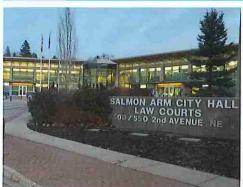
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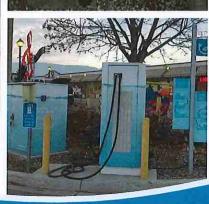
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Downtown Parking Plan

ISL Engineering and Land Services

City of Salmon Arm

FINAL REPORT

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Executive Summary

The City of Salmon Arm (the City) and the Downtown Parking Commission (DPC) contracted ISL Engineering and Land Services Ltd. (ISL) to provide professional services to develop a parking strategy to maximize the efficient use of existing parking resources while enhancing the vitality of the downtown core. The purpose of this study is to identify several relevant and important factors that may impact the future parking strategy. The City of Salmon Arm Downtown Planning study area is generally bounded by Hudson Avenue on the southwest, Highway 1 on the south / southeast, 4th Street on the northeast and CN Railway on the northwest.

Following the start-up meeting, the City provided ISL with background information related to the downtown parking condition. ISL reviewed the documents and determined their relevance for the project. In January 2020, a field review of the study area was conducted by ISL Traffic Engineers. ISL assisted the City in developing questions for a downtown parking user satisfaction survey. The survey was administered by the City and submissions were received between September 28 and October 16, 2020. In total, 203 surveys were received and reviewed. Some highlights from the survey included:

- Working is the primary reason for travelling to the downtown area for 3+ days in a week; however, shopping/retail, restaurants/cafes and banking were the most common reasons for visiting downtown with over 75% visiting for this reason at least a few times a month
- 46% of customers parked for 1 hour or less and 89% of the customers parked for 2 hours or less
- · Only 9% of the respondents could rarely or never find suitable parking
- The strongest negative responses (disagree and strongly disagree) were for responses to whether paid offstreet and/or on-street parking should be implemented.
- Strong positive responses (agree or strongly agree) were found for whether time limit restrictions should be consistent, time limits are currently long / flexible enough, limits are easy to understand and parking can be found within acceptable proximity of their destination.

According to the parking inventory counts provided by the City, conducted in January 2018, there are a total of 311 on-street parking stalls within the City's Downtown Parking Area. A majority (77%) of the existing on-street parking spaces were noted to be unmetered 1 hour parking restricted. It is understood that as of June 2020, the downtown parking restriction has been changed to 2 hour restriction for the entire area except for Alexander Street in order to encourage higher parking turnover for the businesses on that street.

The most recent parking utilization survey available was conducted by the City from 2010, 2011 and 2013 and the data was provided by the City. The parking availability was determined to be lower from 2010 and 2011 than compared to 2013 results. Generally, the results show that in 2013 approximately 20% of the parking spaces were available. Therefore, the survey results indicate that the parking availability in the downtown are withing 5% of the ideal parking availability (85% Utilized).

To determine if the parking fee is appropriate, the parking fee was compared with similar municipalities in British Columbia as shown in Figure ES.1.



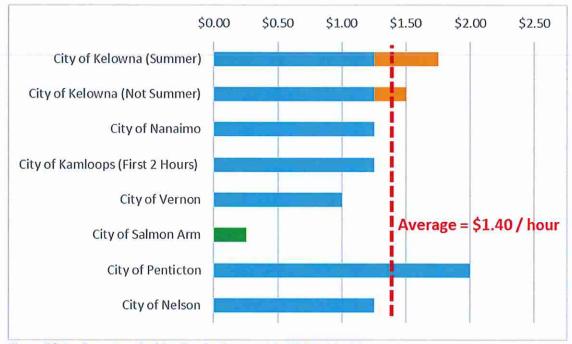


Figure ES.1: Downtown Parking Fee for Comparable BC Municipalities

Based on the review of similar BC municipalities, there is an average on-street parking fee of \$1.40 per hour during the first two hours. The existing parking fee within the City of Salmon Arm downtown area is currently \$0.25 per hour, significantly lower than the average fee for similar municipalities. With the recent public survey results in mind, the implementation of paid on-street parking should be accompanied with an educational initiative, potentially in collaboration with the Downtown Business Association and Downtown Parking Commission, to discuss the benefits of implementing paid parking and how the additional revenue generated will positively impact the surrounding local businesses.

A memo (*Parking Enforcement Technologies*) prepared by the City of Salmon Arm was reviewed in order to identify potential types of methods and technologies that could be implemented including Single Space Metering (Smart Meter) and the multi-space metering (kiosk-based metres). Some basic assumptions were applied when calculating the Cost-Benefit for the two potential parking technologies (i.e., Smart Meter versus Kiosk-based Meter) and the summary can be found in *Table ES.1*.

Overall, it was found that both technologies will have a similar cost per space and the estimated payback period for both technologies will be short; 1 year, 1 months for the Kiosk-based meters and 1 year and 5 month for the smart meter.

Table ES.1: Cost/Benefit Analysis for the Proposed On-Street Parking Enforcement Technologies

	Smart Meter	Kiosk-Based Meter	
Cost			
Per Meter	\$2,500	\$15,000	
Per Space	\$2,000 (2 meters per pole)	\$1,500 (1 Meter per 10 Spaces)	
Total Cost	\$546,000	\$409,500	
Revenue			
Per Year	\$388,050	\$388,050	
10-Years	\$3,880,500	\$3,880,500	
Cost / Benefit			
10-Year Benefit	\$3,334,500	\$3,471,500	
Payback Period	1 year, 5 months 1 years, 1 month		

Existing off-street parking lots within the City's downtown area were inventoried based on the background documents provided by the City and the latest field review. Parking time limit and restrictions for each of the City owned and / or operated public lots have been provided.

During the field review conducted by ISL staff, inventory of the existing wayfinding signage to these parking lots was conducted. The existing parking facilities could benefit from the addition of a map of the downtown area posted in the parking lots, near the accesses, showing where additional parking options may be located. Further improvement could be the installation of digital feedback signs posted outside of the parking lot which indicates the number of available spaces available in the off-street parking lot.

It is understood that the City is planning to implement an off-street parking facility at the 4th Street Parking Lot location. Based on the conceptual plans provided by the City, the parkade could contain up to three levels of parking as well as potentially 260 parking stalls. Since the proposed parking facility is located on the northeast boundary of the downtown area, walkability between the site and the majority of destinations was expressed as a critical success factor. Assuming an average walking speed of 1.2 metres per second, the approximate walking time from the proposed parking facility to an area within the downtown could be reviewed, and a graphic showing various walking times has been provided in *Figure ES.2*.



Figure ES.2: Estimated Pedestrian Walking Times from the Proposed Off-Street 4th Street Lot using the Existing Sidewalk Network



The City's existing *Traffic Bylaw No 1971* was reviewed and suggestions and changes were identified to coincide with the recommended improvements highlighted in this report. The improvements included updating the *Bylaw* (Part V - 25) in order to apply the Smart Meter or Kiosk-based meters technology, and including an item specifically for the parking of tour buses and recreational vehicles (RV).

Based on discussion with the City, it is understood that two major changes are expected in the near future to the traffic operation and flow through the downtown area, these changes include; the Highway 1 signalized intersection relocated from Ross Street to 4th Street and the CP Rail underpass at Ross Street.

As it relates to parking, with the addition of the 4th Street parkade, it is preferred that vehicles would access the downtown from the 4th Street intersection with Highway 1. The signage, currently located on Highway 1 and 4th Street, should be modified to indicate that parking in available off 4th Street.

As it relates to the existing parking condition, it is expected that the underpass open further opportunities for parking as pedestrians will not be required to cross the rail line to access downtown. Areas on the north side of the rail provide a good opportunity to provide parking for RV's and tour busses so that they do no take up valuable parking space near the businesses.

In past experience, it is usually recommended to not have over 30% small car parking for a single parking lot, however, due to the likely makeup of vehicles for the area a smaller percentage could be considered. Motorcycle parking should be provided in the new 4th street parking facility as well as a few other locations (such as the Hudson Lot or Ross Street Lot) and utilization should be observed to determine if additional spaces are required.

In order to maintain bicycle accessibility, the following recommendations could be considered.

- Consider implementing bike lockers at typical locations of interest, to provide additional security and protection for long-term bicycle parking.
- Adequate bicycle parking facilities (bike rack and bike lockers) should be provided for the future 4th Street Parkade.
- New residential and commercial developments should be required to provide short-term bicycle parking near the entrance.

Utilization data of the existing electrical vehicle charging facilities was not provided therefore, the demand for the spaces could not be verified however, as electric vehicle become more popular and more widely used in the future, it is advised that the City begin planning and identifying suitable locations for public charging stations.

With the addition of the Ross Street Underpass, there are opportunities to provide parking for tour buses on the north side of the rail, which would allow tourist to visit the downtown businesses safely, without utilizing valuable existing off-street or on-street parking spaces. Alternative options for the RV and tour bus could also be considered on the south side of the rail, such as negotiating the use of the parking at the church southeast of Hudson Avenue and Lakeshore Drive.

Based on the review of the existing parking conditions and the future parking arrangements, the following recommended measures that could be implemented, as described in this Parking Plan:

- On-street parking restrictions (2-hour limit) should be consistent throughout the downtown area. Maintaining
 one hour limit on 200 & 300 Blocks of Alexander Street.
- A higher on-street parking fee should be considered to be consistent with other comparable municipalities. A
 parking fee of \$1.00 to \$1.25 per hour could be considered and would be slightly below average for the
 municipalities reviewed (\$1.40 per hour).
- The implementation of paid on-street parking should be accompanied with an educational initiative, potentially
 in collaboration with the Downtown Business Association and Downtown Parking Commission, to discuss the
 benefits of implementing paid parking and how the additional revenue generated will positively impact the
 businesses in the area.

- Kiosk based meter systems should be implemented throughout the entire downtown area, similar to the
 existing kiosks, where pay parking is implemented. The City should consider implementing options that
 provide more convenience to the user and ease of enforcement, such as pay-by-plate (pay-and-go) and app
 based solutions.
- The City should prepare a data collection and analysis process to review the parking utilization data in order to develop future policies.
- The City may consider adding wayfinding maps to other parking facilities within the existing off-street parking facilities.
- The City may consider adding digital parking feedback signage to the off-street parking lots to provide realtime available parking stalls to drivers.
- Consistent signage should be provided for the proposed 4th Street parking structure, including along Highway 1 with the Signal being moved to 4th Street.
- The off-street parking fee should be desirable compared to the on-street parking to encourage longer duration parking in the off-street parking and shorter duration in the on-street parking spaces.
- · Recommendation about the future implementation of short-term and lockers for bike parking.
- If additional parking on the north side of the rail, the Downtown specified parking area (as defined in Bylaw 1237), could be expanded in order to continue to manage the parking for the entire area.

The following implementation plan was developed based on the recommendation identified in the report.

Short Term (0-2 Years)

- Review the demand for additional charging stations for electric vehicles based on utilization of existing stations.
- Update the traffic bylaw as recommended in Section 7.
- Provide additional parking (including RV and Tour Bus parking) on the north side of CP Rail after the completion of the Ross Street Underpass
- Investigate expanding the Downtown specified parking area (as defined in Bylaw 1237) to continue to manage
 the parking for the entire area, with the provision of additional parking on the north side of the railway tracks
 and the completion of Ross Street Underpass.

Mid-Term (2 - 10 Years)

- Expand the Pay Parking within Downtown (assuming 25% of the space) approximate cost \$105,000.
- Increase the parking fee to \$1.25 per hour for the partially expanded pay parking estimated annual revenue increase \$97,000 per year.
- Finalize the construction of the 4th Street Parkade.
- Implement full extent of the Pay Parking within Downtown approximate remaining cost \$308,000.
- Increase the parking fee to \$1.25 per hour for the full extent of pay parking estimated annual revue increase \$388,000 per year.
- Provide additional electric vehicle fast-charging stations depending on demand \$64,000 per two stations.



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1.0 Introduction

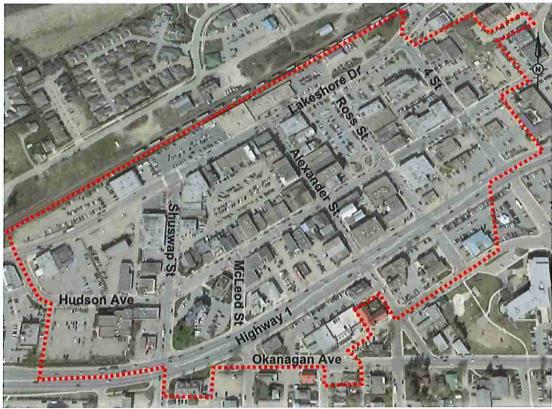
The City of Salmon Arm (the City) is located within the Columbia Shuswap Regional District in the BC's Southern Interior with a population of approximately 17,700 residents (according to the 2016 census). The City and the Downtown Parking Commission (DPC) contracted ISL Engineering and Land Services Ltd. (ISL) to provide professional services to develop a parking strategy to maximize the efficient use of existing parking resources while enhancing the vitality of the downtown core. It is expected that this parking study will help the City develop medium-/long-term (2-10 year) on-street and off-street parking strategies for better management of the existing and future parking availability.

The purpose of this study is to identify several relevant and important factors that may impact the future parking strategy. The findings of the parking study will provide the City and the DPC with guidance and clarity of parking technologies available in addition to potential impacts and costs of the bylaw, policy, and enforcement procedures.

The City of Salmon Arm Downtown Planning study area (Figure 1.1) is generally bounded by the following:

- · Hudson Avenue on the southwest.
- Highway 1 on the south/southeast.
- 4th Street on the northeast.
- CN Railway on the northwest.

It includes most of the businesses and commercial areas in Salmon Arm downtown with on-street parking on both sides of the City's roads and many parking lots (both public and private).



The City of Salmon Arm Downtown Area



■ 2.0 Background Information Review

Following the start-up meeting, the City provided ISL with background information related to the downtown parking condition. ISL reviewed the documents and determined their relevance for the project. The summary of the provided documents is as follows:

- 2013 Available Stalls [Excel]
 - · Parking utilization results during the AM and PM peak hours for 2010, 2011 and 2013.
- Downtown Parking Maps
 - · Four files contain graphics showing:
 - · Off-Street parking lots, on-street parking, and time limits.
 - Location of parking meters/dispensers.
 - · Location of parking lot signage, location of wayfinding signage.
 - · Walking distances from parking lot locations.
- · Relevant Bylaw Documents Pertaining to:
 - · Establishing the DPC.
 - · Parking fee.
 - Payment in lieu.
- Downtown Parking Budget 2019:
 - · Parking-related revenue/expenses.
- · Downtown Parking Information:
 - · Data sheet summarizing restriction and fee for on-street and various off-street parking lots.
- · 2018 Parking Plan Meeting Summary:
 - · Meeting minutes from May 2019 discussing the intention to complete a Downtown Parking Plan
- Concept Plans for the 4th Street Parkade:
 - Sketch/drawing for the proposed 4th Street parkade.
- Development Services Department Memorandum Parking Enforcement Technologies (2018):
 - Memo summarizing parking enforcement technology.
- Study Parkade Stantec 2011:
 - Feasibility study for Ross and 4th Street parkade.
- · Previous Parking Studies:
 - Ward Consulting Group 1996.
 - Urban Systems Transportation Plan (Page 32 36) 2009.
- · Graphics showing traffic flows at Trans-Canada Highway intersections (existing and proposed).

3.0 Site Observation

ISL's traffic engineers conducted a field review of the study area in January 2020. During the field review throughout the downtown area, observations, videos, and photos were taken at points of interest during typical weekday afternoons. Some site photos have been provided below:



Pay Parking Meter on Hudson Avenue



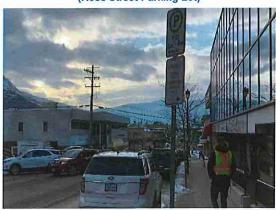
Off-Street Permit Parking Located on 4th Street



Off-Street, 2-Hour Free Parking (Ross Street Parking Lot)



On-Street Parking and One-Way Traffic Operation on Alexander Street



On-Street Parking Signage on Hudson Avenue



Electric Vehicle Charging Stations Ross Street Parking Lot



4.0 Public Survey Results

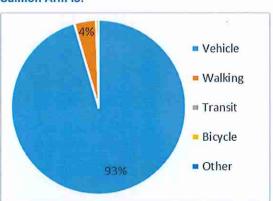
During the parking study, the City organized a parking survey for the local business owners/employees and residents while ISL assisted the City in developing questions for a downtown parking user satisfaction survey. The survey was administered by the City and submissions were received between September 28 and October 16, 2020. In total, 203 surveys were received and reviewed.

The first three questions of the survey were provided to understand why, how, and when people typically visited the downtown area.

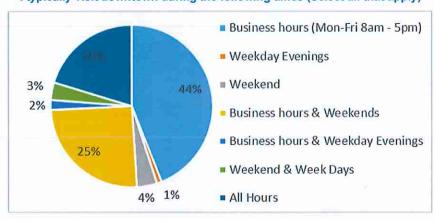
In relation to the Downtown Parking Area, I am a:

1% 2% ### Employee | Resident ### Business Owner ## Visitor | Resident, Visitor ### Business Owner, Visitor ### Business Owner, Visitor ### Employee, Resident ### Employee, Business Owner, Resident ### Downer, Resident ### Employee, Business Owner, Resident ### Employee, Business Owner, Resident ### Employee, Business Owner, Resident #### Employee, Business Owner, Page 1 #### Employee, Business Owner, Page 2 #### Employee, Business Owner, Busin

The main mode of transportation to Downtown Salmon Arm is:



I typically visit downtown during the following times (Select all that apply)

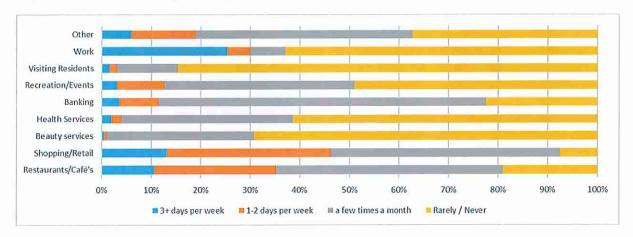


The results showed that a majority of respondents (55%) were residents of the downtown area; however, it is possible that the question was misunderstood as there is likely not a large number of residents living within the downtown area.

A significant majority (93%) of the trips made to the downtown area were most often vehicle trips. Whereas 4% of respondents said they walked most often, while no respondents indicated they utilized bicycle and/or transit.

A large number of people said that they visit the downtown area during business hours (89%), by far the most common time for people to typically visit. People who visited during business hours also visited the downtown during the weekends (20%) and weekday evenings (25%).

The survey also asked visitors to identify what businesses or activities brought them downtown as well as their frequencies. The various use types were provided below:

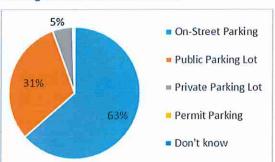


Work is the primary reason for travelling to the downtown area for 3+ days in a week; however, shopping/retail, restaurants/cafes, and banking were the most common reasons for visiting downtown with over 75% visiting for this reason at least a few times a month. Meeting residents was the least likely reason to visit.

When Visiting the Downtown as a Customer how long do you typically park during business hours?



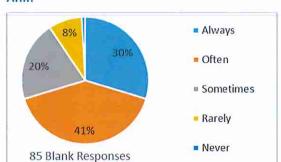
What type of parking do you typically use when visiting Downtown Salmon Arm?



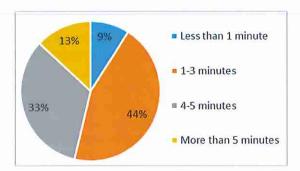
Based on the survey results, it was found that 46% of customers parked for one hour or less and 89% of the customers parked for two hours or less. The distribution indicates that a large portion of the trips do not require a long stay and suggested there is not an existing demand for long-term parking. It was also found that 94% of the parking downtown occurred at public facilities (on-street or public parking lot). Only 5% of the parking occurred in a private parking lot.



In general I have been able to find parking that suits my needs when visiting Downtown Salmon Arm:



The maximum time that I would walk from my parking spot to my destination would be:



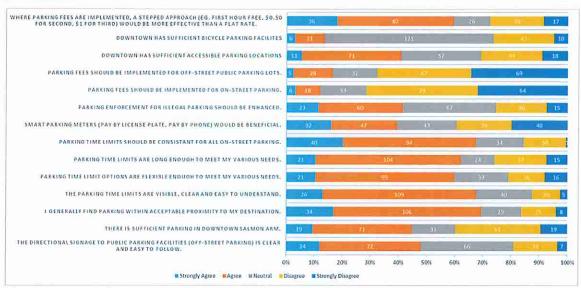
In general, 71% of the respondents could always or often find parking that suited their needs, only 9% of the respondents could rarely or never find suitable parking. It is noted that 85 of the respondents left this question blank. Based on the respondents, 53% would walk up to three minutes to their destinations. Three-minute walking time could mean finding parking approximately 200 metres from the desired destination if an average walking speed of 1.2 metres per second was assumed.

If parking fees are implemented, I would find it acceptable to pay up to:



Based on the responses related to pay parking, it is found that 35% thought no parking fee (\$0/hour) is acceptable and 38% found a fee of \$0.25/hour is acceptable. Overall, 62% of the respondents found that some level of fee was acceptable.

Please indicate your level of agreement with the following statements about parking in Downtown Salmon Arm



The strongest negative responses (disagree and strongly disagree) were whether paid off-street and/or on-street parking should be implemented. Strong positive responses (agree or strongly agree) were found for whether time limit restrictions should be consistent, time limits are currently long/flexible enough, and limits are easy to understand and parking can be found within acceptable proximity of their destination.



5.0 On-Street Parking

According to the parking inventory counts provided by the City, conducted in January 2018, there are 311 onstreet parking spaces within the City's downtown parking area. The existing parking configurations are mostly parallel parking spaces except for some angle parking spaces located on the west side of Shuswap Street, north of Lakeshore Drive, and on the north side of Hudson Avenue between Ross Street and 6th Street.

5.1 Restriction/Time Limit

The parking restrictions within the downtown area included maximum time limits of 15-minute, 1-hour, 2-hour, and 10-hour. A majority of the parking spaces in downtown are unmetered; however, some spaces are provided with meters or a pay-and-display system. The breakdown of parking restrictions are as follows:

Table 5.1: Number of On-Street Parking Spaces by Parking Restriction

On-Street Parking Restriction	Number of Spaces
15-minutes (Metered/Unmetered)	14/1
1-Hour (Unmetered)	240
2-Hour (Metered)	5
10-Hour (Metered / Pay and Display)	41/10

A majority (77%) of the existing on-street parking spaces were noted to be unmetered with a 1-hour parking restriction. Based on discussion with the City, there are no anticipated major changes to on-street parking supply since the 2018 parking inventory survey, however, some traffic operations changes were identified that may have an impact on the parking patterns including the CP Rail Underpass at Ross Street, and the signalized intersection at 4th Street and Highway 1. The potential impacts of these changes will be further discussed below in *Section 9*.

During the field review, it was noted that there were some instances of inconsistent signage in terms of both the directional arrows on parking signage and stickers/labels affixed to the parking meters showing inconsistent time periods for when the parking restrictions are in effect. Some users (i.e., drivers) might not be familiar with the difference in parking time restriction and may unknowingly park longer than the displayed parking restriction. On the other hand, some users may drive around seeking parking spaces that allow for a longer parking duration.

To be consistent for all on-street parking spaces, it is recommended that 2-hour on-street parking time restriction be implemented across the entire downtown parking area. Providing a consistent on-street time restriction could relieve some confusion for visitors, which will also simplify bylaw enforcement requirements.

Typically, off-street parking (discussed below in *Section 6*) should provide lower turnover parking options (such as a 10-hour parking limit) while the on-street parking supply provides parking for higher turnover demands. It is understood that as of June 2020, the downtown parking restriction has been temporarily modified to a 2-hour restriction for the entire area except for Alexander Street to encourage higher parking turnover for the businesses on that street. The City could review the public feedback on this arrangement, monitor the impacts, and ultimately decide whether 2-hour parking time restrictions should be permanently implemented.

5.2 Parking Availability

The recent parking availability (i.e., utilization) surveys, as supplied by the City, were conducted in 2010, 2011. The City-conducted survey data was collected over multiple days, once during the AM and PM peak hours that were generally between June and September. The survey data from 2010 included an average utilization over three days while 2011 included 23 days of survey data, and 2013 included survey data for 17 days. No surveys were conducted in 2012. A summary of the survey data results for parking availability based on 2010, 2011, and 2013 is provided below in *Figure 5.1*.



Figure 5.1: Downtown Parking Survey Results from the City Conducted Surveys (2010, 2011 and 2013)

The survey results indicate that the parking availability is lower for 2010 and 2011 years when compared to the 2013 data results. Generally, the results show that in 2013 approximately 20% of the parking spaces were available during peak AM/PM weekday hours.

According to Donald Shoop's book, *The High Cost of Free Parking*, published by the American Planning Association (2005 and 2011), the optimal parking capacity should be targeted as **85%** utilized. *The goal is to have about 15% of parking spaces vacant and available at any time, to ensure the effective use of parking facilities and is available for priority and short-term use. Additionally, this limits significant unnecessary oversupply while yielding sufficient free space to consistently find a parking space.* Based on past experience and reviews of similar parking studies (such as Squamish, Chilliwack, and West Vancouver), this value is often cited and generally, an availability rate between 15% to 25% (or utilization rate of between 75% and 85%) is considered an industry best practice. Therefore, the survey results indicate that the parking availability in the downtown is within 5% of the optimal parking availability.

Various factors could impact parking utilization in the future, including an increase/decrease in parking capacity, additional parking generators, etc. As the available parking utilization information is outdated, it is difficult to determine the existing (2021) demand as well as the anticipated future demand. It is recommended that an updated parking utilization survey(s) be conducted to evaluate the parking utilization more accurately and appropriately for the downtown area to better evaluate and identify areas that may be over- or under-utilized.



5.3 Parking Fee

Existing on-street pay parking is provided on Hudson Avenue between 6th Street and 4th Street, to the west of 4th Street on the north side, on 4th Street north of Hudson Avenue, and Hudson Avenue between Shuswap Avenue and Lakeshore Drive. The parking fee for the on-street pay parking is signed as \$0.25 per hour between 8:00 AM and 6:00 PM Monday to Saturday. Due to the COVID-19 pandemic, parking fee has been temporarily waived for a majority of the downtown except where meters are still functional.

To determine whether the parking fee is appropriate, the parking fee was compared with similar municipalities in British Columbia and these results are provided below in *Table 5.2* and *Figure 5.2*. These comparison municipalities reviewed are presented in descending order of population (from the highest to lowest, according to the 2016 census).

Table 5.2: Downtown Parking Fee for Comparable BC Municipalities

BC Municipality Downtown On-Street Parking Rate		
City of Kelowna	\$1.25 - \$1.75 per hour (May - Sep); \$1.25 - \$1.50 per hour (Oct - Apr)	
City of Nanaimo	\$1,25 per hour	
City of Kamloops	\$1.25 per hour (first two hours) \$2.50 per hour (third hour)	
City of Vernon	\$1.00 per hour	
City of Penticton	\$2.00 per hour	
City of Salmon Arm	\$0.25 per hour	
City of Nelson	\$1.25 per hour	



Figure 5.2: Downtown Parking Fee for Comparable BC Municipalities

Based on the review of similar BC municipalities, an average on-street parking fee of \$1.40 per hour during the first two hours has been identified. The existing parking fee within the City of Salmon Arm downtown area is currently \$0.25 per hour, which is significantly lower than the average fee when compared to other similarly sized municipalities.

When reviewing the parking fee information in relation to the survey data collected (discussed previously in Section 4), the following trends and links were noted:

- Although the similar BC municipalities have much higher parking rates, the public survey indicated that only 3% of the respondents would find a fee greater than \$0.75 per hour acceptable.
- Approximately 72% of the survey respondents disagreed or strongly disagreed that on-street pay parking should be implemented.

With the recent public survey results in mind, the implementation of paid on-street parking should be accompanied by an educational initiative, potentially in collaboration with the Downtown Business Association and Downtown Parking Commission, to discuss the benefits of implementing paid parking and how the additional revenue generated will positively impact the surrounding local businesses.

Potential advantages to on-street pay parking could include:

- Reduce On-Street Parking Duration/Increase Turnover:
- · Discourage long-term parking for residents, owners, and employees.
- · Encourage more nearby parking for visitors and customers.
- Reduce vehicle circulation for parking spaces.
- Improve traffic operations and reduce potential road safety issues.

Increase Parking Revenue:

- Allow more resources to further enhance the efficiency of the parking system.
- Purchase more advanced technology, such as license plate readers.

Access to More Parking-Related Information/Data

- Easy to collect recent parking data reflecting the existing parking condition.
- · Utilize for decision-making to determine parking locations, rates, and time limits in the future.

5.4 Enforcement/Technology

The existing technology implemented in the City of Salmon Arm is a mixture of both coin-operated parking meters and a pay-and-display system. Parking meters were provided for some of the existing on-street parking stalls; however, during the field review, some vandalism was noted, making many of the existing parking meters non-operational. The pay-and-display system works by having a centralized kiosk where parking can be purchased and then a parking stub can be displayed on the vehicle's windshields.

During the background review conducted for identifying parking fee, the parking technology implemented for other similar BC municipalities was also investigated and summarized in Table 5.3, including the hardware and the platform used, if available.

Table 5.3: On-Street Paid Parking Methods Utilized in Similar BC Municipalities

Municipality	Downtown On-Street Paid Parking Method	
City of Kelowna	Kiosk and app-based (PayByPhone app)Mixture of Pay-and-Display and Pay-by-License Plate	
City of Nanaimo	Kiosk and meter-based	
City of Kamloops	Kiosk and app-based parking (Flowbird app)	
City of Vernon	Kiosk, meter, and app-based (PayByPhone app)	
City of Penticton	Kiosk and meter-based	
City of Nelson	 Kiosk-based 	



As the City of Salmon Arm is just now planning the roll-out of pay parking within the entire downtown area, it is recommended that the City reviews the latest technology available at this time to ensure that the pay parking structure implemented is appropriate and adaptable for the future, as demand and targets change and/or evolve.

A parking discussion memo (*Parking Enforcement Technologies*), prepared by the City of Salmon Arm, was reviewed to identify potential types of pay parking methods and technologies that the City could implement including Single Space Metering (Smart Meter), and the multi-space metering (kiosk-based metres). Detailed discussion is provided below for both technologies:

Smart Meter

Smart meter technology is similar to the single space coin-operated parking meters; however, these parking meters are able to accept additional payment methods such as debit cards and credit cards. The smart meters are able to communicate wirelessly and could provide the City with real time data for each parking stall. In addition, these meters could also be very accessible for users as each or each other stall would be equipped with a smart meter. On the negative side, the smart meters may experience the same issues as the existing coin-operated meter with vandalism, however, the replacement cost of the smart meters may be much higher than the coin-operated ones if they are vandalized. With the provision of other payment methods, available coins within the meters may be limited and the vandalism activities may be discouraged.



Enforcement Procedure

With the implementation of Smart Meters, the enforcement process could be simplified. As the Smart Meter technology communicates wirelessly, enforcement can be more targeted and efficient as the enforcement officer could target the meters that are expired. It is expected that additional training for the enforcement officers as well as additional IT support may be required for the rollout and implementation of this technology.

Cost

According to the City's *Parking Enforcement Technologies Memo*, the Smart Meter cost is approximately \$2,500 per meter including the capital, operating and maintenance costs over a 10-year period. This value was compared to similar studies as well as one sample costing sheet and it was found that the cost estimate may be slightly higher as the comparison research found an estimated cost of \$1,800 - \$2,000 per meter. It is noted that the cost may vary depending on the vendor, therefore, the conservatively high value provided in the City's memo could be used for comparison.

Kiosk-based Meter

The kiosk meter could replace the need for having an individual meter for eac h parking space, similar to the existing parking kiosk found in the City of Salmon Arm downtown area. The advantage of the kiosk-based meter is that a single kiosk can be provided for a number of parking stalls to help offset the relatively high cost of a new kiosk, compared to the parking meters. The kiosk-based meters could accept coins, debit, and credit cards. Kiosk-based meters can also be available in various formats as well including pay-and-display and pay-by-plate (pay-and-go). The pay-and-display method requires users to purchase a ticket at the kiosk and display it in the vehicle's windshield, and enforcement would verify the displayed tickets whether it is still valid. For the pay-by-plate method, drivers input their license plate to pay for the on-street parking and enforcement is then based on reviewing license plates.

Pay-by-plate method can also provide the City with an opportunity to observe parking rates and utilization data to help introduce and assess future policies. Additionally, app-based or PayByPhone services could be rolled-out in conjunction with the kiosks and can also help improve the users experience by providing notifications when parking time is running low. Drivers can purchase and extend their parking time remotely rather than walking to the kiosk to purchase additional parking time.



Enforcement Procedure

Utilizing a PayByPhone or pay-by-plate method, enforcement could potentially be improved and streamlined with the use of license plate reader technology. Some advantages to implementing this form of parking enforcement are the use of cloud-based enforcement technologies, which allow enforcement personnel to review parking in real-time, but are also better suited for issuing violations and accepting online payments. Similar to the Smart Meter technology, it is expected that additional training and IT support will be required for enforcement officers to operate this parking system. Implementing improved digital technology also allows for more flexibility in the future as parking needs change such as strategic scheduling, regulations, and fees.

Cost

According to the City's *Parking Enforcement Technologies Memo*, the estimated cost of multi-space meters is approximately \$7,900 plus tax per meter. However, it was noted that the cost does not include shipping, installation, warranty, support, training, and add-on applications such as pay-by-plate technology. It is expected that some of the costs may vary based on the supplier and their location in which the hardware is being procured. Similar studies have estimated a total cost of \$15,000 per meter, which could be used as an estimate for comparison purposes to consider additional costs not previously identified in the City's memo. One sample costing sheet was reviewed, and it was determined to be a similar price per meter.

To provide a convenient and easy parking arrangement for all users, particularly for visitors, it is recommended to implement a consistent approach for all on-street parking stalls throughout the entire downtown area. As it is understood that the City has already acquired some kiosk-based meters, it is recommended that the City continues purchasing similar meters for the extent of the area. Based on the ability of the supplier, the City should consider the latest available technologies, such as the PayByPhone app or other app-based payment methods (such as EasyPark, HangTag etc.), to improve the user experience and ease of use. Additionally, the City should periodically review the data collected from the parking meters and develop a parking utilization and efficiency analysis methodology to evaluate the effectiveness of the implemented parking fee and determine the need for changes to improve the operation for on-street parking.



Cost-Benefit Analysis

Some basic assumptions were applied when calculating the Cost-Benefit for the two potential parking technologies (i.e., Smart Meter versus Kiosk-based Meter) and they have been summarized below: The basic costs for the two options utilize the values provided in the City of Salmon Arm *Parking Enforcement Technologies Memo* as a base and verified using alternative sources.

- It was assumed smart meters could be installed with two meters per pole/base, the cost per space could be reduced to \$2,000 per space.
- Kiosk-based meters were assumed to operate with one meter per 10 parking spaces.
- Revenue generated was determined based on the extrapolation of the current revenue generated from the
 existing pay parking.
 - According to the 2019 Downtown Parking Budget provided by the City, on-street parking was expected to generate \$17,000 for the existing 64 metered parking spaces within the downtown.
 - Therefore, it was assumed proportional revenue will be generated for the remaining spaces where parking will be applied.
- · It is assumed that the parking technologies applied would not affect the relative parking utilization.
- . It is considered that the maintenance, licenses, and warranty are included in the cost over 10 years.
- It is assumed that the existing 26 spaces on Hudson Avenue serviced by kiosk-based meter will remain, therefore the remaining 273 spaces will be upgraded to the selected enforcement technology.
- Additional revenue is considered proportional to the proposed increase in parking fee, therefore, as the
 proposed increase in parking fee is increased from \$0.25 to \$1.25 per hour, a factor of 5.0 could be applied to
 the estimated revenue (as the parking cost is increased 6 times)

Table 5.4: Cost/Benefit Analysis for the Proposed On-Street Parking Enforcement Technologies

	Smart Meter	Kiosk-Based Meter	
Cost			
Per Meter	\$2,500	\$15,000	
Per Space	\$2,000 (2 meters per pole)	\$1,500 (1 Meter per 10 Spaces)	
Total Cost	\$546,000	\$409,500	
Revenue			
Per Year	\$388,050	\$388,050	
10-Years	\$3,880,500	\$3,880,500	
Cost / Benefit			
10-Year Benefit	\$3,334,500	\$3,471,500	
Payback Period	1 year, 5 months 1 years, 1 month		

Overall, it was found that both technologies will have a similar cost per space and the estimated payback period for both technologies will be short; 13 months for the kiosk-based meters and 17 months for the Smart Meter. However, it is noted, that the calculations do not consider the existing operating overhead, any additional enforcement equipment, staff, or training costs that may be required to operate the proposed enforcement technology. It is assumed that the additional cost of enforcement for both parking methods will have similar costs. Moreover, the analysis assumes similar parking utilization rates will be applied.

6.0 Off-Street Parking

Existing off-street parking lots within the City's downtown area were inventoried based on the background documents provided by the City and the latest field review. The off-street parking lots available in the Downtown area are provided in *Figure 6.1*.



Figure 6.1: Public Off-Street Parking Facilities

6.1 Parking Time Limits/Restrictions

Parking time limit and restrictions for each of the City-owned and/or operated public lots have been provided and summarized in *Table 5*. The off-street parking identified contains four free 2-hour parking lots (226 parking spaces), two pay parking lots (205 parking spaces), and one reserved lot (18 spaces). Other off-street parking lots in the downtown area are privately operated and enforced, with the intended purpose of providing parking for the individual local area businesses.

Table 6.1: Time Limits and Restrictions for existing Off-Street Parking Lots

Lot Name	# of Spaces	Restriction	Notes
Ross Street Parking Lot	135	2 Hour	8am – 6pm, Monday – SaturdayCity Owned Lot
Avon	18	Reserved	Regular Monthly Reservation Only \$26.25 per month
Inner Lot	105	Pay Parking	 \$0.25 per hour 8am – 6pm, Monday – Saturday Monthly Reserved also Available
Salmar Lot	41	2 Hour	8am – 6pm, Monday – Saturday City Owned Lot
Hudson Lot	100	Pay Parking	 \$0.25 per hour 8am – 6pm, Monday – Friday Accommodates Large Recreation Vehicles
C2 Lot	36	2 Hour	8am – 6pm, Monday – Saturday
Employee Lot (City Hall)	14	2 Hour	8am – 6pm, Monday – Saturday



The existing parking fee for off-street parking is \$0.25 per hour with a maximum time limit of 10 hours where the parking fee is currently implemented. In the previous section, increases in the on-street parking rates were reviewed and it was found that a parking rate of \$1.25 could be reasonably applied when compared to other BC municipalities. The goal of applying parking rates should be to encourage short duration/high turnover parking for the on-street parking spaces while encouraging longer duration for the off-street parking lots. Therefore, off-street parking could consider lower rates (compared to on-street) for longer-term parking (i.e., more than two hours).

6.2 Wayfinding

During the field review conducted by ISL staff, inventory of the existing wayfinding signage to the off-street parking lots was conducted. The observations found that existing signage was provided throughout the study area, directing drivers to the nearest off-street parking lots. It was also found that all of the indicated off-street parking lots provided standardized signage indicating the parking fee, time limit and hours of restriction. The standardized signage was noted to be beneficial to provide clear guidance to drivers who are looking for the appropriate off-street parking lot (such as indicating whether it is public parking or permit-only parking).

It was noted that as some central off-street parking lots were fully occupied during the peak hours, drivers may not be aware of other available off-street parking lot options within the downtown area. To further improve the wayfinding for off-street parking facilities, the existing parking facilities could benefit from the addition of a map illustrating the downtown area that could be posted in these parking lots, near the accesses, showing where alternative / additional parking options may be located. A sample of this being utilized in the City of Kelowna is provided in *Figure 6.2*.



Further improvement could be the installation of digital feedback signs posted outside of the parking lot which indicates the number of vacant parking spaces available in the off-street parking lot. This arrangement could encourage drivers to be directed towards off-street parking facilities if they are aware of parking space availability. It could also reduce driver frustration of circling, looking for available parking spaces, and unnecessary adverse traffic operation issues related to slow vehicles searching for parking spaces and potential safety issues due to impatient or careless driver operations. An example of off-street parking feedback signage utilized in the City of White Rock in BC is provided in *Figure 6.2*.



Figure 6.2: Off-Street Parking Digital Feedback Signage in the City of White Rock (Left) and Wayfinding Map Provided on Parking Meters in City of Kelowna (Right)

6.3 Parking Structure

To further increase the number of parking stalls within a limited area, the construction of a parking structure (multi-level parkade) could be considered. It is understood that the City is planning to implement an off-street parking facility at the location of the proposed 4th Street Parking Lot. Based on the conceptual plans provided by the City, the parkade could contain up to three levels of off-street parking as well as potentially 260 parking stalls.

Based on the review of the conceptual design drawings, there will be various accesses to the parking facility proposed including two separate accesses off 4th Street and one from 6th Street. It is expected that the multiple-access arrangement could lead to driver confusion and frustration when attempting to find an available parking stall. People may avoid this off-street parking facility and use other on-street and off-street parking locations due to the confusion be generated. To avoid the potential issue, the proposed parkade should be adequately signed, similar to existing lots, to provide relevant information such as restriction, time limit, parking fee and hours of operation.

As mentioned in **Section 6.2**, the inclusion of an off-street parking digital feedback sign could be useful for the facility to indicate if parking spaces are available before drivers enter the facility. It is more important for a multi-level parking structure as drivers may go directly to floors where parking stalls are available, therefore minimizing unnecessary vehicle circling the parking levels which have already been full.

Since the proposed parking facility is located on the northeast boundary of the downtown area, walkability between the site and the majority of destinations was expressed as a critical success factor. Therefore, the walking distance/time was reviewed for this site relative to the desired destinations for people parking on the site. Assuming an average walking speed of 1.2 metres per second, the approximate walking time from the proposed parking facility to an area within the downtown could be reviewed, and a graphic showing various walking times has been provided in *Figure 6.3*.



Figure 6.3: Estimated Pedestrian Walking Times from the Proposed Off-Street 4th Street Lot using the Existing Sidewalk Network

It was found that a large portion of the downtown area could be accessed by utilizing the existing sidewalk network within 7 minutes from the proposed 4th Street Parking Structure (i.e., 4th Street Parkade). Based on the desired use of the off-street parking facility of longer duration parking, a slightly longer walk time may be tolerable for some users, especially if the price for parking is more desirable than the alternative (i.e., on-street parking).



In conjunction with the implementation of on-street pay parking, the off-street parking pay structure/rate could also be proposed and implemented to achieve the desired uses for the different facilities. The off-street parking facilities' targeted use should be for longer parking durations while leaving the on-street parking for a short duration and high-turnover customer trips within the downtown. To achieve the desired use, off-street parking should be provided at a reasonable fee compared to the on-street parking for longer durations – for example, \$0.50 to \$0.75 per hour off-street compared to \$1.25 per hour on-street). Additionally, parking passes could also be considered for business owner or employees that will utilize the parking for extended portions of the day.

■ 7.0 Bylaws and Policies

The existing Traffic Bylaw No. 1971 is a City regulated bylaw to police/enforce traffic, parking, and the use of streets within Salmon Arm. Upon review of the City's bylaw, the following suggestions and potential changes were identified to coincide with the recommended improvements highlighted in this report:

 To apply the Smart Meter or kiosk-based meter technology, the City could consider updating their Bylaw (Part V – 25), similar to the following sample extracted from the City of Kelowna's Traffic Bylaw:

"A person parked in a metered space or short term parking lot where the head of the parking meter indicates the time remaining or who displays a valid receipt issued from a City-operated pay station, paid a fee for parking the vehicle in a metered space remotely at a pay station using the Pay by License Plate option or has purchased time utilizing a City approved Virtual Parking Payment provider by entering their correct license plate number, shall not be subject to the penalties provided for a breach of Subsection 4.1.2 (hh.1) or (hh.2) of this Part so long as the meter, receipt, or Virtual Parking Payment session remains valid and subsisting."

 The City could also consider and include an item specifically for the parking of tour buses and recreational vehicles (RV), such as the following sample:

"Parking Prohibitions. Except as otherwise provided in this Bylaw, no person shall stop, stand, or park a vehicle or equipment:

Tour Buses (kk) in any area on public property that is designated by a traffic control device to be reserved for the use of tour buses unless that person is operating a tour bus."

More details were discussed in Section 9.4 (Special Parking Consideration) of this report.



■ 8.0 Impacts of Future Traffic Operation Changes

Based on discussion with the City, it is understood that two major changes are anticipated in the near future as it relates to the traffic operation and flows through the downtown area. These proposed changes include the Highway 1 signalized intersection relocated from Ross Street to 4th Street and the consideration for planning the CP Rail underpass at Ross Street. The following sections provide a discussion of the potential parking-related impacts of these changes.

8.1 Highway 1 Signalized Intersection Relocated from Ross St to 4th Street

It is expected that with the signalization of the intersection at 4th Street, Ross Street will become restricted to right-in/right-out only at Highway 1. Following this change, the main entrances to the downtown area will be located at the new traffic signal at 4th Street.

With respect to parking arrangement, and considering the addition of the 4th Street Parkade, it is expected that a majority of vehicles would access the downtown area through the 4th Street intersection at Highway 1. The signage, currently located prior (eastbound) to Ross Street on Highway 1, could be modified to indicate that the available off-street parking off 4th Street to provide the proper wayfinding. Similar signage could be applied on Highway 1 westbound vehicles, directing visitors to the downtown area through 4th Street. The signage along 4th Street should be clear for drivers as well indicating that the proposed parkade can be utilized when visiting downtown.

8.2 Ross Street CP Rail Underpass

The Ross Street Underpass is proposed to connect Ross Street underneath the CP Rail line north of Lakeshore Drive and connecting to Beatty Avenue on the north side of the railway tracks. The proposed underpass will provide a safe and convenient connection to areas north of the railway tracks. It is assumed that the design will provide safe pedestrian crossing as well as vehicles.

As related to the existing parking condition, it is expected that the proposed underpass could further increase the utilization for existing off-street parking on the north side of the railway tracks as users will not be required to directly cross the railway tracks to access the downtown area. Although, it is unlikely that passenger car visitors will choose to park on the other side of the railway tracks, existing and future parking supply on the north side of the railway tracks could provide a good opportunity to allow parking or vehicle storage for RV's and tour busses so that they do not take up valuable parking space near the downtown businesses. It is understood that the majority of the properties on the north side of the railway tracks are privately owned and the City may consider having agreements and/or purchasing the land to provide bus/RV parking on those sites. Additionally, once the underpass is completed, with the intention to provide additional parking on the north side of the railway tracks, the Downtown Specified Parking Area (as defined in City's Bylaw 1237), could be expanded to continue to manage the parking for the entire area.

9.0 **Special Parking Considerations**

9.1 Small Car and Motorcycle Parking

Generally, it is preferable to provide standard dimension parking spaces so that they could be all accessible to both standard and small sizes passenger vehicles. However, in some locations, it may be beneficial in providing small size parking spaces, to maximize the usable space for off-street parking lots. With the review of previous parking studies, it was recommended to have 30% or less of total parking as small size stalls for a single parking lot, however, due to the likely makeup of vehicles for the area, a smaller percentage could be considered.

Additionally, if possible, the provision of motorcycle parking could also be considered in the on-street spaces and off-street lots. In general, one parking space could provide comfortably up to two motorcycle spaces. In addition to the encouragement to use small size motorcycles instead of large size passenger cars, the provision of defined motorcycle parking spaces will assist in optimizing parking usage as well as improve the ease of enforcement for motorcycle pay parking. Motorcycle parking could be provided in the new 4th street parking facility as well as a few other locations (such as the Hudson Lot or Ross Street Lot) and utilization should be observed to determine if additional spaces are required.

9.2 **Bicycle Parking**

Based on a recent field review of the parking supply in the downtown area, it was found that bike racks were observed along many of the major roads. As the site visit was conducted during the winter weather, bicycle parking utilization could not be email identified; however, various bicycle storage types and/or bike racks were noted, and a few examples can be seen in Figure 9.1.



Near Hudson Lot



Near Shuswap St and Hudson Avenue



At Hudson Avenue and Alexander Street



Near Shuswap St and Hudson Avenue

Bicycle Facilities within the Downtown Area Figure 9.1:



To maintain bicycle accessibility, the following recommendations could also be considered.

- Consider implementing bike lockers at typical locations of interest, such as major transit stations, to provide additional security and protection for long-term bicycle parking.
- Adequate bicycle parking facilities (bike rack and lockers) be provided for the future 4th Street Parkade.
- New residential and commercial developments are required to provide short-term bicycle parking near the
 entrance.

9.3 Electric Vehicles

It was found during the field review, that two electric vehicle parking stalls were provided in the Ross Street offstreet parking facility. Utilization data of the existing facilities were not provided therefore, the demand for the spaces could not be verified. However, as electric vehicle become more popular and more widely used in the future, it is advised that the City could start planning and identifying suitable locations for public charging stations. The *Electric Vehicle Charging Infrastructure Deployment Guideline* (*July 2009*), prepared by BC Hydro, provides an estimated cost for both Level 2 "Primary Charging" facilities and Level 3 "Fast Charging" facilities. The guideline provides an estimated cost of \$12,875 for a Level 2 Charging station and \$64,158 for a Level 3 Charging Station. The City could consider additional spaces within the existing off-street facilities or on-street parking spaces. The appropriate City's departments could be coordinated to determine the ideal locations based on ease of connection to power/installation or coordinating the work with other road works to limit the construction costs.

9.4 Tour Bus / RV Parking

Including the turning paths for parking activities, tour bus and RV parking that takes up a significant parking area. A tour bus or RV parked in the downtown area can take up multiple valuable parking spaces and reduce parking opportunity for regular passenger vehicles. However, tour buses also provide some economic benefit to the businesses providing access to tourists for shopping in the downtown area. Therefore, it is beneficial to provide a location for them to park, unload and allow visitors to the downtown shops, restaurants, and businesses. As mentioned in the **Section 8.2**, with the addition of the proposed Ross Street Underpass, there are opportunities to provide parking/storge for tour buses on the north side of the railway tracks, which would allow tourist to visit the downtown businesses safely, without utilizing valuable existing off-street or on-street parking spaces.

Alternative options for the provision of RV and tour bus parking and storage could be considered on the south side of the railway tracks, such as negotiating the use of the parking at the church (southeast of Hudson Avenue and Lakeshore Drive). However, the lot is relatively small and may have some difficulties to provide adequate turnaround space for RV's or busses.

■ 10.0 Recommendations and Implementation Plan

10.1 Recommendations

Based on the review of the existing parking conditions and the future parking arrangements, the following recommended measures that could be implemented, as described in this *City of Salmon Arm Downtown Parking Plan*:

- Implement on-street parking time restrictions (2-hour limit) throughout the downtown area. Maintaining one
 hour limit on 200 & 300 Blocks of Alexander Street.
- Introduce a higher on-street parking fee to be consistent with other comparable BC municipalities. A parking fee of \$1.00 to \$1.25 per hour could be considered and would still be slightly below average for the municipalities reviewed (\$1.40 per hour).
- Accompany with an educational initiative, potentially in collaboration with the Downtown Business Association
 and Downtown Parking Commission, with the implementation of paid on-street parking to discuss the benefits
 of implementing paid parking and how the additional revenue generated will positively impact the businesses
 in the area.
- Implement Kiosk-based meter systems throughout the entire downtown area, similar to the existing kiosk-based meters, where pay parking is implemented. The City could consider implementing options that provide more convenience to the user and ease of enforcement, such as pay-by-plate (pay-and-go) and app-based solutions.
- Undertake a parking data collection and analysis to review the parking utilization data to develop future policies.
- · Consider adding wayfinding maps to other parking facilities within the existing off-street parking facilities.
- Consider adding digital parking feedback signage to the off-street parking lots to provide real-time available
 parking stalls to drivers.
- Provide consistent signage for the proposed 4th Street parking structure, including along Highway 1 with the Signal being moved to 4th Street.
- Consider the off-street parking fee to be desired compared to the on-street parking to encourage longer duration parking in the off-street parking and shorter duration in the on-street parking spaces.
- Provide recommendations about the future implementation of short-term and lockers for bike parking.
- Expand the Downtown specified parking area (as defined in Bylaw 1237) to continue to manage the parking
 for the entire area, with the provision of additional parking on the north side of the railway tracks and the
 completion of Russ Street Overpass.



10.2 Implementation Plan

Short Term (0-2 Years)

- Review the demand for additional charging stations for electric vehicles based on utilization of existing stations.
- Update the traffic bylaw as recommended in Section 7.
- Provide additional parking (including RV and Tour Bus parking) on the north side of CP Rail after the completion of the Ross Street Underpass
- Investigate expanding the Downtown specified parking area (as defined in Bylaw 1237) to continue to manage
 the parking for the entire area, with the provision of additional parking on the north side of the railway tracks
 and the completion of Ross Street Underpass.

Mid-Term (2 - 10 Years)

- Expand the Pay Parking within Downtown (assuming 25% of the space) approximate cost \$105,000.
- Increase the parking fee to \$1.25 per hour for the partially expanded pay parking estimated annual revenue increase \$97,000 per year.
- Finalize the construction of the 4th Street Parkade.
- Implement full extent of the Pay Parking within Downtown approximate remaining cost \$308,000.
- Increase the parking fee to \$1.25 per hour for the full extent of pay parking estimated annual revue increase \$388,000 per year.
- Provide additional electric vehicle fast-charging stations depending on demand \$64,000 per two stations.