk infrastructure, or it could include programs or events that encourage tourism and local vitality in the Downtown. Using parking revenues for these purposes will not only improve the Core, but will also signify a direct reinvestment of parking revenues in the Downtown.

As the land values in the Downtown Core increase with development, it will become more economical for the City to sell one or both of the existing Downtown Core lots and replace them with less expensive properties in the periphery area. The funds from the sale can contribute to the purchase, development and maintenance of the new lots.

7.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management is a wide variety of tools, which the City of Parksville can implement to reduce the number of single occupant vehicle trips into the Downtown Core. TDM strategies can help Parksville to reduce parking demand and put off the building of a new parking facility by a number of years depending on the quality of TDM programming and variety of tools implemented.

Travel mode selection is a product of the options made available within the community. If the most attractive option is driving, then people tend to drive, which increases parking demand. But if facilities and programs are put in place that make non-automobile forms of transportation more desirable than automobile use, the preferred travel mode will shift and parking demand will decrease. Transportation Demand Management (TDM) refers to integrated programs, policies, and services designed to reduce vehicle travel demand by influencing individual travel behaviour and expanding the range of available travel options. Rather than increase vehicle infrastructure, TDM looks to shift travel habits to satisfy demand by increasing use of transit, walking, cycling, carpooling, and telecommuting.

Transportation Demand Management strategies work towards achieving multiple benefits. Of primary importance to this study is the goal of shifting travel demand away from single-occupancy vehicle travel towards modes that reduce parking demand. More general TDM benefits include:

- Decreased greenhouse gas (GHG) emissions;
- Reduced traffic congestion;
- More efficient use of public monies;
- More compact land use patterns; and
- Increased health and well-being.

The following sections outline recommended TDM strategies for the City of Parksville to implement in order to decrease parking demand in the Downtown Core, and encourage sustainable travel. It should be noted that the City's Transportation Master Plan also contains a series of TDM recommendations intended to reduce traffic volumes, where TDM recommended programs overlap, reference is made to the Transportation Master Plan.

7.1 TDM and Parking Management Strategies

The following are strategies that respond to Parksville's current parking situation. Parksville's Downtown Core is compact with many businesses and residences concentrated in small area. However, on the edges of the Downtown Core and other areas within the Study Area, land use development is dispersed and automobile dependency flourishes. Employees working in the Downtown Core generate much of the parking demand, so commute trip reduction strategies are particularly appropriate. Implementing TDM strategies can help to ease the perception of too little parking in the Downtown Core, limit frustrations of Downtown Core users, and shift users to more sustainable commuting modes.

7.1.1 Walking

Walking is a simple and easy alternative to driving and parking at a destination. Walking is particularly relevant to people who live or work in the Downtown Core as it reduces demand for long-term parking. Walking also facilitates more "park once" trips, in which visitors park at the edge of the Downtown Core and walk to their destinations. Walking can be coordinated with other TDM strategies such as facilitating ridesharing and public transit, which aid in reducing the number of automobile trips, thus decreasing the overall parking demand.

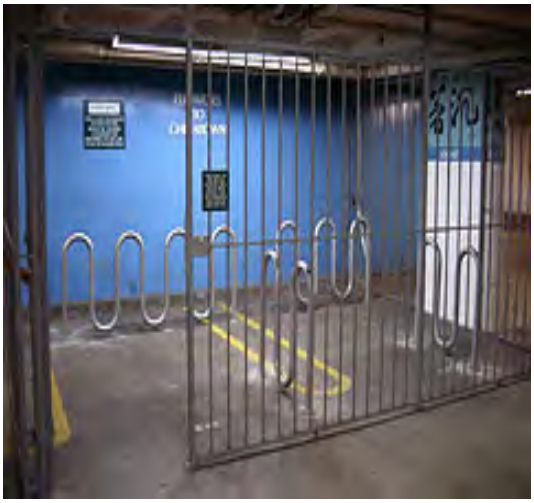
Downtown Parksville is compact and highly walkable. There are existing sidewalks and crosswalks on most streets, and relatively low traffic speeds. The City should continue to improve Downtown walking conditions, with special consideration for connections among the Downtown Core worksites, retail business, and the seashore.

7.1.2 Cycling

Cycling as a TDM strategy encourages individuals to cycle to their destinations instead of driving. This reduces parking demand and supports transit use. Cycling reinforces the types of compact, mixed uses development that reduces automobile dependency. Parksville is relatively bikeable, with paths, bike lanes, and wide shoulder on many roads. The City should continue to improve cycling conditions by strengthening connections between the Downtown Core and nearby commercial and residential areas.

Bike Parking

Bike parking is supplied as either Class I parking which is long-term secured parking or Class II parking that is short-term parking intended for visitors.



Example of a Class 1 bicycle facility

Example of a Class 2 bicycle facility

There is currently no bike-parking requirement for developments in the zoning bylaw. A review of similar community's bike parking requirements is shown below. These communities have many different bike parking requirements based on the type of land use; commercial and residential were evaluated in **Table 8**.

Table 8 – Similar Communities Bike Parking Requirements

City of Victoria		
Land Use	**Class I**	**Class II**
Residential – Multiple dwellings	1 space/unit	6 space rack at each entrance of apartment building
Commercial – Office, retail	1 per 205m2 (50%)	1 per 205m2 (50%)
Commercial – Shopping centre	1 per 205m2 (30%)	1 per 205m2 (70%)
District of Saanich		
Land Use	**Class I**	**Class II**
Residential Apartment/townhouse	1 space/unit	6 space rack at each entrance of apartment building
Commercial – Office, retail	1 per 250m^2 (50%)	1 per 250m^2 (50%)
Commercial – Shopping centre	1 per 250m^2 (30%)	1 per 250m^2 (70%)
Town of Sidney		
Land Use	**Class I**	**Class II**
Residential – Apartment	0.5 spaces/unit	0.25 spaces/unit
Commercial – General	1 per 125m^2	1 per 125m^2 (for lots greater than 370m^2

Based on the review of other communities, bike-parking rates vary depending on the size of the community, but on average 1 space per unit of Class I spaces are provided and, Class II are provided at a rate of one rack per entrance to a residential development. Commercial land use Class I and Class II rack space allotments are determined by the size of the facility and the use.

Recommended Bike Parking Requirements

In an effort to promote cycling to/from the Downtown Core, it is recommended that the zoning bylaw be amended to include Class I and II bike parking requirements. For multi-family residential Class I bike-parking rates should be set at one space/unit and Class II bike parking set at a rack outside of each apartment entrance. Commercial Class I bike parking rates should be set at a similar rate as seen in other communities, 1 space for between 125m^2-250m^2 floor area with a limitation to the size of the building where smaller buildings for example under 370m^2 would not have to provide bike parking. Class II racks should be required at building entrances.

7.1.3 Public Transit

Public Transit can substitute for personal automobile travel, and households in transit-oriented communities (areas with very high quality public transit service and supportive land use) tend to own fewer vehicles, providing an addition reduction in parking demand. Parksville Transit currently has three (3) routes within the City. Transit in Parksville is felt to be relatively inefficient due to limited routes and service levels. Adding additional transit routes and more efficient daytime schedules will enable people to better utilize transit and reduce parking demand, particularly during business hours. For more on transit in Parksville refer to section 7.0 of the Transportation Master Plan.

7.1.4 Shuttle Service

A Shuttle service for tourists and residents of Parksville was examined in detail in the Parksville Transportation Master Plan.

7.1.5 Neighbourhood Zero Emissions Vehicles

For a detailed description of NZEV's, please refer to the Parksville Transportation Master Plan.

7.2 Downtown Employee Parking Demand Reduction Strategies

Many Downtown Core businesses employees drive to and park in the Downtown Core. One of the challenges with Downtown parking is meeting the need for employee all-day parking. The following strategies are intended to provide options for these employees. Providing opportunities for employees to choose other modes of transportation will aid in reducing parking demand in the Downtown Core.

7.2.1 Carsharing and Ridesharing

Ridesharing, including vanpooling and carpooling, are both potential travel options for those employees commuting to Downtown who do not have convenient transit access, or live too far to walk or cycle to work. Carpooling is typically an informal agreement between small groups of individuals who share a ride to a location, while vanpooling tends to be more formally arranged and involves a larger group of commuters, who pay a monthly fee to a vanpooling agency, who then provides the vehicle. Ridesharing can be a great alternative to driving alone; however, it is typically only successful if commuters can find other individuals in their areas, and with similar schedules. Businesses should encourage employees to consider the benefits of carpooling to and from work by providing promotional and educational material on site, and advertising the benefits of ridesharing to the different stores and services on site.

7.2.2 Teleworking

Teleworking is an arrangement where employees work from their homes on certain days of the week, eliminating their need to park Downtown. Often employees coordinate their telework days so that only a small number work from home on a particular day, with minimal impact on business operations. Businesses can support this option by providing the equipment necessary to work from home, perhaps computers, software, or video equipment.

7.2.3 Alternative Scheduling

Alternative scheduling involves a variety of arrangements to stagger working hours to take advantage of periods during the day when Downtown Core parking demand is low. Flex days refers to a strategy where employees meet their required weekly or monthly working hours by working more hours in fewer days. This reduces Downtown parking demand on the days that an employee is not working.

7.2.4 Parking Cash out

Employers who are currently offering free or subsidized parking to employees can implement ‘parking cash out’. Under a ‘parking cash out’ program, an employer gives employees a choice to keep a parking space at work, or to accept a cash payment and give up the parking space.

More info on Parking Cash Out here:
http://www.lgc.org/freepub/docs/community_design/presentations/parking2007/parkingcash.pdf

7.2.5 Bicycle Parking

Bike parking is an informal way of encouraging cycling for employees and customers. Bike parking should be offered to employees in the form of Class I spaces inside and Class II spaces outside for customer use. See *Section 8.1.2* for more information on bike parking.

7.2.6 Guaranteed Ride Home

A guaranteed ride home program allows a Downtown employee who travels to work via non single-occupancy vehicular modes access to a free ride home in case of emergency. As an example, the service may entitle cyclists a ride home in case they become ill during the day or a carpooler may be given a taxi voucher if they need to return home to attend to their sick child. Rides are most often given as a taxi voucher, but may also be fleet vehicles or rental cars. One of the most commonly cited barriers to alternative transportation, such as cycling or transit, is that it is not flexible, and cannot be counted on to deal with unforeseen circumstances. The guaranteed ride home service addresses this issue.

7.2.7 Transit

Transit is another alternative to driving that should be encouraged. In some BC municipalities, employers give employees who do not drive to work, but rather take a bus, cycle, carpool, or walk, a prize incentive or a bonus on their paycheque. In the Victoria Region, incentives are given to those employees who bus to work, in the form of a transit ProPass. The ProPass program offers employees who are enrolled in their company program, a bus pass purchased at work by payroll deduction and a slight discount for a minimum of one year. These types of incentive programs could work well for some of the larger businesses in the City of Parksville, such as the banks, grocery chains, and corporations. As the weather can be an issue for residents, carpooling and transit are likely more realistic options.

7.2.8 Promotional Events

Promotional events expose the community to new travel modes and, while they only represent behavioural change for a single day or week, they aid in developing momentum for altering travel behaviour. This city should continue to take initiative in holding and promoting events such as:

- Bike to School Week (HASTE) - May
- Bike to Work BC Week - May
- Carpool Week - Fall
- Clean Air Day - June
- Commuter Challenge - June
- iWalk to School Week - Fall
- World Carfree Day – September 22
- Earth Day – April 22
- National Environment Week - June

7.3 Summary

Parking management and TDM are directly related as changes to one directly influence the other. The focus of this document is on Downtown Core parking management, with consideration for TDM. This document does not however outline all potential TDM strategies that may benefit Parksville. It is recommended that the City develop a comprehensive TDM plan that considers the strategies outlined above, in the Transportation Master Plan, considers the expected impacts of TDM, includes, an implementation plan, and a thorough cost-benefit assessment of funding TDM versus funding conventional travel habits.

Many of the strategies identified for parking management and the promotion of alternative travel modes will require marketing to their target audiences. Marketing should be proactive, rather than reactive, to ensure uptake and acceptance.

8.0 ENFORCEMENT AND MONITORING

With the recommended changes to parking management practices in Parksville, it is important that enforcement practices be increased from current levels. Expanding enforcement will ensure that the new restrictions are having an impact and create data that can be used for monitoring the effect of the changes on parking habits.

8.1 Enforcement Level

With the recommended changes to the current on street and off-street parking scenarios, it will become important for City to enforce the new restrictions. Enforcement should be increased in the Downtown Core to ensure that parkers follow the new restrictions, especially during the initial stages. The goal of increased enforcement is to ensure that parking habits change and that the correct user groups are parking in their associated areas. The City of Parksville should increase consistent enforcement of parking restrictions in the Downtown Core, particularly ensuring enforcement in the areas with high instances of long duration parking. This will ensure parking availability; determine if the existing restrictions work, and act as a TDM strategy. Enforcement officers are Corps of Commissionaires and ambassadors for the community. It was noted that enforcement personnel are relatively well-received by the community, which is not the case in most communities.

It is recommended that parking enforcement is increased when the parking restrictions are implemented and pay parking in the off-street lots is implemented to ensure that the parking management techniques achieve the desired affect.

8.1.1 Parking Fines

At present, parking fines in Parksville are $15.00 if paid within 4 days otherwise $50.00. The fine rates in a number of comparable communities were reviewed. See **Table 9**.

Table 9 - Parking Fines in Comparable Communities

Community	Fine
Kelowna, BC	$25.00
Kamloops, BC	$5.00 (within 24 hours) or $20.00
Penticton, BC	$10.00 (within 7 days) or $35.00
Prince George, BC	$25.00
Vancouver, BC	$70.00 (1/2 price if paid within 34 days)
Vernon, BC	$10.00 (1/2 price if paid within 24 hours)
Victoria, BC	$40.00 (1/2 price if paid within 14 days)

Based on the review of other cities parking fines the current parking violation fine of $15.00 if paid within 4 days otherwise $50.00 is sufficient.

8.1.2 Fine Collection

If significant problems arise with people not paying their parking tickets or parkers repeatedly in violation of the restrictions, the City might consider adopting bylaws to address the situation. Bylaws could include towing repeat offenders after they cross a predetermined threshold, using collection agencies to collect outstanding fines or approaching ICBC to implement a program withholding insurance renewal until fines are paid. No changes are recommended for fine collection unless this becomes a significant problem.

8.1.3 Technology and Enforcement

Using more technologically advanced parking meters as recommended in Section 7 will help reduce costs of parking enforcement. New meter technology using wireless technology can indicate on a central computer or handheld device which spaces are expired, reducing the number of individuals required for increased enforcement. Purchasing new hand-held ticketing devices and wireless technology for the meters will ease both the cost and labour demands of enforcement. These technologies are particularly relevant if pay parking is installed on street in the Downtown Core.

8.1.4 Funding TDM + Parking Management

At present, all parking fine revenues are put into the bylaw enforcement fund to be used for on-going enforcement by the Commissionaires, the revenue generated through parking tickets nearly meets the entire enforcement budget[4]. This funding structure should continue, however excess funds should be put into the parking reserve fund not general revenue. Revenue generated from pay parking should also contribute to the parking reserve fund for use to improve transportation conditions through TDM and alternative transportation programs, parking management and for new parking infrastructure within the Study Area. As outlined in Section 9.3, it is recommended that the City promote the use of cash-in-lieu and any funds collected through this method should also go into the parking reserve fund.

It is recommended that revenue generated from paid parking, funds beyond the budget required for the Commissionaires, and cash-in-lieu funds are put into the parking reserve fund to pay for parking related infrastructure and transportation demand management.

[4] *As per conversation with City of Parksville Bylaw department on March 1, 2011.*

8.1.5 Marketing Changes to Parking Management

Implementing changes to parking restrictions and off-street pay parking requires education and marketing. Developing a flyer with maps of the parking restricted areas, pay parking areas and other frequently asked questions will help to provide information for users. The flyer could include walking routes from the Community Park lots into the city centre, details on how the parking meter funds will be spent, and a list of promotional events.

On the parking meters, a small chart, much like those at the gas pump, could outline where parking monies go helping people to see the benefits to their communities.

Signage should be developed telling parkers where additional parking is available and showing routes between the Community Park lots and Downtown.

The Old Pasadena Example

Old Pasadena residents and businesses resisted the installation of parking meters in their area because they perceived it as a deterrent to customers, however, with the implementation of a "Parking Benefit Area" the perception improved. Parking meters were installed in high demand areas of Old Pasadena to create higher turn over rates and signs on the meters tell parkers that revenues collected from these meters are used specifically to "maintain the streets, sidewalks, and alleys of Old Pasadena...new signs, lighting, pedestrian-friendly alleys, and other improvements...[5]"

8.2 Monitoring Parking Conditions

The City should undertake an annual review of parking conditions during the busiest time of the year, likely July, to understand that maximum demand on parking infrastructure. This will allow for an understanding of the on and off-street capacity including the busiest season for Community Park.

It is recommended that the City conduct an annual review of parking occupancies in the Downtown Core and entire Study Area, annually to determine occupancy rates and durations as explained in

[5] *http://www.sonic.net/~woodhull/trans/Parking.htm*

Section 3.0. It is expected over a period of several years, the occupancy rates of on-street spaces within the Downtown Core will increase; and changes to the on-street parking restrictions will be necessary. Collecting parking data will allow the City to ensure that parking in on and off street locations are meeting the needs of their target parkers. Annual data will allow the City to monitor changes in parking demand, in light of changes including new development in or near the Downtown Core, increased TDM, and enhanced enforcement.

The City should monitor on an ongoing basis locations with high numbers of complaints, particularly in surrounding residential areas or areas with high violations of the posted restrictions. These areas should be considered for changes to the posted restrictions or changes to the hours the restrictions are in effect.

It is recommended that the City undertake a comprehensive review of their Parking Management Strategy in five years time to review the existing conditions and examine policies for future parking management.

9.0 POLICIES AND DEVELOPMENT REGULATIONS

The City's Zoning Bylaw presents another opportunity to ensure appropriate parking supply and improved parking management through future land development. There are a number of opportunities outlined below to improve Downtown parking conditions using bylaws.

9.1 Tiered Parking Requirements

Tiered parking requirements for multi-family residential developments more accurately reflect the expected parking demand according to the size of the units; a bachelor suite is likely to demand less parking than a 2-bedroom suite. Applying a tiered parking requirement reduces the number of parking stalls required in the development and creates an unspoken TDM strategy for the development. The cities of Nanaimo, New Westminster, Coquitlam, Langford, and Langley have all successfully developed zoning bylaws that use a tiered parking requirement depending on the size of the unit. The City may consider establishing tiered multi-family residential requirements, as shown in **Table 10**.

Table 10 – Multi-family Tiered Parking Requirement

	Existing Requirement	Proposed Requirement
Bachelor	1 / unit	0.75 / unit
1 bedroom	1 / unit	1 / unit
2 Bedroom	1 / unit	1.25 / unit
3 bedroom +	1 / unit	1.5 / unit

It is recommended that the City amend the Parking Bylaw to provide a tiered parking requirement for multi-family residential developments in the Downtown Core, as outlined in **Table 10**.

9.2 Bicycle Parking Requirements

As recommended in *Section 7.1.2* Class I and II bicycle parking requirements should be added to the parking bylaw for both multi-family residential and commercial developments, particularly those near the Downtown Core.

9.3 Cash-In-Lieu Policy

Cash in-lieu of parking is a regulatory mechanism used by the City to leverage monies from new development where private parking spaces are not needed or are difficult to accommodate on site.

Parksville's existing cash-in-lieu program requires $9,800 per unbuilt space[6]. Cash-in-lieu funds are placed into a reserve fund that the City must use for providing off-street public parking infrastructure in the Downtown Core. See **Table 11** for examples of other Municipalities cash-in-lieu rates. Cash-in-lieu allows the developer to contribute to new parking facilities, which the development is, creating demand for, but gives the City the ability to manage the development of new parking infrastructure. The City can determine the design and timeline of the new parking according to current demand and parking patterns in Parksville, allowing for a more efficient parking system for all users.

Table 11 – Other Municipalities Cash-in-Lieu Rates

Community	Per Space
Town of Sidney	$20,000
City of Langford	$11,000
City of Parksville	**$9,800**
City of Kamloops	$5,000
City of Pentiction	$3,000 / $5,500
City of Nanaimo	$3,000
Port Hardy	$700

Currently, no change to the cash-in-lieu rate is necessary; however, the City should review the cash-in-lieu policy over time to ensure that where possible developers participate. It is recommended that the City promote cash-in-lieu for properties in or near the Downtown Core, put the funds into the parking reserve fund, and use them to develop shared parking facilities in the Study Area.

Further, it is recommended Parksville revisit the current definition of the parking reserve fund holding cash-in-lieu funds to expand the definition, and take advantage of the new legislation in Local Government Act, which allows cash-in-lieu funds to be used for infrastructure development supporting walking, transit, and cycling. This change allows Parksville the widest range of options to spend their cash-in-lieu funds to the community's benefit.

9.4 Parking Requirements for the Downtown Core Area

The City's Zoning Bylaw provides parking supply requirements for developments based on land use. Currently the rates for the Downtown Core are lower than the rest of the City. The bylaw[7] states that properties located within Downtown Core area as outlined in the OCP are required to provide 50% of

[6] *Parksville's cash-in-lieu fund is found in: "City of Parksville Zoning and Development Bylaw, 1994, No. 2000" Section 408*

"City of Parksville Zoning and Development Bylaw, 1994, No. 2000" Section 407

the required parking provided the lot is less than 2,000 square meters, lots of 2,000 square meters or more are required to meet the supply without the 50% reduction. Lots of 570 square meters or less and within the Downtown Core area are required to provide any onsite parking or cash-in-lieu.

The City should support and promote the use of this bylaw provision to provide less private parking in the Downtown Core where residents and businesses can take advantage of shared parking, alternative transportation, and proximity to a high-density area of services and employment.

10.0 SUMMARY AND IMPLEMENTATION

The major findings of this report are that the City of Parksville does not have enough off-street parking to accommodate the employees and long-term parkers within the Downtown Core but there is sufficient on street parking to meet the needs of short-term parkers. Using parking management, parking demand can be shifted to better utilize the existing on and off street parking and delay the need for a new off-street parking facility.

10.1 Summary

Currently there are areas of on street parking almost reach full occupancy and others with low occupancies during the on street parking peak period, and some long-term parking is occurring in on-street spaces, creating the perception that there is too little parking in the Downtown Core. Our study has determined there is adequate on street parking, and some demand for new off-street parking facilities; however, implementing parking management can address these issues and create a more effective parking scenario.

On-street parking is used generally by customers of Downtown shops looking to park for periods less than four hours, to accommodate on street parkers and provide continual turn over in the busiest areas of the Downtown Core, parking restrictions should be introduced for on street parking in the Downtown Core. The highest demand spaces should be restricted to one hour, medium demand areas should become two hour parking, and the lowest demand on street locations should become four hour parking. This tiered restriction will allow a variety of users to park and distributes parking demand throughout the Downtown Core. When on street parking restrictions are changed, implementing pay by day parking in the off-street parking lots, to be used by long-term parkers, generally Downtown Core employees. Pay by day parking will help to distribute parking demand to the community park lots and cause some parkers to transition to other methods of commuting to work.

To compliment these changes, the City should undertake an extensive transportation demand management program to reduce and shift parking demand in the Downtown Core. TDM strategies (outlined in Section 7.0) include promotional events for walking and cycling, transit incentives, carshare, and other programs to encourage the use of alternative transportation. Concurrently applying parking management and transportation demand management techniques will reduce the parking demand and potential upset from the installation of paid parking.

When paid parking and parking restrictions are implemented, increased enforcement will ensure that long-term parking does not occur on street, and that long-term users do not begin parking in residential

areas to avoid paying for parking. Investing in handheld ticketing devices will help reduce the workload for enforcement officers.

Parksville should consider determining a location and acquiring land for construction of an additional off street parking facility on the edge of the Downtown Core if the opportunity arises. See **Figure 9**. In the mean time, the Community Park lots should be considered as part of the off-street parking strategy and should be offered for long-term parking at no charge. Off street parking lots should be treated in a tiered manner, the parking lots in the Downtown Core should be priced the highest starting at $3 per day. The gravel lot at Craig Street and Jensen Avenue should be improved to include curb stops and priced at $2 per day, and the Community Park lots should remain the lowest at no charge. When a new parking facility is built, it should be priced lower than the Downtown lots to help disperse parking demand from the Downtown Core.

To help facilitate the use of the Community Park lots, information about parking in the Community Park lots should be made available with information on pedestrian routes and parking rates. Parksville should also work to strengthen these pedestrian connections with Streetscaping, banners and other way finding signs. It should be stressed that parking in Community Park is an option in the off-season, however during the summer; parking in Community Park is only for park users. The city should strongly promote TDM in the months leading up to peak season for Community Park to promote the seasonal shift to active transportation, reducing the parking demand in Community Park.

In the future Parksville should consider on-street pay parking however, this is not currently necessary. Pay parking can be implemented for several reasons, to reduce parking demand, to generate revenue or to reduce parking demand. If pay parking is introduced it should be priced at $0.50 an hour from Monday to Friday between 9 am and 5pm when demand for Downtown Core parking is at its highest.

In support of parking management policies, Parksville should also encourage the use of the cash-in-lieu policy, considering a tiered parking requirement for multi-family residential developments and offer parking variances for specific sites in the Downtown Core. Using the opportunities for spending the parking fund outlined in the Local Government Act, the City of Parksville should use cash-in-lieu funds to pay for facilities that support transportation demand management.

In order to understand changes in parking demand and to recognize when it is necessary to implement additional parking management strategies, Parksville should undertake a parking survey annually, and in five years comprehensively review this Parking Management Plan.

10.2 Implementation Phases

The phases outlined below sequence the recommendations for implementation; however, if implementation of all the recommendations is not complete within the allotted timeline, the City should continue to pursue Phase 1 before moving on to further phases. It is possible that not all the recommended actions will be undertaken within the lifetime of this plan. The implementation phases are outlined below and the detailed plan is in **Appendix B**.

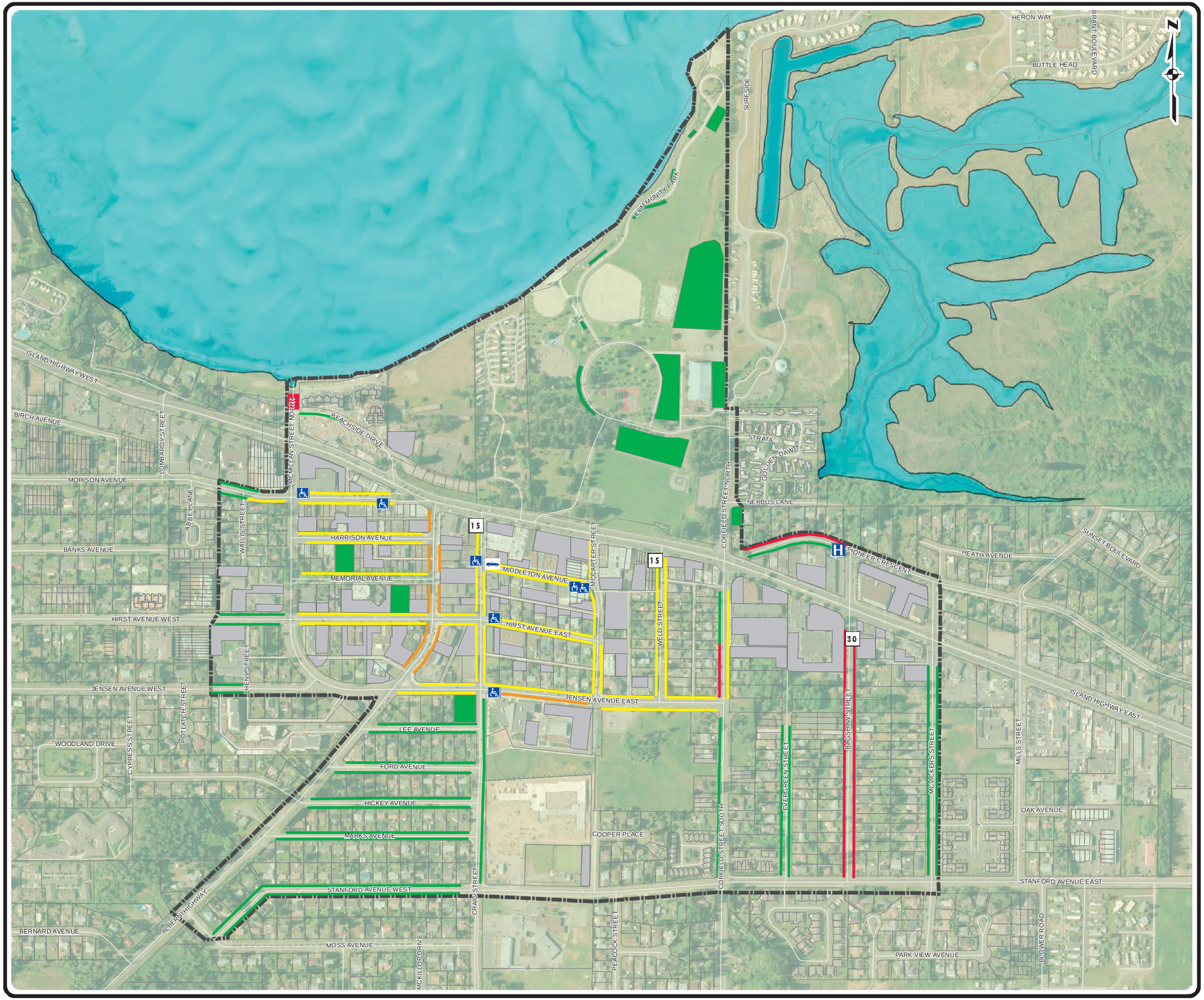
The ongoing phase includes activities, which will help the City of Parksville to reduce parking demand, better utilize the cash-in-lieu program, and promote sustainable transportation in Parksville. Incorporation of these activities into other City programming and departments will best achieve the City's goals. Many of the opportunities in the ongoing phase are programs, which community groups, and other organizations can support allowing them to take ownership and influence travel behaviour.

Phase 1 involves both infrastructure and policy changes to adjust the behaviour of individuals parking in the Downtown Core. The goal of the parking restrictions are to limit parking durations in the busiest areas of the Downtown Core, move long-term parking to off-street lots, and enforce the changes to ensure the modification of parking behaviour. The policy changes in this section allow Parksville to better use their cash-in-lieu program and reduce off-street parking development while collecting funds to develop an overall more efficient parking system for the Downtown Core.

The purpose of Phase Two is to continue adjusting parking restrictions to modify parking behaviour and further decrease and disperse parking demand from the Downtown Core.

In the future, it maybe necessary for the City of Parksville to implement on street pay parking, this is likely to be beyond the timeline of this report and after the completion of another parking study. From our report there are several recommendations if in the event of pay parking being installed are relevant.

APPENDIX A: MAPS



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TITLE

2011 PARKING INVENTORY

CORE AREA PARKING STUDY

City of Parksville

LEGEND

Parking Restrictions

- 15 — 15 Minute Only
- 30 — 30 Minute Only
- Handicapped
- H — Hospital Only
- Loading
- Unrestricted
- 2 Hr
- 1 Hr
- Residential Only

Off - Street Parking

- 3 Hr
- Unrestricted
- Private

SCALE

0 100 200 400 Meters

1:6,000

PREPARED BY

Boulevard Transportation Group

#201-791 Goldstream Ave
Victoria, BC Canada V9B 2X5
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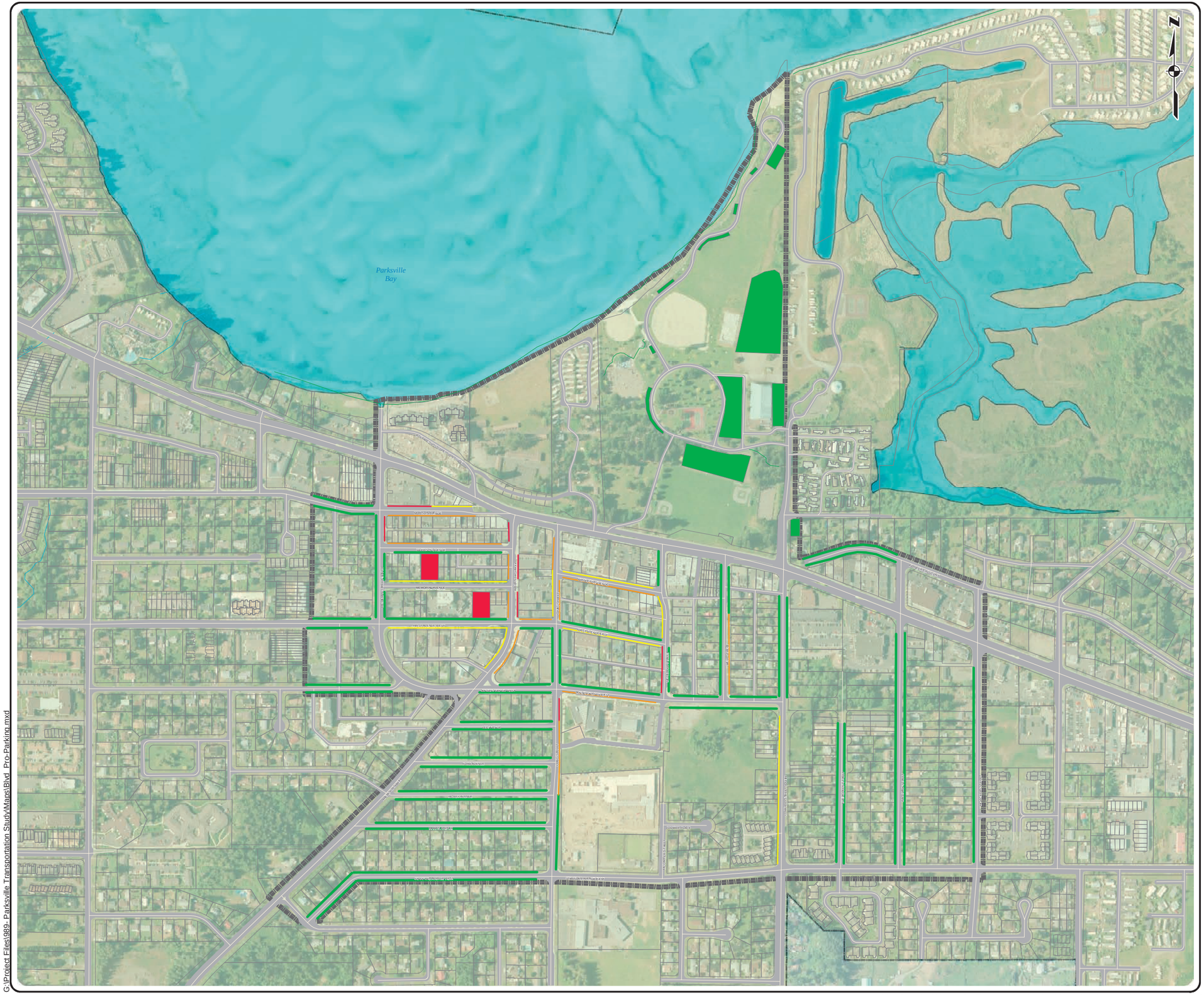
FILE #	DATE	DRAWN
1316	Nov 16, 2011	RL



TITLE

2009 PEAK PERIOD OCCUPANCY

CORE AREA PARKING STUDY

City of Parksville

LEGEND

Peak period occupancy is the portion of the parking supply occupied during the busiest hour of the day.

Occupancy

- High (85 - 100%)
- Moderate (70 - 85%)
- Low (50 - 70%)
- Very Low (0 - 50%)

Occupancy

- High (85 - 100%)
- Moderate (70 - 85%)
- Low (50 - 70%)
- Very Low (0 - 50%)
- Study Area

SCALE

0 95 190 380 Meters

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1316	Nov 16, 2011	RL

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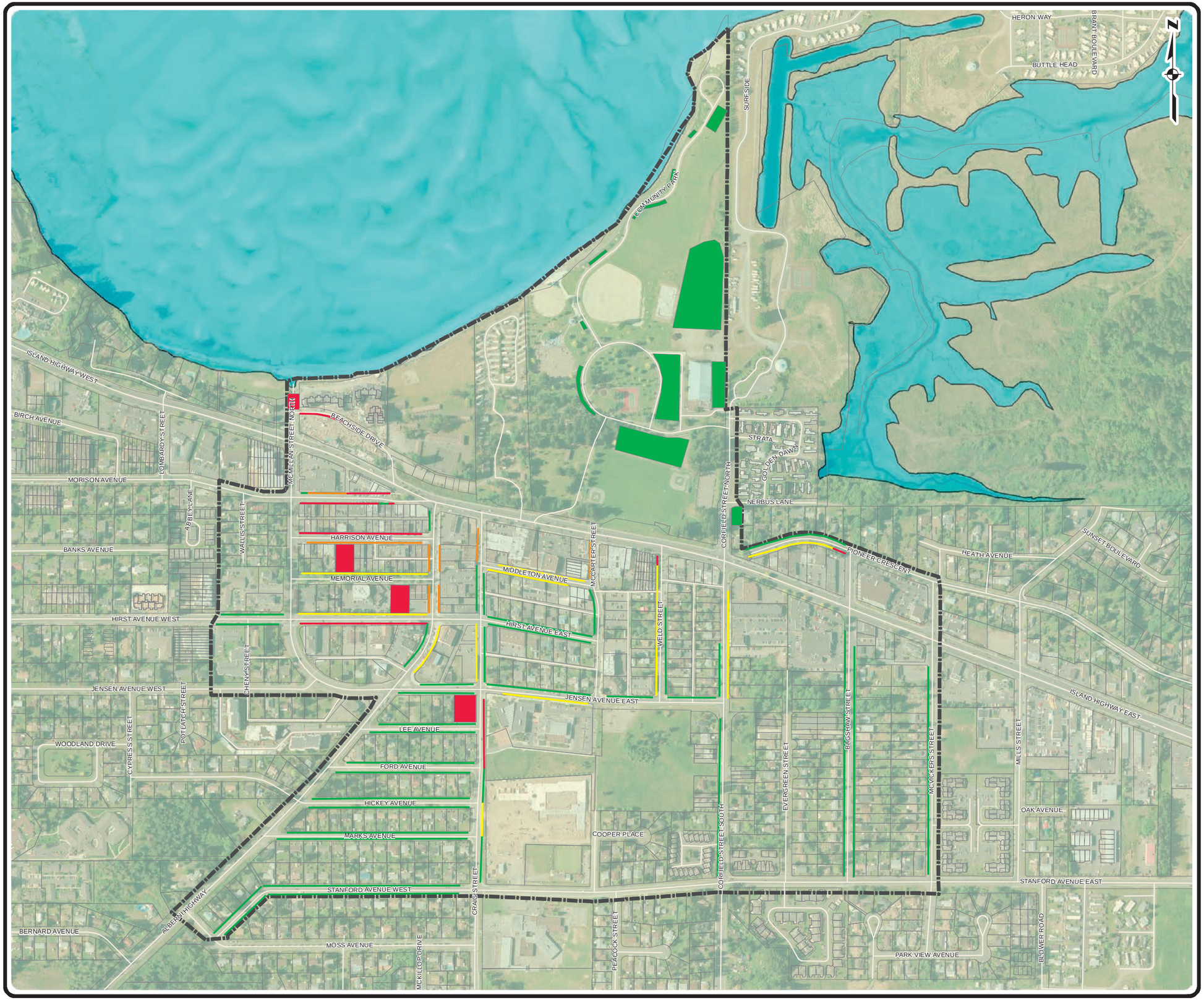

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TITLE

2011 PEAK PERIOD OCCUPANCY

CORE AREA PARKING STUDY

City of Parksville

LEGEND

2011 Occupancy Rate

- High (85 - 100%)
- Moderate (70 - 85%)
- Low (50 - 70%)
- Very Low (0 - 50%)

Off - Street Parking

- High (85% - 100%)
- Moderate (70% - 85%)
- Low (50 - 70%)
- Very Low (0 - 50%)

Peak period occupancy is the portion of the parking supply occupied during the busiest hour of the day.

SCALE

0 100 200 400 Meters

1:6,000

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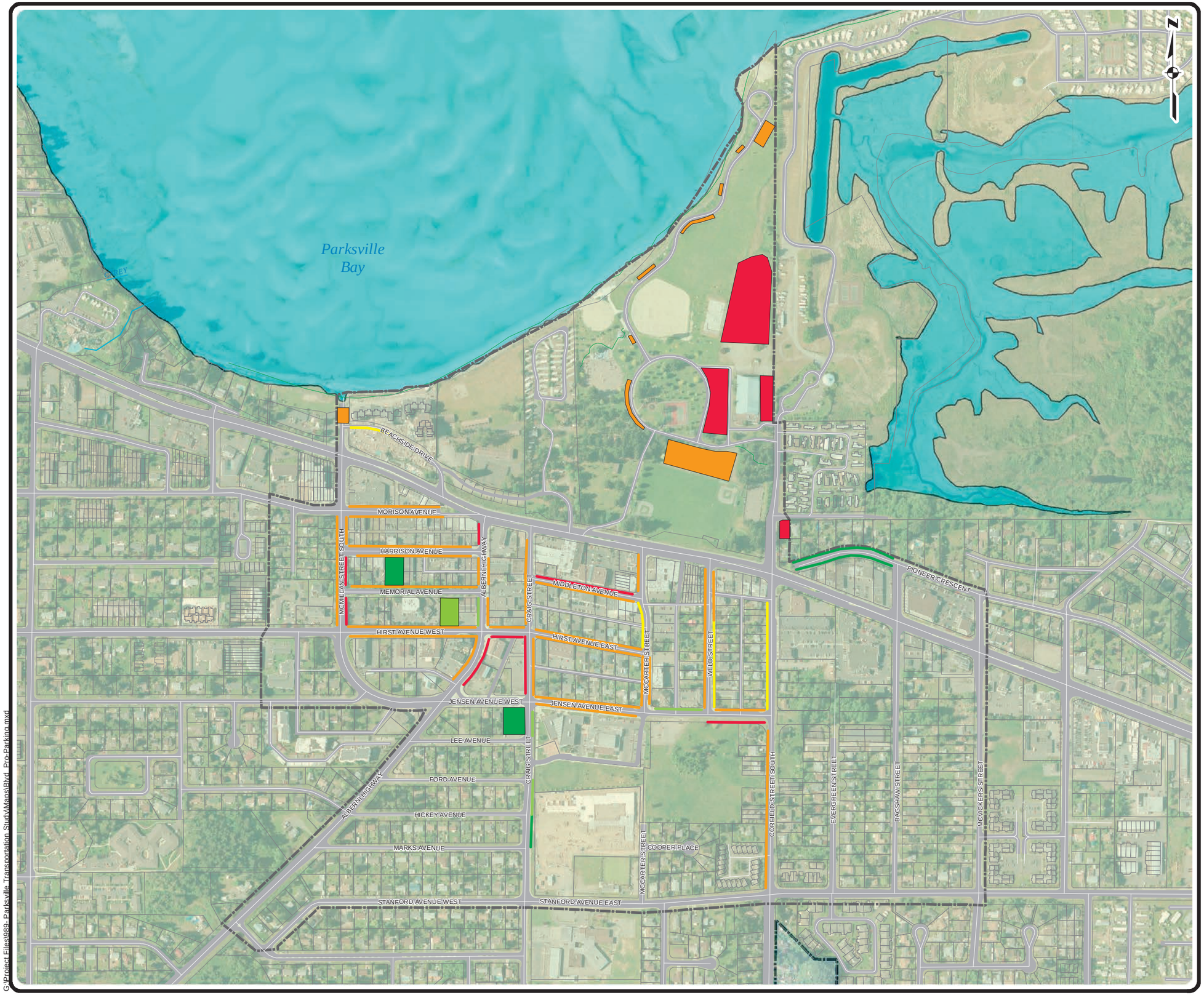

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TITLE

AVERAGE DURATION

CORE AREA PARKING STUDY

City of Parksville

LEGEND

Parking duration is the length of time a vehicle is parked at a parking bay.

Average Duration (Hrs)

- 0 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- 3.0 - 4.0
- 4.0 +
- 0 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- 3.0 - 4.0
- 4.0 +
- Study Area

SCALE

0 87.5 175 350 Meters

1:6,000

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FILE #	DATE	DRAWN
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APPENDIX B: IMPLEMENTATION CHART

Core Area Parking Study Implementation Schedule

		Reference	Cost
Ongoing	(Beginning immediately and on-going)		
	Develop materials and programs to implement promotional standalone (i.e.. bike to work week) and integrated (i.e.. providing bike parking at an event) TDM opportunities and events	7.2.8	low
	Encourage developers to use cash-in-lieu to create more efficient parking opportunities through shared parking	9.3	low
	Develop materials and programs to implement Downtown Core employee TDM strategies including ridesharing, Teleworking, alternative scheduling, parking cash out, bicycle parking and guaranteed ride home including recommendations from the Transportation Master Plan	7.2	low
	Maintain existing parking fine rates	8.1	low
Phase I	(Year 1 - 3)		
	Implement revised parking restrictions for on-street parking (1-hour, 2-hour, 4-hour)	5.1	medium
	Implement pay by day parking in public off-street lots in Downtown Core ($3 per day) and the Craig Street / Jensen Avenue lot at ($2 per day), do not charge for Community Park lots	6.2.1	medium
	Install curb stops to increase the number of parking spaces in the Craig Street / Jensen Avenue parking lot	6.1.4	medium
	Provide signage and information for the parking opportunities in Community Park for long-term parkers at no charge	6.1.3	medium
	Strengthen pedestrian connections to Community Park lots including signage, improved crossings and rain shelters	6.1.3	medium
	Increase consistent enforcement of parking restrictions	8.1	medium
	Consider purchasing hand-held ticketing devices to aid enforcement officers	8.1.3	medium
	Expand the definition for the parking reserve fund to permit the use of cash-in-lieu funds for sustainable infrastructure	9.3	low
	Amend the zoning bylaw to include tiered parking requirements for multi-family residential developments	9.1	low
	Amend the zoning bylaw to include bicycle parking requirements for multi-family and commercial developments	7.1.2	low
	Amend the zoning bylaw for parking requirements for the Downtown Core area, decreasing the parking requirements to avoid ongoing applications for parking variances	9.4	low
	Install short term (class II) bicycling parking throughout the Downtown Core	7.1.2	medium
	Implement an annual parking count to determine occupancies and durations for on and off street parking within the Study Area	8.2	low
	Amend the parking reserve fund to allow revenues from parking fines in excess of the enforcement budget and revenues collected from paid parking to be included in the fund for spending as permitted in the definition of the fund	8.1.4	low
	Consider approaching the operator of the private lot on McCarter Street to use pay by day opposed to monthly passes	6.2.2	low
	Continue to improve pedestrian conditions throughout the Downtown Core	7.1.1	low
	Using the TDM measures outlined in this plan and the Transportation Master Plan develop a TDM Plan incorporating all the opportunities and programs to create a cohesive approach to TDM for the City of Parksville	7.3	medium
	Revenues from parking should be used to support Transportation Demand management, parking management and general enhancement of the Downtown Core	6.2.3	low
	Refer to the Transportation Master Plan for recommendations for Transit, NZEVs and a shuttle service	7.1.3/4/5	medium
	Revenue from parking tickets should be used to pay for enforcement and excess should be put into the parking fund.	8.1.4	low
	Monitor areas with high numbers of tickets or complaints. Consider amending the parking restrictions accordingly.	8.2	low
Phase II	(Year 3-5)		
	Begin to consider on-street pay parking and plan for its development.	5.2	medium
	If non-payment of parking fines is an issue consider bylaws or other options to ensure payment	8.1.2	low
	Implement more stringent on street parking restrictions on blocks where 100% occupancy in Downtown Core if this level is observed	8.2	low
	Reduce time restrictions in four hour parking areas if demand for shorter term parking has increased	8.2	low
	If off-street demand requires, consider lease agreements for existing private off-street parking. Price consistent with off-street parking rates.	6.1.5	medium
	Plan for the purchase of property for a new off-street parking facility	6.1.2	high
	New lots should be priced according to the existing tiered rates	6.1.2	medium
	Undertake a comprehensive review of this parking strategy	8.2	medium
Future	(Beyond 5 years)		
	Install on-street parking meters at $0.50 per hour	5.2.2	medium
	Consider increasing the cost of off-street parking to $4.50 the same price as a cash return fare on transit to encourage transit use	6.2.1	medium
	Develop and implement programs such as first hour free, parking smart cards and courtesy tickets to reduce the impact of installing on-street pay parking	8.2	low
	Develop and distribute educational materials about the projects parking revenues fund	8.1.5	low

Cost: Low - administrative and staff time, Medium - administrative, staff time and some capital costs, High - requires budgeting and planning