

City of Vancouver Downtown Parking Efficiency Study 2018



Acknowledgments

Parking Program Manager

Steve Kaspan
Mike Merrill (retired)

Project Leadership Team

Teresa Brum
Lloyd Tyler
Chad Eiken
Carrie Lewellen
Chris Christofferson
Jan Bader
Natasha Ramras
Jeri Newbold
Jennifer Campos

Stakeholder Group

Paul Schlesinger
Bruno Amicci
Carly Lowder
Stephanie Rice
Carmen Caraballo
Greg McGreavy
Mike McLeod
Michael Lary
Leah Jackson
Linda Glover
Derek Hofbauer
Tim North
Jenni Denton
Dean Irvin

Parking Program Staff

Karen Kumpula
Sharie York
Dareen Thielbar
Tim Brown
Holly Naramore
Nathaniel Krase
Jessie Keenan
Cher Martini
Tina Picchioni
Jonna Papajohn

City Staff

Greg Turner
Barb Thomas
Erik Bjerke
Lt. Raquer
Peggy Furno
Kevin Heitz
Allison Williams

Table of Contents

Executive Summary	5
Initial Findings	
Operation Assessment	6
Enforcement	10
Operations	15
Parking Revenue	22
Policy	27
Final Recommendations	
Immediate (0-12 Months)	
Enforcement Training and Appearance	48
Enforcement Technology Equipment Enhancements	50
Meter Configuration Improvements and Elimination of Free Parking Policy	52
Meter Collections Security Improvements	54
Proactively Increase City's Citation Collections Effort & Improve Customer Service Functions	56
Residential Parking Permit (RPP) Optimal Tool Process Improvements	59
Adjust Parking Fines and Rates to Reduce Infractions	61
Modify Code to Provide Flexibility on Paid Parking Days/Hours	62
Additional Enforcement Staff, Vehicles and Modification of Prolonged Parking Policy	63
Short Term (1-2 Years)	
City Parking Technology Hardware Enhancements	65
Modifications to Parking Requirement	67
Modifications to Transit Overlay District	69
Establish a formalized TDM Program	70
Wayfinding, Branding & Parking Education Improvements	72
Improve Parking Opportunities for Employees of Downtown	74
Long Term (2+ Years)	
Evaluate Performance - (Demand) Based Pricing	75
Appendix A: Stakeholder Group Meetings	77
Appendix B: Comparable Cities Analysis	88

Executive Summary

Today, the City's Parking Services Department manages nearly 4,200 on- and off-street parking spaces, including one of the City's off-street garage locations, Vancouvercenter. The City operates a mixture of single-space and multi-space pay station equipment with nearly 1,500 single-space meters and 103 pay stations.

During the fall of 2016, the City released a Request for Proposals to complete a Parking Program Total Cost of Ownership (TCO) study associated with its public parking services program and functions. In response, the City of Vancouver retained Dixon Resources Unlimited (DIXON) in February 2017. The Parking Program TCO Study was renamed the Downtown Parking Efficiency Study for the City. In detail, the study is focused towards the City's Parking Services, its overall operational effectiveness and financial outlook.

Project Objectives

The project objectives outlined by the project team were as follows:

- ❖ **Identify current and future staffing needs:** There is currently a perception that Parking Services is understaffed and therefore a need to determine if staff is utilizing and allocating time effectively and whether additional staff is needed moving forward.
- ❖ **Perform a financial analysis on current paid parking and parking related revenues:** To date Parking Services in Vancouver has operated at a deficit. The City's goal is to be financially self-sufficient in the near future. To do so, the City would like the study to include a financial analysis on current paid parking, the associated technology and the resulting parking revenue to ensure the City is maximizing its efforts.
- ❖ **Comparable Cities Analysis:** To increase Parking Services' operational effectiveness the department is interested in studying cities similar to Vancouver and identifying industry program best practices as they relate to parking operations and technology.
- ❖ **Examine the City's current parking programs and determine best practices for moving forward:** Parking Services is expanding its paid parking to other areas of the City. In preparation for its Uptown District roll-out, the study needs to explore the potential for a more formative Residential Preferred Parking program to prevent spill-over into neighborhoods from newly implemented paid parking.



Initial Findings: Operation Assessment

On-site Visit and Operational Assessment

As part of the study, DIXON and Nelson Nygaard visited Vancouver in mid-March and completed an initial on-site assessment of the City's parking operations. While on-site, both DIXON and Nelson Nygaard met with members of Parking Services staff including Parking Enforcement, Maintenance and Administrative services. DIXON interviewed internal stakeholders from the City's Police, Engineering, Planning, and Finance departments. Finally, DIXON engaged members of the City's management Leadership Team as well as held the study's first Stakeholder Meeting which consisted of local business owners, developers, employees, and members of the community.

The following report captures both DIXON's initial on-site observations and findings surrounding parking enforcement, operations, technology, revenue, reconciliation, and collections. The Initial Findings report also includes Nelson Nygaard's policy review and summary of the existing codes and plans related to parking in Vancouver, with a focus on the Downtown core. Following the City's review, DIXON and Nelson Nygaard will begin to format formal recommendations based upon the findings outlined within this report.

Findings

The initial findings outlined within this report incorporate firsthand experiences and observations, but more importantly, the feedback from Parking Services Staff and affiliated departments. The initial findings discovered during the project teams visit are not intended to be a negative reflection of the departments, the City's parking operation, or its staff. Instead, the purpose of this report is highlight those areas and current procedures that one would consider to be less than efficient when considering optimal industry practices.

In summary, through observing multiple departments, it is apparent that many of the City's parking operation deficiencies stem from an overall lack of adequate staffing. In many cases, staff, administration, enforcement and maintenance assume responsibilities outside of their normal duties. This is not to state that staff should not accept multiple responsibilities or multi-task but that the frequency which staff is engaging these alternate duties is far too often. This problem impacts the quality of work and task achievement, lower revenues and an overall inefficient parking operation.

Operationally, the Downtown parking rates for pay station and single-space meters are inconsistent and confusing in certain locations. The recent rate increase to hourly parking on-street was not applied to all meters throughout Downtown and as a result, has created streets with conflicting rates. In addition, the current 20-minutes free button on the majority of single-space meters has contributed to lost revenue and enforcement challenges. Furthermore, the City is not currently maximizing its available parking locations or types of parking (permit and hourly) through clear, intuitive wayfinding and signage.

The City's parking enforcement team is bearing a sizeable portion of the programs deficiencies. There is a lack of enforcement officers and a few staff attempt to enforce the entire City daily. A combination of scheduling, enforcement strategies and priorities, lack of enforcement technology, and labor-intensive processes, has created a less than ideal working environment for the existing officers and subsequently less effective.

To date, Parking Services has operated at a deficit because of debt on the Vancouver Garage. After meeting with staff and examining the City's parking revenues starting from the collection of meters to

the collections of unpaid parking citations, it is evident that there are substantial revenue gaps where monies are not being captured. With over \$1.1 million in delinquent parking citations, only a 20% recovery rate and annual write-offs nearing up to \$200,000, the department has significant room for improvement.

Based on Nelson Nygaard's review of the existing codes and policies related to parking in Vancouver, the current inefficiencies related to operations, enforcement and parking revenues are closely correlated to these municipal codes and plans. As Parking Services is structured, the current parking codes are outdated and have not evolved with the City's parking growth or technologies.

The Parking Efficiency Study's Initial Findings report is intended to provide the City with a thorough review of current issues and to identify potential areas for program improvements and efficiencies.

Prior to the DIXON and Nelson Nygaard's on-site visit on March 13 - 15, 2017, the project team carefully worked to identify the necessary City staff to meet with and interview. To achieve the most value from the team's time in Vancouver, one-hour time slots were scheduled for each interviewee. The goal of the meetings was to identify any relationship each staff member may have with daily parking issues. Each meeting was structured as an open dialogue aiming to explore the full breadth each staff member may have with parking. The conversations ranged from the simple downloading of a report to collecting meters to zoning for future parking or to the writing of a parking citation. Furthermore, DIXON and Nelson Nygaard invited each interviewee to provide their ideal solution for what may make each of their jobs more effective or the overall parking operation more efficient.

Throughout the on-site visit, DIXON and team engaged in multiple field ride-alongs with members of the Parking Services staff. Parking Services staff is comprised of parking enforcement, maintenance and collections. The team observed staff perform each task to fully understand the duties and responsibilities of each area.

On Monday March 13th, DIXON accompanied Parking Enforcement out to the neighborhood district to perform a series of neighborhood enforcement tasks that mostly included prolonged vehicle enforcement. The following day's ride-alongs included performing collections with maintenance staff on various pay stations and during the afternoon, walking an enforcement beat throughout Downtown including the Vancouvercenter garage. The final field visit occurred Wednesday where DIXON accompanied another of the enforcement officers on a separate beat of the Downtown, walking the City's mobile pilot area and exploring different public surface lots enforced by the City.

DIXON focused its attention towards enforcement officers' methods of enforcement including where and when citations are issued; the amount of time required to issue citations; communications via enforcement handhelds in certain areas of town; the beats and routes that officers typically follow both in the Downtown core as well as in the neighborhoods. Through the visits, the team was able to understand the process by which both enforcement and maintenance staff approach their respective duties each day.

A complete list of the individuals who participated in interviews, ride-alongs, and meetings are identified on the following pages:

Monday, March 13, 2017

Meeting	Attendees
Project Lead Meeting	Teresa Brum & Jennifer Campos
Interview – Vancouver Police Department	Lieutenant Raquer
Ride Along - Neighborhood Enforcement	Sharie York
Interview - Traffic Engineering Tech	Erik Bjerke
Interview – Admin	Jonna Papajohn
Leadership Team Meeting	Teresa Brum, Lloyd Tyler, Chad Eiken, Carrie Lewellen, Chris Christofferson, Jan Bader, Natasha Ramras, Steve Kaspan, Jeri Newbold, Jennifer Campos
Interview – Parking Manager	Steve Kaspan

Tuesday, March 14, 2017

Meeting	Attendees
Ride Along – Downtown Maintenance/Facilities	Nat Krase
Interview – Customer Service	Peggy Furno
Interview – Current Planning	Greg Turner
Interview – Admin	Tina Picchioni
Project Team Meeting	Teresa Brum & Jennifer Campos
Ride Along – Downtown Enforcement	Holly Naramore
Interview – City Traffic Engineer	Chris Christofferson

Wednesday, March 15, 2017

Meeting	Attendees
Interview – Enforcement	Dar Thielbar
Ride Along – Downtown Enforcement	Tim Brown
Interview – Enforcement	Jesse Keenan
Supervisor Interview	Karen Kumpula
Interview – Finance	Barb Thomas, Kevin Heitz and Carrie Lewellen



Initial Findings:
Enforcement

Department Structure

To encourage compliance and customer service, the City of Vancouver supports a “**parking ambassador**” approach to parking enforcement, therefore, customer service and education of parking rules and regulations to the public is a priority. Parking enforcement staffing is currently divided between Downtown and the neighborhoods.

The Downtown Vancouver parking meters operate daily between 8:00 a.m. and 6:00 p.m., excluding Saturday, Sunday, and holidays. Currently, the Vancouvercenter garage operates daily with hours extending until 10:00 p.m. or midnight depending upon the day of the week. Staff hours range from Monday through Friday from 6:30 a.m. until 6:00 p.m. There is no parking enforcement staffing for after-hour or weekend enforcement duties. Parking complaints are directed to the Police Department and the City receives 311 and 911 calls from residents about parking issues.

Current Staffing

- ❖ Two Full-time Parking Enforcement Officers (PEOs)
 - One PEO is assigned solely to the neighborhood enforcement program
 - One PEO is currently on light-duty (restricted) and is not permitted to work in the field
- ❖ Two Full-time Parking Officers (POs)
 - In addition to enforcement duties, the PO’s role assists with parking meter collections/maintenance as-needed
- ❖ One Part-time PEO

Enforced Areas

1. North
2. South
3. The Lots (includes Clark College area)

Enforcement Coverage

Today, officers’ alternate areas of enforcement each day rather than following set beats and there is minimal proactive enforcement of the time limit zones. Frequently, one of the assigned downtown enforcement officers is pulled to assist with neighborhood enforcement as added support, leaving just one officer to cover the entire downtown. The lack of adequate staffing, usually two officers, but at times reduced to one officer has resulted in ineffective and inconsistent enforcement as a department.

Inefficiencies have spread to the City’s parking enforcement procedural duties as well. Currently in certain areas of downtown, metered and permit areas are shared on the same block. For example, a space or group of spaces may allow both permit and metered parking. When enforcing permits, the PEO must scan the permit to verify whether the permit is valid or not (Figure 1). There is no color variation or differentiation between type of permit, aside from a hole-punched box,

which requires closer inspection from officers. It is important to note, officers also mentioned the difficulty in inspecting permits at times because of rain and wet windshields. This arduous process is evident within the garage as well, not all permit holders are parking in assigned permit only spaces, the



Figure 1. Parking Permit

permit status must be verified for each vehicle parked in the garage. The permit verification process is time consuming and the repetitive motion of scanning has contributed to a work-related injury. In speaking with enforcement officers, the lack of cellular communications inside the garage have a significant impact on an officer's ability to reliably enforce. Often an officer is unable to verify permit status with the office because of weak connection. The same communication issues have been experienced in other locations throughout the City.

Today, enforcement officers are unable to verify disabled placards. Though not uncommon for municipalities and officers, the result is opportunity for placard abuse, allowing vehicles to park without time limits or payment. While expired registration citations should not be a PEO's priority, the option to cite for expired tabs when appropriate should be available to officers.

Enforcement Technology

Currently the City uses MC9500 Motorola ticket writers and detached O'Neil printers for enforcement. Some officers have had **injuries from the repetitive motion of scanning permits. Additionally, it was noted that images are slow to capture and of low quality.** One officer is using a separate digital camera because of safety concerns with the amount of time it takes standing in the street to capture the needed images with the handheld.

The City recently purchased seven Verizon iPhone 6s to replace the current handhelds. The City's IT Department updated the internal Oracle system to use the T2 Flex application. The City purchased a subscription to the T2 Flex Software in January 2016. Parkmobile can be integrated with the iPhones for a more seamless enforcement process that will allow enforcement officers to query plate numbers. The City is planning to deploy the new handhelds shortly once an issue with the citation formatting has been addressed. This should resolve the above-mentioned issues.

Abandoned Vehicles

The City recently introduced a city wide **Prolonged Parking** ordinance prohibiting any vehicle from remaining parked in an on-street space for more than a 24-hour period. The policy is primarily complaint driven by residents and has created a significant amount of investigatory work for the neighborhood PEO. Due to the considerable number of complaints, not every incident reported is addressed and therefore, officers are unable to be consistent and fair in enforcing the rules effectively.

As part of the Neighborhood Program, the City's Code Enforcement Officers (CCOs) have the authority to tow vehicles. In addition, CCOs are responsible for vehicle camping issues. The violations, for which PEOs are responsible for, such as abandoned vehicles, are violations that warrant towing a vehicle.

Hansen Management System

As previously mentioned, the City has migrated to the Hansen Maintenance Management system for certain services, including ticket management. However, enforcement officers are not currently utilizing the system's features for field management and have relied upon the more familiar and traditional practice of printed documentation and checklists. The following is a list of features available through the Hansen system and were not observed to be fully utilized by PEOs:

- ❖ The Hansen program's **mapping tool** for open cases which may reduce a significant amount of manual work for the PEO enforcing the neighborhood

- ❖ Officers are currently submitting violations in bulk and utilizing the Code Violation Module.
- ❖ The status of open violations is not currently being updated individually
- ❖ The Hansen program allows users to set **priority levels** and it will automatically sort cases based on set criteria and escalation of cases can be based on the date the case was opened
- ❖ Images can be linked to the case file or violation through Hansen. Currently, officer's handhelds can capture pictures; however, because of lack of picture quality, officers are using separate digital cameras. Neither the handheld pictures or pictures captured with digital camera are being linked to the Hansen system and applicable cases
- ❖ Currently, the case number is not being linked to the issued citations

The department is currently utilizing Hansen for all complaints received but has not fully exercised the tool in the field. Customer complaints are accepted by various City departments, including Code Enforcement, Operations and the City Manager's Office, depending on the method or form in which the individual's complaint is submitted.

Enforcement Technique and Tactics

The current staffing and time allotments prioritize the Prolonged Parking policy over the downtown meter enforcement. The **lack of necessary downtown enforcement** is problematic; over time motorists have become familiar with enforcement's lack of presence throughout the downtown, feeling there is not a need to consistently pay to park because the chance of receiving a citation is minimal. To further compound the issue, the City's current expired meter fine is \$15.00, only \$2.50 more than the cost of parking all day at certain metered space. The lack of enforcement presence and minimal fine amount have combined to form a belief by motorists that there is not a need to pay to park. The effect on the City is ongoing losses in paid parking revenue and a reduction in consistent vehicle turnover commonly desired in a commercial downtown such as Vancouver.

The desired "parking ambassador" philosophy to enforcement has been practiced with mixed approaches. The lack of structure and oversight in the current program has led to the **creation of informal parking rules**, enforced by some but not others and not clearly communicated or documented among enforcement staff.

Since 2003, the City has discontinued all curb painting, uncommon amongst most municipalities. In lieu of marked curbs as a method distinguishing parking rules, PEOs rely solely on posted signage. However, this has created a lack of transparency on the City's part with the public because posted time limits for spaces such as loading zones do not exist, creating room for argument as to the enforced regulation for that space.

Uniforms

Enforcement officers are not currently required to dress to a consistent uniform standard. Officers are provided a uniform allowance of \$400 per year to purchase uniform clothing from vendors pre-selected by the City. This allowance was implemented in 2008; however, it was communicated by multiple staff that it is difficult to acquire the necessary equipment within their allotted budget. For example, quality rain jackets, sufficient for officers who spend extended periods of time in the region's inclement weather are expensive and may consume much of the allowance according to one officer. The uniform guidelines currently consist of clothing in the color of navy-blue with supplied department badges affixed.

Communications

Vancouver PEOs do not carry city-issued radios like police officers. Instead, PEOs rely on city-issued iPhones to contact the Police Department for support, including emergency situations. The phone is an additional piece of free-standing equipment that must be carried by parking enforcement staff. Officers have reported experiencing issues with reception depending on their location, and at times feel as though their safety is being comprised.

- Based on observations there is an overall lack of appropriate staffing to consistently and effectively manage the existing Downtown parking policies.
- The current parking enforcement hours do not cover all parking meter hours of operation and leaves over 50% of the garage operating hours without parking enforcement monitoring.
- As the enforcement perimeters and zones are constructed today, the areas in which officers are required to enforce are too large to adequately enforce.
- Holistically, the permit verification process is inefficient and labor intensive, especially in the Vancouvercenter garage, where there is a lack of cellular communications impacting the operation of the current handheld devices.
- The current handhelds do not integrate well with Parkmobile, and the enforcement officers must wait a significant amount of time for the data to load.
- The 24-hour Prolonged Parking policy and other current field management processes are cumbersome and inefficient. In addition, the authority divided across the PEOs and CCOs is at times resulting duplication of services provided the current towing and abandoned vehicle procedural rules.
- Inconsistency in enforcement approach and style is apparent from officer to officer. Consequently, there is a level of confusion not only between enforcement staff but also among the public who witness rules not being enforced consistently and equitably.
- As representatives of the City and parking ambassadors to the community, parking enforcement officers currently lack uniform consistency and a level of professionalism in terms of perception towards the public.
- PEOs carry city issued phones as the only direct form of communication rather than city issued radios (like the Police Department).



Initial Findings:
Operations



Parking Operations

Recently the City of Vancouver's Parking Services department and related areas have struggled to maintain what the City considers to be an optimal operation. Citing budget constraints, cuts to staffing in recent years and minimal parking operations oversight, Parking Services has become fragmented and not nearly as efficient as it desires. In addition, new expansion of paid parking to the Uptown district on the north side of town and newly broken ground along the riverfront for the Waterfront Development Project will further **stretch the existing resources** in the near future.

Currently Parking Services operates at a deficit with a minimal budget to invest in new parking technology as well as the ability to cover the maintenance on the City's two garages.

The department is also weighing options in other areas. In speaking with staff, the City has under consideration the potential to sell one of its current garage facilities. Citing upkeep and immediate return, this is an opportunity that was discussed in the Study's first on-site visit. In addition, with the Waterfront Development Project on the horizon, City staff are exploring the decision metrics and the rationality of becoming an investor or partner in a potential new parking facility at the Waterfront. As part of this decision-making process, the City has stated there may be the opportunity to consider the potential for a revenue share model for this development.



Figure 2. Waterfront Development Project

Staff

A main goal for staff involved in parking is to make **parking a self-sustaining program** and ideally begin to generate revenue in excess of costs, with the intent to pay for additional parking in the future. To reach this goal the department is enlisting in an effort to maximize its resources and efficiency though this is not the situation today. Currently Parking Services is considerably understaffed with staff members dividing time between inter-departments and completing tasks outside of their immediate responsibilities. The department has raised the question as to whether abandoned vehicles, as well as the Neighborhood Parking policy, should be the responsibility of Parking Services.

It is important to note that the current staff who make up Parking Services is a cohesive group that has utilized the current resources to build a dedicated team. Particularly in speaking with members of the enforcement staff and observing their work in the field, the group has developed an action plan for covering the areas they can as efficiently as they can. Staff expressed a desire to be able to accomplish more and cover additional areas with more regularity.



Figure 3. Parkeon pay station

Parking Meters and Payment Options

Vancouver has a mix of single-space meters and pay stations. The City's single-space meters are coin-operated MacKay meters. Of the 1428 single-space meters, 36 are either limited to 15- or 30-minutes

with a rate of \$1.00 per hour. The remaining 1392 single-space meters are priced at \$0.50 per hour. The recent rate increase was not applied to the single-space meters.

There are two types of pay station meters, Parkeon (Figure 3) and Cale (Figure 4), located throughout downtown, each charging an hourly rate of \$1.25. The pay stations accept both coins and credit cards. The 20 Parkeon pay stations were installed in 2004 and there are two types of Parkeon pay stations. The 15 Cale pay stations were installed in 2007. All pay stations are configured in a pay-and-display mode which means that the receipt must be displayed to confirm payment. Staff indicated that locating a pay station receipt for display can be a challenge.

In Spring 2017, the City installed additional Parkeon pay stations to replace some of the downtown single-space meter installations. This order includes a door retrofit for some of the existing pay station equipment which will provide a consistent display for the Parkeon equipment. Currently, the City is determining the viability of a configuration change to the pay stations from pay and display to pay-by-plate.

Maintenance staff has cited that **it is difficult for the City to maintain a sufficient spare part** stockpile to perform timely maintenance. There is a concern that the budget for spare parts is not adequate to support the needs of the maintenance operation. Additionally, due to the different types of pay stations, the City cannot order ticket rolls in bulk because the specifications are different for each vendor system.

The City has recently implemented a mobile payment pilot program with Parkmobile. The pilot is located near a cluster of downtown technology companies on Main Street. However, the Finance Department is concerned about the potential increase in reporting that may be required to reconcile mobile payment data. The pilot has not expanded citywide.



Figure 4. Cale pay station

Parking Rate Management

The City has provided a courtesy service to motorists and those parking in Downtown at single-space meters, a 20-minute free option. The 20-minute free option, in the form of a button, allows motorists 20-minutes of free parking at the meter. The result is **lost revenue**. Between April 2015 and May 2016, the City's lost revenue opportunity was estimated at \$232,000 from the use of the 20-minute button. Additionally, the meters, because of their configuration and age, do not have the controls in place to limit the button from only being pressed once. Therefore, motorists and patrons are free to repeatedly press the button at the expiration of each 20-minute period for extra 20-minute cycles. Many customers are frustrated with the coin operated meters and the requirement to carry coins, while stakeholders have expressed that they would be in favor of "smart" meters that can accept credit cards.



Figure 5. 20-minute free button on single-space meters

Rate Increases and Meter Relocation

Over the first few months of 2017 the City has made several changes related to paid parking rates, permit rates, and the relocation of meter infrastructure. As of January 1, the cost of monthly parking permits for lots, garages and on-street spaces increased by \$20.00 per month. Beginning on March 1st, the on-street hourly parking rate at pay station meters only, **increased** from \$0.50/hour to \$1.25/hour. For off-street, also beginning on March 1, the City's hourly parking rate in the Vancouvercenter Park 'n Go garage increased from \$0.75/hour to \$1.25/hour. In addition, the weekday daytime parking rate from 6:00 a.m. – 6:00 p.m. will increase from \$6.00 to \$9.00; 6:00 a.m. – Closing will increase from \$8.50 to \$12.50, and the maximum weekday evening, 6:00 p.m. – Close, and weekend parking rate will increase from \$2.50 to \$3.50. It should be noted, there is currently no enforcement on the weekends.

As of January 2017, the City has a total of 1,428 on-street single-space meters. Of the total number of meters, 36 are time limit (15 or 30-minute) spaces at a rate of \$1.00/ hour. The remaining 1,392 on-street single-space meters are a rate of \$0.50/hour. The average monthly revenue for all meters in 2016 was roughly \$53,121. According to Parking Services staff, if a rate increase to \$1.25/hour had been applied to all meters, revenue would have increased to an average of roughly \$132,804 per month. Furthermore, if the 20-minute free button was removed from all meters at a \$0.50/hour rate, the projected average monthly revenue would increase to approximately \$70,252. If both the 20-minute button was removed and the hourly rate increased to \$1.25/hour, the **projected average monthly revenue would rise** to an estimated \$203,056. These figures put into perspective the amount of potential monthly revenue an already financially burdened parking operation is losing.

The City's relocation of meters will move the current single-space meters located Downtown to the Uptown district which will be implementing paid parking for the first time. The Uptown hourly rate for **single-space meters will remain** at \$0.50/hour for several reasons including maintaining the current meter collection schedule and not increasing the existing collection frequency. In addition, Uptown will be acclimating to paid parking for the first time and the lower rate will be an easier accommodation for the community.

Garages

The City's Vancouvercenter Garage is a paid parking facility that operates Monday through Thursday between 6:00 a.m. and 10:00 p.m., 6:00 a.m. to midnight on Friday and Saturday, and from 8:00 a.m. until 10:00 p.m. on Sunday. The original design of the garage included access control gates, but due to a lack of funding **there is no access control system** (Figure 6). Patrons pay for parking at Parkeon pay stations located within the garage, yet the garage is not enforced on the weekends due to staffing limits.



Figure 6. Vancouvercenter Garage

The City's second garage is the Columbia Bank Garage. The garage is free on weekdays after 6:00 p.m. and on weekends. This garage has 233 stalls with a mix of 90-minute and 5-hour single-space meters. The mechanical single-space meters throughout the garage are inefficient to enforce. There is no parking access revenue control system. Additionally, there is currently **no parking guidance or garage**

occupancy information identifying either garage. This type of equipment not only serves as a garage identifier but can also promote space availability within each facility.

Garage signage indicates that patrons should remember their space number to pay for parking, but the pay stations are configured for pay-and-display like the on-street operation. This requires patrons to return to their vehicle to display their parking receipt. A Parkeon pay station within the Vancouvercenter garage is pictured in Figure 7 to the right.

Each public space in the Vancouvercenter garage allows both hourly and monthly parking. It is also time consuming for the enforcement officers to check each space within the garage. The pay & display permits require the officers to inspect the vehicles throughout the facility and check those without a receipt for a permit. There are also privately-managed spaces scattered throughout the garage that are not monitored by parking enforcement staff.

The City previously owned the Main Place Parking Garage at 1111 Main Street, but sold it three years ago after paying off the debt service. There are about seven years remaining (2024) to pay off the debt service on the Vancouvercenter garage.



Figure 7. Off-street Parkeon pay station

Permits

The City offers the following types of permits:

- ❖ Residential Permits
- ❖ Visitor Hangtags
- ❖ Vancouver Police Department Permits
- ❖ Harney Street Permits
- ❖ Vancouvercenter Permits
- ❖ Monthly Parking Permits (Lots, On-Street and Carpool)

Permits are not sold online, and customers are not able to set up their own account, primarily due to the requirement of a physical signature. If a customer wants to purchase a permit for the first time, they must physically come into City Hall lobby. To renew a permit, there is an online renewal option. Residential parking permits are free in specific areas and are valid for 6 months. Permit management processes require a significant amount of time for City staff and there is no permit fee to support the program's services. Additionally, **the permit waitlists are not automated** even though T2 Flex software provides a waitlist management feature.

Currently **the permits are not linked to license plate numbers**. Additionally, the City does not color code permits. Instead, a barcode must be scanned to validate permit status. Linking the plate numbers to the permits could eventually allow the City to transition to a digital permitting solution that can be integrated with license plate recognition technology.

The City also has a meter hooding program for special events that requires the use of parking spaces. There is a \$45.00 application fee, and it currently costs \$5.00 per metered space and \$12.50 per pay

station space. The meter hood rate is scheduled to increase in the Fall to coincide with the recent meter rate increase. Last year there were 47 events that required meter hooding.

Signage and Wayfinding

City staff communicated as did the stakeholder group, that there is a **perception among the public that there is not sufficient parking availability in Downtown**. As this perception was discussed in more depth, it became apparent that the perceived lack of available parking is dependent on the area of town one is in and the time of day or day of the week that one is attempting to park. Though data collection to determine occupancy rates was not part of this study, we did witness at the height of the lunch hour, multiple empty spaces along Main St. between 6th and 7th streets. However, on adjacent streets, there was little available occupancy. It is difficult to make an accurate analysis in such a brief observation, but the available occupancy may be attributed to the time of day or even the specific location observed. As it relates to off-street parking, the Vancouvercenter garage facility has a freestanding sign on the exterior sidewalk displaying “PARK ‘n GO’ and the garage has hourly parking available to the public. However, because the ‘PARK ‘n GO’ brand is not displayed anywhere else in the City or recognized as the public parking brand for Vancouver, one may not quickly register this as a public parking facility.



Figure 8. Empty spaces along Main St. during lunch-hour

Another aspect of a public’s perception of unavailable parking is often their own willingness to walk, meaning, not parking directly in front of their destination but maybe two or three blocks away. Unfortunately, the frequent inclement weather, parking habits and being non-educated about parking opportunities around Downtown lead one to **feel a need to park as close to their destination as possible**. Vancouver has affordable and longer-term on-street parking, not always common in downtown commercial districts.

One City staff member cited that inconsistent signage Downtown is also evident through the deficiency in loading zone signs throughout the commercial core. There has been an increase in delivery trucks parking in the travel lane, making deliveries to business and restaurants. As a result, **congestion in the area has grown recently**, especially with C-TRAN’s new bus rapid transit line the VINE. Running through the Downtown core, the buses are not able to easily or safely go-around the parked delivery trucks, causing further congestion.

Special Events

Vancouver holds several special events Downtown each year with the two largest being the **Vancouver USA Marathon and the Cruisin the Gut classic car show**. Both events are typically held during the spring and summer and on the weekends. Unfortunately, the current parking hours of operation and enforcement staffing are not conducive to the needs of the City’s special events. The City’s Parking Services does not currently employ overtime for PEOs to help manage the events and parking issues that are said to arise. Currently the City relies on event coordinators to help monitor and control the parking surrounding the event, including posting temporary signage, however it has been reported that event staff are often unreliable and subsequent parking problems have developed.

- The state of the existing program does not have adequate staff to readily enforce and maintain these areas with any consistency.
- Presently, staff have their own routines and habits when approaching each work day, however there is a lack of necessary tools in place to determine and **measure how effective officers and staff** are being or what they may potentially be able to achieve if provided the proper tools and resources.
- The enforcement officers cannot use their City-issued iPhones to validate mobile payment currently. The enforcement handheld loads the Parkmobile data slowly, which makes it inefficient to enforce.
- The City's 20-minute Free button located on single-space meters is a significant issue that needs to be addressed in order to limit the potential loss of revenue as well as help PEOs more effectively enforce the meters. Between April 2015 and May 2016, the City lost \$232,000 in parking revenue as a result of the button.
- The existing signage in the garage is inconsistent with the pay station configuration. Signage states to remember one's space number however the pay stations are configured as pay and display (like on-street pay stations).
- A significant contributor to perception of a lack of parking is insufficient wayfinding in the form of signage. Based on observations, it was apparent that the City lacks a defined parking brand that would otherwise be messaged across the Downtown. Several of the City's public surface lots are not clearly identified as public parking. The inconsistency in wayfinding or public parking branding is further evident at the Vancouvercenter garage facility.
- Wayfinding in the form of parking regulatory signage such as loading zones and painted curb markings is also absent Downtown, especially throughout the commercial core.



Initial Findings:
Parking Revenue

Parking Services

Currently, Vancouver's Parking Services (Parking) fund is established as an enterprise fund under the Community and Economic Development Department. In fact, **2017 is expected to be the first year that the general fund will not help sustain the parking fund**. Therefore, the department is proactively taking several actions toward ensuring the program runs as efficiently as possible while also placing itself in the best position to maximize parking related revenues. To date, Parking Services has operated at a deficit and has been supplemented by the general fund to cover operating costs. A large part of this current issue being that Parking Services is in the midst of funding its debt service to the City's Vancouvercenter garage.

An initial step that the department has taken relates to the parking rate fee increases at the City's parking pay stations. The department anticipates that the **revenue generated from the increase will pay for the capital cost of the new pay stations** that are currently on order. Also, part of this process is the relocation of meters to other areas of town including the Uptown District as well as the Government District. The installation of single-space meters in Uptown will be a new source of parking revenue. The Government District has had equipment pre-purchased that will be installed in correlation with a change in parking types and time limits, part of Phase II of the Government District Parking Management Implementation Plan, initiated in November 2016. A successful Phase II should generate an additional source of revenue, ideally paying for the operating costs associated.

The changes in rates, meter locations, and paid parking areas will contribute towards making the department self-sufficient and gaining added revenues through paid parking related tasks.

Current Parking Meter Collections

Currently pay stations and meters are collected on a weekly basis by PEOs and Maintenance depending on staff scheduling and availability. Pay stations are collected in a team of two while single-space meters are collected by one team member. There is a consistent overlapping of job duties and responsibilities to ensure that major tasks are covered however this has led to other support requirements being overlooked or neglected at times.

There are multiple steps to the collection process given the variety of equipment on-street as well as the age of some equipment. There are three types of pay stations in-service on-street including Cale, Parkeon Stelios and Parkeon Strada. Today, the Cale pay stations are keyed the same from machine to machine. However, this is not the case of the Parkeon pay stations. The Stelio's pay stations have different keys for each unit and the Strada's have two separate keys, spilt up between older and more recent models. There is confirmation needed on whether the new Strada pay stations currently on order will include the same keys as those currently installed. To compound the current collection key issue, each of the single-space meters has its own individual key. **These individual keys add up to nearly 1,500 keys** that must be checked out from the Finance Department by Maintenance on each collection day. It was noted that Maintenance often attempts to begin its collections in the



Figure 9. Single-space meter key ring

early-morning however there have been times that keys are unavailable because Finance does not open until 8:30 a.m.

It is important to note that one Maintenance staff member took on the tedious task of inventorying the single-space meters and keys. The staff member realized that the key ID was being confused with the meter ID number, and was creating issues as to which keys were for what meters and which meters had then been collected. This should be recognized as a proactive initiative to streamline the current disorganization of the collection process.

Reconciliation

Collection staff utilize a **closed-can system** for single-space collections, meaning the coin canister located inside the meters is retrieved by collection staff, inserted and emptied into a larger collection can without the monies ever being exposed. **This is considered an industry best practice** and it is a positive to see that Parking Services is employing this method of collections. Single-space collection routes are each counted separately, meaning the City has a count of the selected meters on that collection route. In the case of the City's pay stations, the coin collection boxes are collected by specific pay station manufacturer. For example, Cale pay station monies are counted separately from Parkeon pay station revenue. However, the collected revenues from each pay station are combined, and not counted by machine or zone like single-space meters.¹



Figure 10. Parking staff collecting a pay station

For the single-space meters, given they are not smart meters, the reconciliation process is a bit more difficult because the department does not have an ability to generate a revenue report from the meter's back-office management system. In the case of the pay stations, a collection slip can be printed from the meter at the time of collection which is an ideal first step in the reconciliation process. According to Parking Services, staff currently save slip and make copies for retention. Provided the pay stations are considered smart meters, Finance can generate a revenue report from the pay station's back office, a positive for the reconciliation process. Loomis, the City's contracted armored car service, picks up collected monies daily and sends the City a report of the total amount deposited by container; single-space by routes and pay stations by manufacturer. There is currently no software integration between the City's Oracle financial system and the three different collection processes including Cale, Parkeon and Loomis. City staff must manually input collection receipts and deposits into the Oracle database which is both time consuming and can result in inputting errors.

Even with the appropriate measures being put in place through collection process, the lack of reporting tools with the City's current single-space meters is preventing certainty regarding the ideal accuracy of monies collected.

¹ As of August 2017, the Parking Services is now bagging coins by specific zone

Citations, Revenue and Reconciliation: Management and Operating Systems

Parking Services has effectively created internal processes and in-house modules that enable staff to access necessary information or run certain required reports. For example, one member of the City’s IT staff has written a program that allows staff to pull out vehicles currently in the T2 system, if they have been reported sold, thus reducing clutter and duplicate data. In other cases, however, the City has tools that are either not being effectively used or used at all.

For instance, the City currently contracted with T2 Systems, self-hosting its Flex software management platform but T2 charges a fee of \$0.95 for each DMV look-up by the City through its system. Therefore, the City completes its own push-pull of DMV data. Furthermore, staff identified that there is an ability through Flex for customers to complete an online citation appeals process but have not enabled the feature for customers yet. It should be noted, only an estimated 4% of citations are currently contested. The anticipated reason is that the City has required a physical signature on appeal paperwork, therefore requiring protests to submit in person or mail the completed ticket and appeal form to City Hall. In 2015, the State of Washington passed legislation that allows for electronic signatures however the City has not yet implemented this option for its citation appeals process.

VEHICLE DATA LICENSE AGREEMENT BETWEEN DEPARTMENT OF LICENSING AND CITY OF VANCOUVER, PARKING SERVICES		
Contract No. 45418	DOL Contract No. K5418	
Contract start date: 5/1/2015	Contract end date: 4/30/2020	Contract amount: Revenue to City
Purpose: This License Agreement ("Contract") establishes the requirements and authorization for DOL to provide and the Contractor to receive DOL vehicle Data. This Agreement cancels and supersedes K4894 and any other agreements for the same service.		
Contractor:		
City of Vancouver, Parking Services		
415 W. 6 th Street, Vancouver WA 98660		
Contract Manager: Lisa Standford	Phone: 360-487-8657	Email: lisa.standford@cityofvancouver.us
Contract Manager: Michael Merrill	Phone: 360-487-8658	Email: Mike.merrill@cityofvancouver.us
Department of Licensing (DOL):		
Division: Program Services Division		
Contract manager: DOL Box 9650, Vancouver WA 98660		
Contract address: Olympia, WA 98507-9039		
Phone: 360-902-0136		
Email: VehiclePacteam@dol.wa.gov		
Attachments (when applicable):		
This Contract consists of the following attachment(s) and all document(s) incorporated herein or by reference:		
Attachment A: Class Security Requirements		
Attachment B: Title Layout		
Contractor's Vehicle/Seal Contract Application:		
The terms and conditions of this Contract are an integration and representation of the final, entire and exclusive understanding between the parties superseding all previous agreements, writings, and communications, oral or otherwise, regarding the subject matter of this Contract. The parties signing below represent that they have read and understand this Contract, and have the authority to execute this Contract. This Contract shall be binding upon signature by DOL.		
Contractor signature: Lisa Standford	Date: 5/18/2015	DOL signature: Tami L. Dolman
Contractor title: Administrative Assistant		DOL title: Assistant Director, Administrative Services Division
Contractor phone: 360-487-8657		DOL phone: 360-902-0444
Contractor email: lisa.standford@cityofvancouver.us		DOL email: tami@dol.wa.gov

Figure 11. License agreement between DOL and City of Vancouver

Based on observations, the financial responsibilities related to parking operations reporting and revenue reconciliation are scattered amongst different programs and staff members. These programs include pay station back-offices, the T2 Flex software, Hansen, Oracle, and self-managed staff Excel workbooks and spreadsheets. In addition, the City is in the process of upgrading from Hansen 7 to Hansen 8 citywide, which includes Parking Services.

Delinquent Citations & Collections

Under Parking Services, unpaid citations follow a penalty schedule and are eventually moved to the City’s contracted collection agency. As of March 2016, the City had \$1,163,300 in unpaid outstanding citations. This figure is likely to have increased since. The current collection’s agency used by the City averages approximately 20% in delinquent citation recovery, a low figure when compared to municipalities and collection agencies in the industry. The City writes off nearly \$200,000 annually under the current statute of limitations, which is part of the City’s 10-year statute of limitations.

Vehicles who are cited for two unpaid citations and an outstanding balance after 30-days of citation issuance are marked as scofflaw. Three or more unpaid tickets are reported to the Washington Department of Licensing (DOL), which has the authorization to deny vehicle registrations or suspend driver’s licenses. Unfortunately, the State must apply this criteria 120-days prior to the registration due date. If this process is not completed, any potential hold or suspension is delayed until next vehicle expiration date.

Another significant issue is the City’s proximity to Portland and the State of Oregon. The City has experienced an increase in traffic and visitation from those living to the south. These visitors and motorists who drive into Vancouver are liable for citations as well; however the City does not pursue

delinquent citations for out of state license plates. Thus, a violator who receives a citation in Vancouver with an Oregon license plate faces no immediate penalty through the state's Department of Motor Vehicles like they would in Washington. Therefore, these motorists are not under the same incentive to pay their citation fine. As of today, Parking Services does not boot or tow of vehicles.

- Based on initial observations and after inquiring with Maintenance personnel it is apparent that the department is understaffed. Much like other areas within Parking Services, Maintenance staff is required to multi-task between responsibilities which appears to be affecting their immediate duties.
- Currently, staff assigned to collecting meters and pay stations must differentiate between four different key sets. Furthermore, each single-space meter is individually keyed, requiring staff to shift through nearly 1,500 keys. This process is significantly inefficient and time consuming.
- Maintenance is required to retrieve meter collection keys from the Finance office. However, because Finance does not open until 8:30am, maintenance workers who arrive early in the morning often having to wait to access keys or break-away from other tasks to retrieve keys later in their shift. This has led to an unproductive process for staff.
- The current collection process of combining collected monies, whether into a large bag or can, without proper reconciliation measures puts the department at a significant risk of unaccounted monies and significant variances in overall meter revenue.
- Though the Parking Services is now collecting by zone, optimal measures are not in place to track, reconcile and analyze the money that is being collected from single-space meters or pay stations.
- Parking Services and supporting departments are not maximizing the web-based management tools available to them. Examples include the Hansen system as well as the T2 Flex software. Parking Services staff that lack the proper training and familiarity with these systems to maximize the programs' features.
- The lack of a central management system for parking financial data is forcing staff to create work-arounds, work less efficiently and fail to benefit from more complete and accurate data. A central management system for data and reporting is needed for the department and should be integrated with the City's financial system and allow for automated updates.
- The City is not currently enacting a boot and tow policy for scofflaws and unpaid citations. This is allowing those from out-of-state (i.e., Oregon) who commute to Vancouver often to continue to park in the City without consequence.
- The City's delinquent citation and collections rate is extremely low (20%) and as a result the City is missing out on a significant amount of potential revenue. As of March 2016, the City's unpaid citations totaled \$1,163,300. In addition, because of the City's current 10-year statute of limitations, roughly \$200,000 is written off on an annual basis.

CITY OF VANCOUVER
MUNICIPAL PARKING LOT #2
1 OR 2 HOURS FREE PARKING AS SIGNED
2 HOURS MAXIMUM PER DAY ALL STALLS
INCLUDING ADA SIGNED STALLS
ENFORCED 8AM-6PM MONDAY-FRIDAY
PARKING WITH AUTHORIZED PERMIT ONLY
IN RESERVED STALLS #18-28
For Permit Information Call (360)487-8454
HEAD IN PARKING ONLY
Subject to Towing 24 Hours
VMC 19.07.030(B) RCW46.55
Langley's Towing Phone (360)892-2924

Initial Findings:
Policy

Overview

This section summarizes the existing codes and plans related to parking in Vancouver, with a focus on the downtown core. This memorandum is divided into three sections:

- ❖ **Municipal Code:** A summary of the code sections related to parking, including parking requirements by land use and other related parking requirements or rules;
- ❖ **Downtown Parking:** An overview of downtown parking, including a brief summary of parking inventory, regulations, and pricing. An overview of the Parking Advisory Committee is also provided.
- ❖ **Planning Context:** A brief summary of relevant downtown and citywide plans, with an emphasis on parking-related findings and recommendations.

Summary of Key Findings, Issue and Opportunities

- ❖ The parking code restricts pricing and time limits to weekday only, between 8:00 a.m. and 6:00 p.m. Similarly, the maximum hourly charge for parking allowed in the code is \$1.25.
 - These provisions potentially limit the City’s flexibility to adjust pricing and regulations to respond to changing patterns of demand. For example, Downtown has recently experienced higher parking demand on weekends and in the evenings because of revitalization efforts and new development. The current code limits the City’s ability to use management tools to address these parking challenges.
- ❖ The parking code requires that the first 20 minutes of parking to be free. Many of the existing payment systems lack an effective enforcement mechanism to prevent people from simply adding more “free” time. It is likely that this regulation and ineffective enforcement creates a significant financial and operational burden on the parking system.
- ❖ The City Manager, or a designee, is given authority over parking management policies. However, it is unclear what policies apply to setting maximum or minimum rates and hours, and what policies apply to the actual rates and hours of the parking system.
- ❖ Parking revenue is required to be reinvested back into the parking system because it is an enterprise fund
- ❖ The City’s minimum parking requirements largely reflect industry standards. Many cities across the county have eliminated parking requirements, especially in their downtowns.
- ❖ The Transit Overlay District allows properties to leverage adjacent transit access. It is “voluntary”, which potentially limits its effectiveness and desired impact.
 - There is no distinction between parking requirements in Tier 1 and Tier II for properties in the Transit Overlay District. A lower parking requirement (and lower maximum) for areas with higher transit service levels has the potential to better reduce vehicle congestion and result in better multimodal outcomes.
- ❖ The City has a Residential Permit Program (RPP), which allocates free parking permits to residents. It does not appear that there is a well-defined process in the code to guide formation of RPP zones or districts. In addition, by issuing free permits, the program does not cover its own

administrative costs and is, therefore, subsidized by other sources. Permits are also not linked to actual inventory, creating the potential for demand to exceed supply.

- ❖ The municipal code was revised in July 2016 to restrict parking to no more than 24 hours. It was established as a tool to solve the problem of semi-trucks being stored on the street. This change was intended to minimize impacts of long-term parking, especially in residential neighborhoods. However, the regulation may be resulting in a significant administrative and enforcement burden that is not proportional to its benefits.
- ❖ The municipal code does not require transportation demand management (TDM) as part of new development. Reductions in parking minimums can incentivize TDM, but the allowed TDM options are limited and do not include the policies or programs that are most effective at reducing parking demand.
- ❖ The municipal code has minimal incentives to encourage shared parking, especially in the downtown where shared parking can significantly improve system efficiencies.
- ❖ The municipal code is largely silent on design requirements for surface or structured parking facilities.

Municipal Code

The municipal code describes parking regulations primarily within Title 19 and Title 20. Title 19 covers programs and the policies related to parking management and operation, such as time limits, pricing, and regulations. Title 20 covers land use regulations and parking requirements.

Parking (Title 19)

Time Limits

The code gives the City Traffic Engineer the authority to impose parking time limits and set the duration of parking restrictions (days and times) on any streets for the purpose of facilitating traffic movement and business access.² The code indicates time limits can only apply between 8 a.m. and 6 p.m., Monday through Friday.³

On-Street Metered Zones

The code gives the City Council authority over where metered zones are located. Metered zones include metered, permitted, signed, or other council-approved parking facilities.⁴ The code establishes a default maximum parking stay of 10 hours in metered zones. The City Manager (or someone designated by the City Manager), with input from the Parking Advisory Committee, has authority to reduce maximum parking durations to less than 10 hours. However, this reduction can only be applied to contiguous segments of parking stalls up to 200 feet. In making this change, the City Manager must consider local land use, market conditions, occupancy rates, and discussions with property owners along the affected block face.⁵

² Section 19.02.040 A

³ Section 19.02.040 B

⁴ Section 19.04.020

⁵ Section 19.04.010 C

The code specifies locations of metered zones. They include most of downtown between I-5 on the east, the Columbia River on the south, the railroad on the west, and 16th Street and Mill Plain Blvd on the north. The parking meter zone also extends into the Uptown Village District generally between Washington and C Streets from 16th Street north to Fourth Plain Blvd.⁶

The code requires that all one- and two-hour parking zones provide 15 minutes of free parking at the start of the parking duration.⁷ The code only allows for paid parking between 8:00 a.m. and 6:00 p.m., Monday through Friday. The code also caps the hourly parking rate to \$1.25 for one-, two- and 10-hour parking zones. For zones where parking is limited to 15 minutes or less, the maximum rate is \$0.35 for every 15 minutes. For zones where parking is limited to 30 minutes, the maximum rate is \$0.65 for every 30 minutes. The maximum rates may be changed by the City Manager or a designee.⁸ It is unclear whether this only applies to the actual hourly rates, or the maximum rates permitted by code.

Parking Revenue

The City Treasurer is authorized to collect money from all parking payment collections, all sales of parking permits, and all fines for parking violations. Parking revenue is placed into the **Parking Operation Fund**. The Parking Operations Fund is used to fund the enforcement of parking meters and enforcement of parking control regulations. Any available profits are used first to reimburse the capital improvement fund and then are allocated to fund off-street parking facilities or other means recommended by the Parking Advisory Committee and approved by City Council.⁹

Municipal Lots and Garages

The City of Vancouver owns a parking lot at Evergreen and Broadway, known as the Evergreen Lot (Municipal Lot 2). The code specifies the lot be open and available for public use 24 hours per day, 7 days per week. The code also stipulates that the lot is free for parking up to 2 hours, and that up to 11 spaces should be set aside for long-term permits, the cost for which should be a maximum of \$100 per month (which can be reduced by the City Manager or a designee). **Figure 13** lists the cost and number of spaces for each parking type.

Figure 13. Evergreen Lot Parking Details

Space Type	Cost	Stalls Specified in Code
1-hour	Free	17
2-hour	Free	35
Long-term	\$100 / month	11
TOTAL		63

Source: Vancouver Municipal Code Section 19.06.030

⁶ Sections 19.05.010 and 19.09.010

⁷ Section 19.11.020

⁸ Section 19.11.030

⁹ Sections 19.04.040 and 19.04.080

The code specifies that long-term permits are first issued to people who manage local shops, offices, or restaurants adjacent to the parking lot that need to be in and out of their place of business frequently. The code also indicates only a single permit can be issued to each store, shop, office or restaurant, but that the permit can be used by more than one employee. Revenue collected from the long-term permits go to the Parking Operations Fund.¹⁰

Although the code allows for a maximum cost of \$100 per month, the actual monthly cost for a reserved space in the Evergreen Lot is currently set at \$82 per month. Additionally, one parking space allocated to short-term parking is used for ADA parking.¹¹

Section 19.07 of the code also grants the City Council authority to provide off-street parking to the public as demand indicates or is necessary for public safety. The Council also has authority to set rates for the parking facilities.¹² Section 19.11.040 of the code establishes maximum parking rates for off-street lots.¹³ These rates are listed in **Figure 13**.

Figure 14. Maximum Parking Rates for Off-Street Facilities

Time Frame	Maximum Cost	Maximum Senior Citizen Discount
Daily	\$9.00 / day	20%
Monthly	\$100.00 / month	20%
Event	\$10.00 / event	20%

Source: Vancouver Municipal Code Section 19.11.040

The City Manager has authority to modify the parking rates based on the guidelines below. It is unclear whether these guidelines only apply to the actual rates, or only the maximum rates permitted by code.

- ❖ To reach a desired occupancy rate in each lot,
- ❖ To reach a desired occupancy rate in on-street spaces,
- ❖ To reflect annual consumer price index inflation in the Portland-Vancouver metro area,
- ❖ To reflect market conditions in the Portland-Vancouver metro area,
- ❖ To accommodate specific site characteristics and seasonal events,
- ❖ To reflect parking conditions or amenities (such as covered versus uncovered parking, or reserved versus non-reserved parking).

Residential Parking Permits

The code also establishes Residential Permit Parking Zones. In these zones, residents can apply to obtain a free permit to park in any legal space in the zone for each vehicle that is registered to them.¹⁴ Residents in residential parking zones 1, 1A, 2 or 3 with no garage or driveway shall be issued a long-term permit at no charge for each vehicle in their name.¹⁵

¹⁰ Section 19.06

¹¹ City of Vancouver Downtown Parking. <http://www.cityofvancouver.us/ced/page/parking-downtown>

¹² Section 19.07

¹³ Section 19.11.040

¹⁴ Section 19.08.010

¹⁵ Section 19.08.030

Prolonged Parking

A new 2016 policy **limits on-street vehicle parking to no more than 24 hours** without a valid permit. The policy allows the city to place notice on a vehicle that has been parked for 24 hours asking for the vehicle to be moved within 24 hours. If the vehicle is not moved within 24 hours of being given a notice, the city may cite the vehicle and tow it.¹⁶ The City has a single staffer dedicated to enforcement of this rule.

Other

In addition, the city recently updated and modified certain sections of Title 19. These changes include:

- ❖ Allowing the city to cite or remove vehicles that restrict street sweepers from cleaning a street.
- ❖ Establishing a formalized program and fees for reserving on-street spaces during events and for special purposes.
- ❖ Specifying that vehicles cannot park in bicycle lanes.
- ❖ Establishing a process to allow for distribution of parking permits to law enforcement staff who use unmarked vehicles for official business.

Land Use and Development (Title 20)

Minimum Off-Street Parking Requirements

Minimum off-street parking is required for new developments. Minimum off-street parking required by land use is in listed in **Figure 15**.¹⁷ The code allows for reductions of the required parking based on whether the applicant meets certain requirements (Type I and II procedures). Type I allows for required parking be reduced by up to 10% in non-residential developments, when the applicant demonstrates:¹⁸

- ❖ Parking will not adversely impact uses in the immediate area
- ❖ Use of transit, transportation demand management (TDM), or other characteristics would reduce the expected parking demand compared to ITE standards

A Type II procedure allows required parking to be reduced up to 20% using the following reductions:¹⁹

- ❖ Reduce vehicle spaces by one for every 5 bicycle parking spaces (or for every single 2-bike locker), for up to a reduction of 7%
- ❖ Reduce vehicle spaces by 5% for a transit supportive plaza along an arterial roadway
- ❖ Reduce vehicle spaces by 5% for buildings that place the primary entrance along the street, the building is built at the minimum required setback, and other site design characteristic that support access by non-auto modes.

¹⁶ Section 19.12.100

¹⁷ Section 20.945.070 J

¹⁸ Section 20.945.070 E

¹⁹ Section 20.945.070 E

Figure 15. Parking Minimums by Use

Land Use	Parking Requirement
Residential	
Group Living	1 space per 7 residents under 12 and 1 space per resident aged 12 or older
Transitional Housing	0.33 per bed
Home Occupation	None
Single Family	1 space per dwelling unit
Accessory Dwelling Unit	1 space per dwelling unit
Duplex	1 space per dwelling unit
Multi-Dwelling Units	1.5 spaces per dwelling unit
Senior Multi-Family Housing	1 space per dwelling unit
Manufactured Housing	1 space per dwelling unit
Civic/Institutional	
Cultural Institutions	2.5 spaces per 1,000 square feet
Hospitals, Residential Care Centers	1 space per 4 beds
Convalescent Hospital, Nursing Home or Congregate Care Facility	1 space per 2 beds
Religious Institutions	1 space per 6 seats (equivalent to 12 feet of benches/pews)
Preschool	2 spaces per classroom
Elementary/Middle School	Greater value of: 1 space per 4 seats or 1 space per 8 feet of bench/seating in auditorium/assembly room
High School	1 space per employees, and Greater value of: 1 space per 6 students, or 1 space per 4 seats or 1 space per 8 feet of bench/seating in auditorium
College	In rooms of at least 30 seats: 1 space per 3 seats In lecture halls: 12 spaces per 30 seats
Commercial	
Commercial lodging	1 space per lodging unit
Eating/drinking establishment	4 spaces per 1,000 square feet
Movie or Performance Theater	1 space per 6 seats or 1 space per 12 feet of benches/seating
Sales-oriented retail	3.3 spaces per 1,000 square feet
Personal services	2.5 spaces per 1,000 square feet
Repair-oriented retail	2.5 spaces per 1,000 square feet
General Office	2.5 spaces per 1,000 square feet
Medical Office	5 spaces per 1,000 square feet
Extended Office	3.3 spaces per 1,000 square feet
Industrial	
Industrial services	1.67 spaces per 1,000 square feet
Manufacturing and production	1.25 spaces per 1,000 square feet

Land Use	Parking Requirement
Research and development	1.67 spaces per 1,000 square feet
Other	
Cemeteries	1 per 6 seats or 12 feet of benches/seating in chapel
Detention facilities	1 per 3 beds
Mining	1 per employee maximum shift

Source: Vancouver Municipal Code Section 20.945.070 J

City Center Zone

The City Center Zone (CX) has its own minimum parking requirements. Land uses are broken out into four main categories: residential, lodging, care facilities, and other uses (Figure 15).²⁰

Figure 16. Parking Minimums in City Center District (CX)

Land Use	Parking Requirement
Residential	1 space per dwelling unit
Transient lodging	1 space per living unit
Congregate care facility	0.5 spaces per living unit
All other uses	1 space per 1,000 square feet

Source: Vancouver Municipal Code Section 20.945.070 F

Transit Overlay District

The Transit Overlay District is a “voluntary and incentive based” district that can be utilized at the request of an applicant for a property within the District boundaries (Figure 16). The overlay district applies to all uses within the district, except residential.²¹

The overlay district’s minimum parking requirements are 75% of the base zone rate. Additionally, the district enforces a parking maximum, which is set at 125% of the base zone rate. Although the code established two tiers within the overlay district, the minimum and maximum parking requirements are the same for both zones (Figure 17).

Figure 17. Minimum and Maximum Parking in Transit Overlay District

Tier	Description	Minimum	Maximum
Tier 1	Higher densities and more transit-friendly design	75% of base zone standard	125% of base zone standard
Tier 2	Encourages increased density with less restrictions	75% of base zone standard	125% of base zone standard

Source: Vancouver Municipal Code Section 20.550.040 H

Properties within the overlay district may include on-street parking toward minimum parking requirements. However, the code indicates this is only for spaces along the frontage of the property and if the spaces are “available.” These spaces also count toward parking maximums.

²⁰ Section 20.945.070 F

²¹ Section 20.550.040 H

Property owners are permitted to exceed the parking maximums if:

- ❖ They have explored all potential options for shared parking,
- ❖ The building has an expected employee density ratio that is higher than what is commonly experienced,
- ❖ Trip generation is higher than is commonly experienced,
- ❖ Parking at or below the maximum may have a detrimental effect on adjacent uses,
- ❖ Trip reduction cannot be achieved because of no transit service (existing or proposed) are within ¼ mile

The code allows developers to establish a formal agreement with nearby property owners for shared or joint parking. Shared parking is permitted when two or more property owners sign/record an agreement that specifies the duration of the agreement indicates that the nearby land uses attract drivers to two or more uses in a single trip, and that there is adequate parking for each of the uses.

Additionally, properties in transit overlay districts can have their traffic impact fee reduced by up to 3% if parking is paid for by residents or employees in the building. An additional 1% can be reduced from the impact fee if preferential carpool/vanpool parking is provided.

Downtown Plan District (020.630)

The Downtown Plan District is an overlay district encompassing many of the streets in downtown Vancouver (predominately between I-5, Mill Plain Blvd, and the railroad tracks). The district has three parking areas where different parking rules apply.²² A map of these parking areas is in **Figure 21**.

- ❖ Structural Parking with Limited Access Area
 - No new surface parking lots are allowed
 - Access to structured parking is not allowed from Main Street
- ❖ Structural Parking Area
 - No new surface parking lots are allowed
- ❖ Limited Surface Parking Area
 - Surface parking is allowed upon approval of a phased development plan with eventual elimination of surface parking
 - Parking spaces that exceed the parking minimums for a use cannot be shared with other properties

Downtown Parking

On-street metered parking in downtown is generally limited to 2-hour parking. Some spaces are 15-minute, 1-hour, or 3-hour parking. Longer-term parking (3-hour and 10-hour) is generally provided north of Mill Plain Blvd. and west of the downtown core (generally between Franklin and Columbia, and between 8th and 13th Streets). **Figure 22** shows medium- and long-term parking options in downtown Vancouver.

According to the Downtown GTEC Plan (2007), there are approximately 9,725 parking spaces in downtown. Approximately 2,000 spaces are at the curb and there are about 1,800 total on-street parking meters.

²² Section 20.630.060

On March 1, 2017, the hourly on-street parking rate increased from \$0.50 to \$1.25 per hour. The rate change was the first since 2009, and was done to ensure adequate operational revenue and finance system improvements. The older coin-operated meters will remain at \$0.50 per hour until they are replaced with new pay stations. These old coin-operated meters will be moved to Uptown Village to address parking constraints there, where currently there are no on-street meters.

Rates for downtown permits at off-street lots were also updated as of January 1, 2017. The rates are listed in **Figure 18**.

Figure 18. Downtown Permit Rates

Parking Area	Type	Cost per Month
Lot 1 – Smith Tower (5th and Washington)	Reserved	\$67
	Reserved Senior	\$58
	General Access Senior Housing	\$34
Lot 2 – Evergreen Lot (Evergreen and Broadway)	Reserved	\$82
	General Access Senior Housing	\$34
Lot 11 – Thornton Lot (11th and Broadway)	Reserved	\$82
	General Access Senior Housing	\$34
Lot 18 – Vancouver Center (6th and Columbia)	General Access (Level P1/P2)	\$87
	General Access Senior Discount	\$75
	General Access Senior Housing	\$34
	General Access (Level P3)	\$100
On-Street Permit (signed areas on-street)	General Access	\$57
	Downtown Residential (without garage or driveway)	Free
	3A Residential	Free
On-Street Permit (signed for carpools)	Carpool Permit	\$35
Any metered stall during a news event	Media Permit	\$50 (per year)

Rates effective January 1, 2017

Parking Advisory Committee

The Parking Advisory Committee is a group that advises City Council on issues related to all city-owned parking (including on- and off-street), and makes recommendations on parking facilities, parking policies, and parking regulations. The Committee is composed of seven members, all appointed by City Council.

The Parking Advisory Committee’s jurisdiction is an area generally bound by I-5, the Columbia River, railroad tracks on the west south of 15th St, Grant St on the west north of 15th St, and Fourth Plain Blvd on the north between Grant St and I-5.

The mission of the Advisory Committee is to provide a forum for public discussion on downtown parking issues and policy. The Committee advises the City on parking issues within their defined boundary using the 85% rule to trigger implementation of parking strategies to address parking availability.

Planning Context

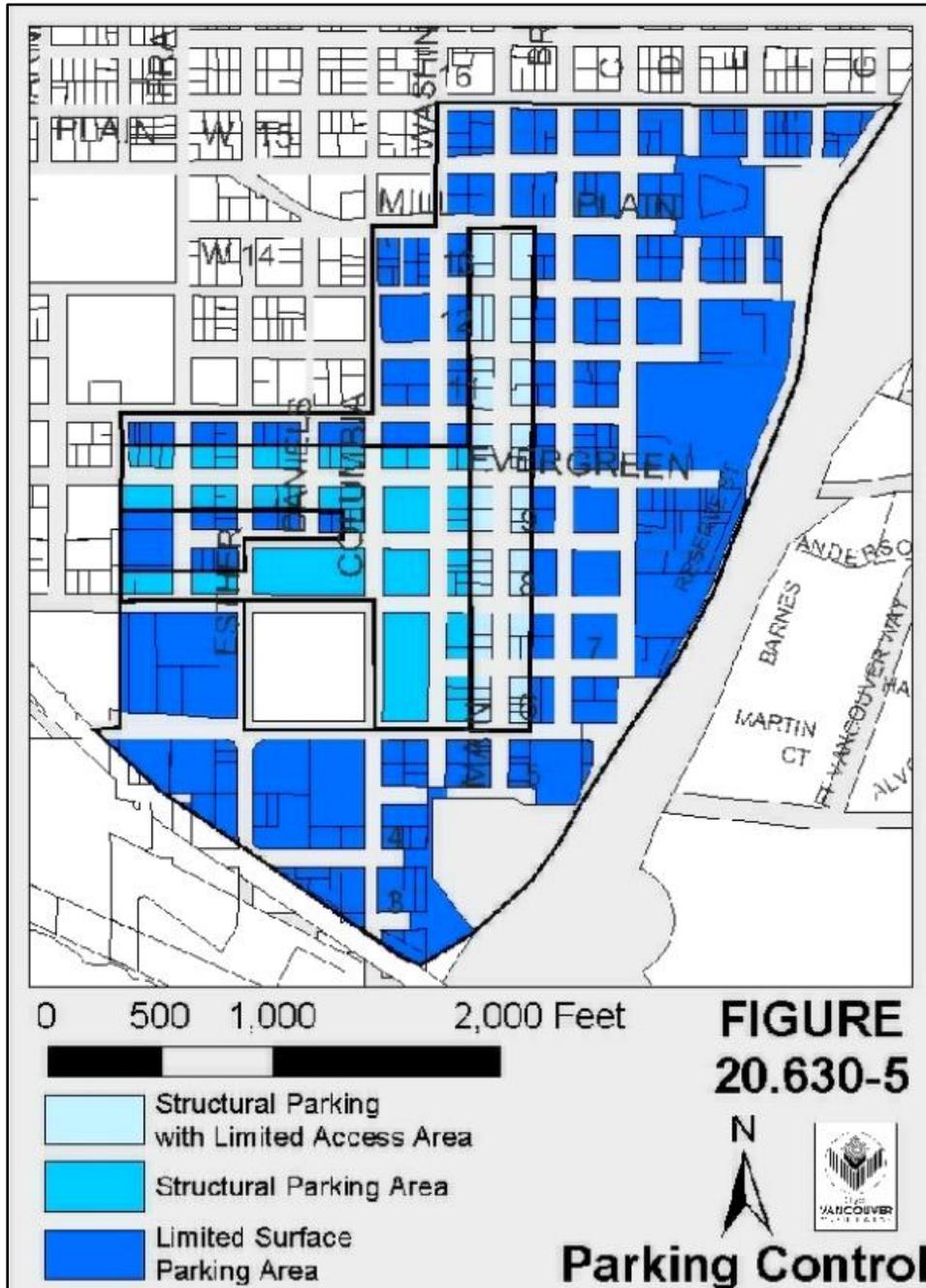
Figure 19 summarizes several key planning documents in Vancouver, with a focus on plans that are related to transportation and parking. **Figure 23** through **Figure 27** show the boundaries for each of the plans.

Figure 19. Summary of Planning Documents

Plan	Year	Description
Downtown Plans		
Government Parking District Management Plan	2013	<ul style="list-style-type: none"> Plan indicates there are 783 parking spaces on-street, of which 52% are free (and many of those free spaces have no time limits). Two of the plan's findings are that there are too many parking types and that most parking is for long-term trips. A study of utilization found that overall district occupancy peaks between 9-11 a.m. at around 80%. Between this time, some segments have an occupancy rate above 85%. Most 1-hour metered parking spaces have average stays greater than one hour. 2-hour free parking has an average duration of 3.5 hours. The plan recommends using 85% occupancy as the optimum occupancy rate and the basis for decision-making. The plan also recommends using only two base durations (3-hour and 10-hour).
Vancouver City Center Vision & Subarea Plan	2007	<ul style="list-style-type: none"> The City Center Vision & Subarea Plan is intended to guide growth of the City Center area. Plan states the goal of parking should be to serve needs of priority users. The plan identifies priority users as people who shop, visit or recreate in downtown. Recommendations in the plan include reducing minimum parking requirements for commercial and residential development, implementing maximum parking ratios until surface lots are prohibited, limiting new surface parking, preserving on-street parking, and incentivizing structured parking to include retail street frontage.
Downtown Growth and Transportation Efficiency Center (GTEC) Plan	2007	<ul style="list-style-type: none"> The GTEC Plan indicates that parking has not reached capacity and that off-street spaces are used inefficiently. The plan recommends all free off-street spaces be changed into paid parking and all off-street sites should increase their fees or rates. Additionally, the plan recommends extending the duration of on-street metered parking hours and increasing the hourly on-street rate.
Uptown Village Parking Management Plan	2006	<ul style="list-style-type: none"> The plan recommends establishing a fee-in-lieu program to accommodate residential development that cannot incorporate parking into the development, establish parking maximums for commercial and residential development, and to implement minimum parking ratios for new residential.

Plan	Year	Description
Other City Plans/Requirements		
Westside Mobility Strategy	2016	<ul style="list-style-type: none"> ▪ The Westside Mobility Strategy is a planning process intended to identify improvements to the transportation network on Vancouver’s west side. ▪ The community identified parking needs, including a need for more parking wayfinding, new parking structures, and the need to identify whether parking constraints are a perception or an actual problem. ▪ The plan recommends for on-street parking to be adjusted to allow bike lanes along the curb, for parking to be used in developing protected bicycle lanes. ▪ The plan also indicates that there should be no net loss of parking.
Strategic Plan 2016-2021	2016	<ul style="list-style-type: none"> ▪ Action 8.1.3: approves a dedicated funding source to address unique downtown needs like safety/security, parking management, etc.
Vancouver Comprehensive Plan (2011-2030)	2011	<ul style="list-style-type: none"> ▪ The Vancouver Comprehensive Plan includes two policies related to parking. ▪ PFS-19 adopts coordinated parking standards that promote multi-modal transportation system and an efficient utilization of limited land. ▪ 5.2.5 establishes land use development standards – that include parking details – to support alternative modes of transportation.
Commute Trip Reduction (Vancouver Municipal Code Section 18.12)	-	<ul style="list-style-type: none"> ▪ The Commute Trip Reduction (CTR) state law applies to employers with more than 100 full-time employees that begin work between 6 and 9 a.m., and work two or more workdays per week for 12 months. ▪ The CTR requires a designated Employee Transportation Coordinator at each employment site. ▪ Employees must be given information about transportation options when they are new employees, and twice per year. ▪ Employers need to offer at least three emergency ride home vouchers per year to employees. ▪ Vancouver has a minimal number of CTR sites.
Transportation System Plan	2004	<ul style="list-style-type: none"> ▪ The 2004 TSP recommends a revision to the land development code that supports the plan’s recommendations, including parking standards, site circulation, street connectivity and pedestrian zones.

Figure 21. Downtown District Parking Control



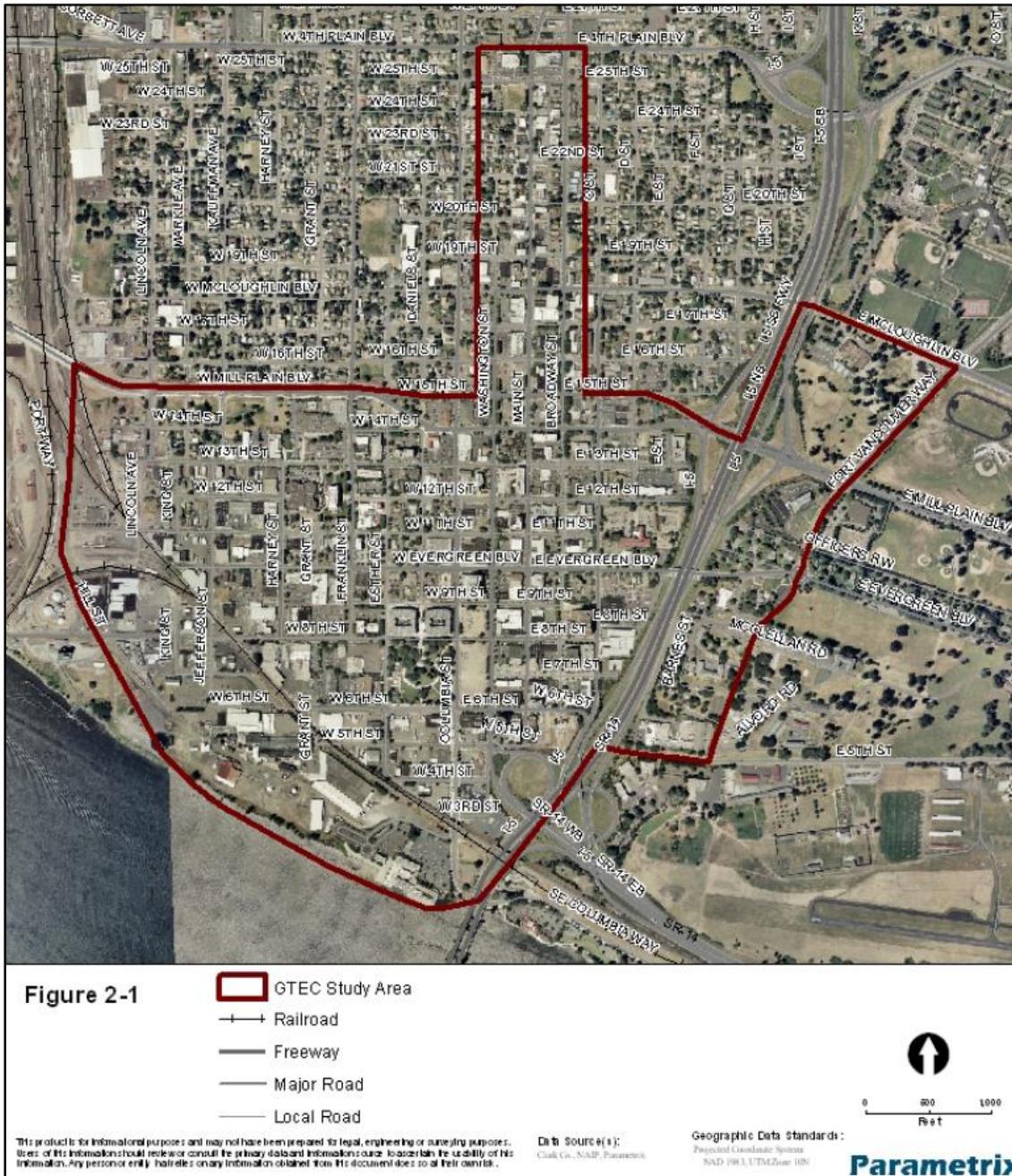
Source: Vancouver Municipal Code

Figure 22. Downtown Medium and Long-Term Parking Options



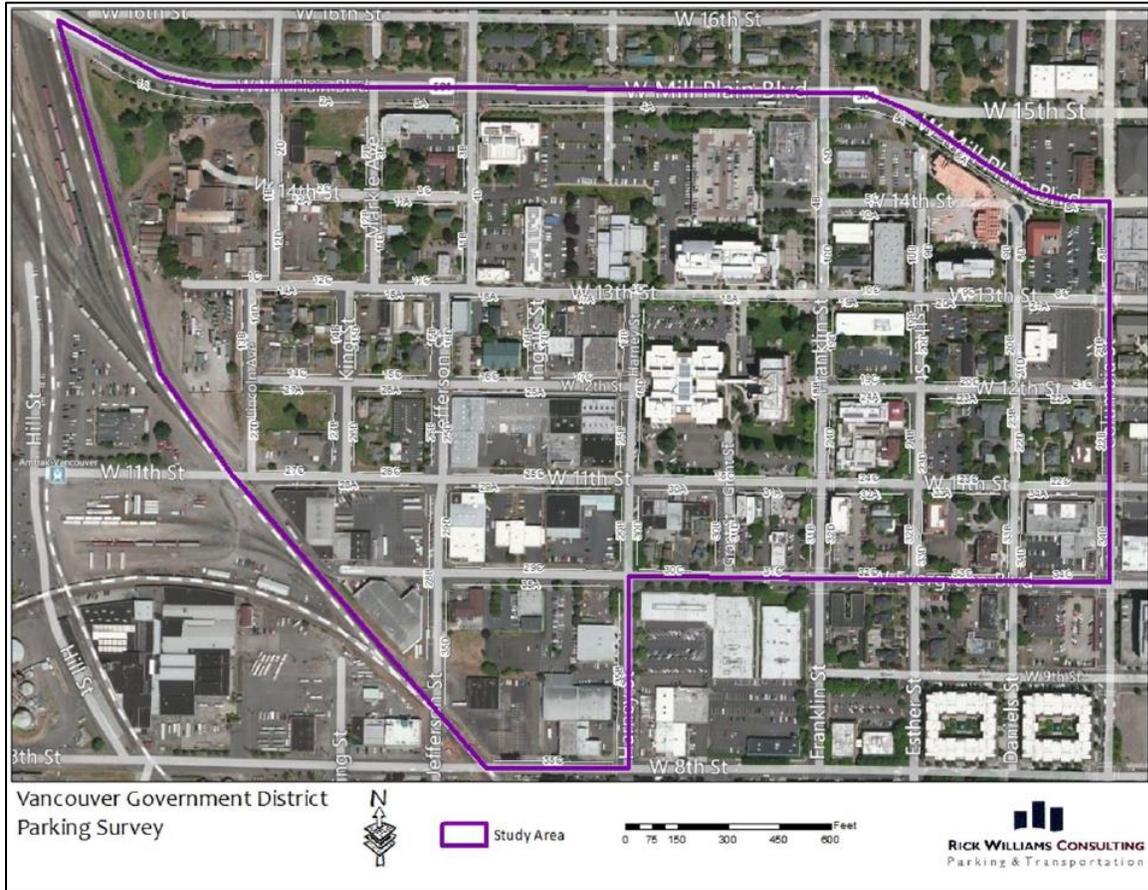
Source: Vancouver's Downtown Association

Figure 24. GTEC Study Area



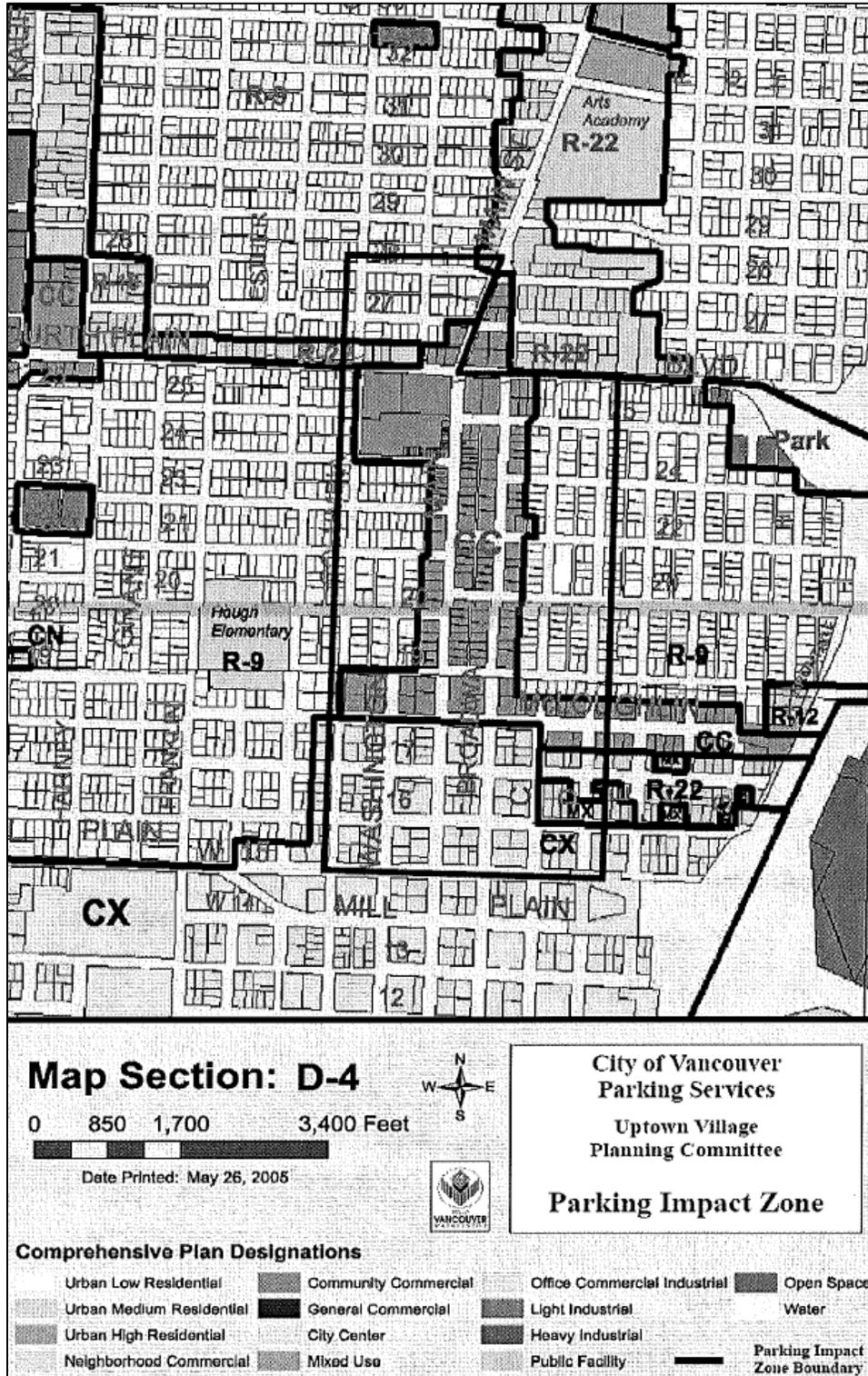
Source: Downtown GTEC Plan

Figure 25. Government District Parking Plan Study Area



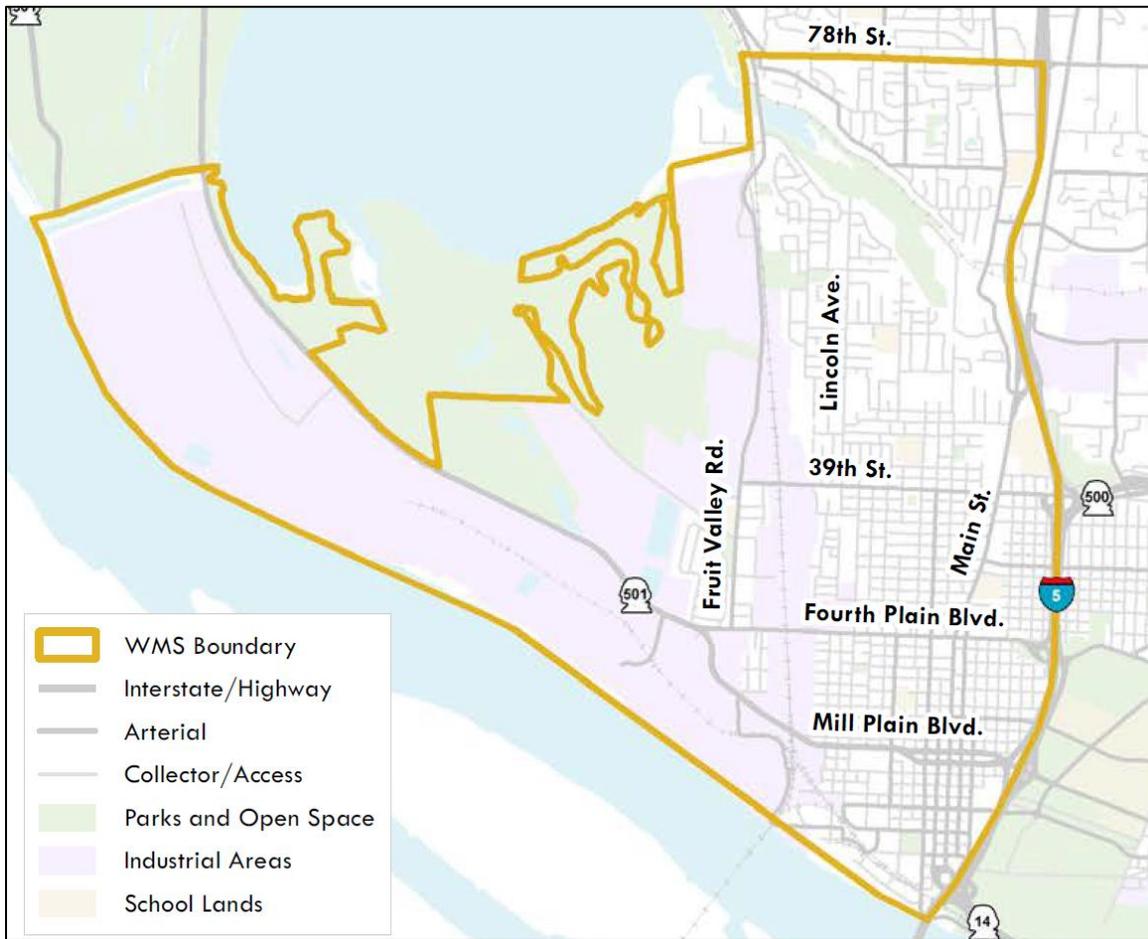
Source: Government District Parking Plan

Figure 26. Uptown Village Parking Plan Study Area



Source: Uptown Village Parking Plan

Figure 27. Westside Mobility Strategy Project Study Area



Source: Westside Mobility Strateg



Final
Recommendations

30 MINUTES	
↓	PAY HERE



Immediate (0 - 12 Months)

Operations: Enforcement Training and Appearance

❖ **Current Issue(s):**

- Inconsistency in enforcement approach and style is apparent from officer to officer. Consequently, there is a level of confusion not only between enforcement staff but also among the public who witness rules not being enforced consistently and equitably. For example, some Parking Enforcement Officers (PEOs) consistently chalk vehicles to monitor and enforce time zones and other do not provide this same oversight.
- As representatives of the City and parking ambassadors to the community, parking enforcement officers currently lack uniform consistency and an overall professional appearance.

❖ **Proposed Recommendation:**

Parking enforcement officers are a group of highly visible city employees who directly reflect the City of Vancouver. Often, because of the required duties of the officers, they may be portrayed in a negative light. Therefore, **initial and on-going training is vital** while ensuring each officer is trained with an equal level of proficiency. The **City should engage** the PEOs in an enforcement training refresh course and complete comprehensive performance reviews on a bi-annual basis. The PEO training should include:

- Communication skills, including conflict avoidance & resolution management
- City/community values
- Customer service & public relations overview
- Ordinance reviews/updates
- Driver/bike/personal safety
- Technology & equipment review
- Field training programs & refresher briefings

Well-trained officers will continue to serve as ambassadors for the City regarding how to park in Downtown Vancouver and further ensure increased compliance and a balanced approach to parking enforcement. At the same time, consistent and equal enforcement among all parking enforcement officers combined with a customer-friendly approach **may help reduce** negative views of parking enforcement in Vancouver.

❖ **Supplemental Recommendations:**

- Provided the level of visibility that officers have around Downtown and in the eyes of the community, it is important that consistency among officers is recognized beyond just their enforcement tactics. It is **recommended** that the City adopts a uniform policy and provide each officer with an increased uniform allowance. The annual uniform allowance **should provide** the officer the ability to maintain his or her uniform to the City's standard. To do so, each officer's uniform quality and state of condition should be examined on an annual basis.

- In addition, all officers **should be outfitted** with rain-gear that is suitable for Vancouver's climate.

❖ **Cost to Implement:**

- *Enforcement Training*
~\$3,000 - \$3,500

- *Uniform*
The current annual uniform allowance is \$400, which was implemented in 2008. The City should increase the allowance per officer that would also allow for the purchase of appropriate rain gear.

Immediate (0 - 12 Months)

Operations: Enforcement Technology Equipment Enhancements

❖ **Current Issue:**

- The current enforcement handhelds do not offer an efficient operating platform and the enforcement officers must wait a significant amount of time for data to load which inhibits their ability to verify Parkmobile payment status.
- Holistically, the permit verification process is inefficient and labor intensive, especially in the garage, where there is a lack of cellular communication impacting the operation of the current handheld devices.
- Current enforcement handhelds are bulky and cumbersome, resulting in injuries from the repetitive motion of scanning. In addition, the camera on the device is slow to capture images and images are poor in quality.
- PEOs do not carry city radios (like Police Department), leaving the PEO with no immediate or direct form of communication other than the City-issued phone which was an expressed officer safety concern.

❖ **Proposed Recommendation:**

Recently, the enforcement handhelds have been replaced and upgraded to iPhone 6 devices. The City should proceed with this enhancement. This hardware will provide the enforcement staff with a more useful, reliable and integrated tool that can be used to verify payment status and other supplementary enforcement details. The City's recent decision is considered an industry-best practice.

Furthermore, with the implementation of mobile payment via Parkmobile, using the iPhones for enforcement, PEOs will be able to query license plate numbers in real-time. The **integration** between the City's T2 Flex citation software and Parkmobile utilizes a standard application programming interface (API). The City's parking pay station equipment, Parkeon and Cale, can also provide data utilizing the same API. Enforcement handheld integration with paid parking equipment is imperative to **maximize the efficiency** of PEOs and minimize the burden of equipment that they are required to carry.

❖ **Supplemental Recommendations:**

- If the City opts to reconfigure the current Parkeon pay station equipment to a Pay-by-Plate configuration, a real-time **integration** with parking enforcement officer's handheld equipment will ensure that officers are receiving the most current vehicle payment status.
 - With a Pay-by-Plate configuration, the City should consider the use of license plate recognition (LPR) technology mounted to an enforcement vehicle to maximize efficiency and field performance

- With the provision of radio communications training, the City should equip PEOs with a city radio. This allows the PEO to have direct communications and contact with emergency resources. Typically, there is an emergency button on the radio that allows a distress signal to be issued. If radios are not an option, the City should implement emergency protocols for utilizing the City-issued smart phone devices that can be used for both communications and citation issuance.

❖ **Cost to Implement:**

This cost has already been expended by Parking Services. Any further integration with the City's parking technology vendors should be negotiated at zero to minimal cost.

For standard Police Department radio hardware, the Department may typically have a communications resource person responsible for the ordering and programming of radios. Currently Code Compliance utilizes 5 CRESA radios with an annual user cost of \$26,600/year. In 2018, the annual costs are estimated to be \$27,211 and there is a possibility that surplus radios could possibly be obtain from Police inventory. If radios are not an option, the City may utilize the smart phone devices that can be used for communications and citation issuance.

Immediate (0 - 12 Months)

Policy: Meter Configuration Improvements and Elimination of Free Parking Code Language

❖ **Current Issue:**

- The City's 20-minute free button located on single-space meters is a significant issue that needs to be addressed to limit the potential loss of revenue, as well as help PEOs more effectively enforce the meters.
- The button is incorporated into what are considered throughout the parking industry to be outdated and antiquated meters, not contemporary smart meters. Therefore, the controls needed to actively monitor the 20-minute free button and prevent constant abuse are absent. This results in an arduous and ineffective process of enforcement for PEOs who are unequipped to avert one from repeatedly pressing the button. A similar use of a button to provide free parking time to customers has only been observed by DIXON in another municipality, Boise, ID. However, in Boise, the City utilizes smart single-space meters combined with in-ground sensors which prohibit the abuse of the 20-minute free button after its initial use.
- Currently, due to the configuration of single-space meters and multi-space pay stations in the Downtown, a customer may park on one side of the street and be required to pay for the full parking time at the pay station, while one who parks on the opposite side of the street may be afforded the 20-minute free because of being parked at a single-space meters.
- Through the study's engagements with key stakeholders, there is a **consensus** that the 20-minute button is **obsolete** and does not aid in promoting the much-needed turnover in an increasingly parked Downtown. Furthermore, there is a general frustration with the City's single-space equipment given that the meters only accept coin.
- In addition, providing free parking undervalues these popular on-street spaces, and leads to inefficient use of the Downtown parking system.
- Between April 2015 and May 2016, the City lost \$232,000 in potential parking revenue because of the button. For a parking department that has operated to date at a significant deficit, the continued use of the button only compounds the City's budgetary and revenue related issues.

❖ **Proposed Recommendation:**

- It is **recommended** that the City remove the current "20-minute free" button that is located on the existing single-space meters throughout Downtown.
- **Eliminate** Section 19.11.020 of the municipal code, which currently allows for 15 minutes of free parking at all 1- and 2-hour meters.

❖ **Supplemental Recommendations:**

- To better accommodate short-term parking in the downtown, the **City should evaluate** adding more short-term spaces in popular commercial corridors. These spaces should be priced to manage demand, but could be set at a cheaper rate.
- Low-cost or free parking **should be prioritized** in off-street facilities.

❖ **Cost to Implement:**

- The Parking Service maintenance team has confirmed that the existing meters with 20-minute buttons can be reconfigured and removed. The City may opt to install button plate covers for an estimated cost of \$2,300 or simply install a plug for approximately \$500. Neither maintenance option includes the estimated internal labor costs
- Staff time to write and administer code changes. Maintenance staff labor to remove the button.
- Increase in net revenue of approximately \$200,000-\$300,000, plus reduced enforcement burden for 15-minute free provision.

Immediate (0 - 12 Months)

Operations: Meter Collections Security Improvements (E-locks & Staff Levels)

❖ **Current Issue:**

- Currently, staff assigned to collecting meters and pay stations must differentiate between four different key sets. Furthermore, each single-space meter is individually keyed, requiring staff to shift through nearly 1,500 keys. This process is significantly inefficient and time consuming.
- Maintenance is required to retrieve meter collection keys from the Finance office. However, because Finance does not open until 8:30am, Maintenance staff who arrives early in the morning often having to wait to access keys or break-away from other tasks to retrieve keys. This has led to an unproductive process for staff.
- The current collection process of combining collected monies, whether into a large bag or can, without proper reconciliation measures has a significant risk of unaccounted monies and significant variances in overall meter revenue.
- There is currently no software integration between the City's Oracle financial system and the three different collection processes including Cale, Parkeon and Loomis. City staff must manually input collection receipts and deposits into the Oracle database which is both time consuming and can result in inputting errors.
- Currently, collection teams differ in size when collecting pay stations vs. single-space meters. Pay stations are collected in teams of two while single-space meters are collected by a single collector. Collecting alone puts the collector's personal safety at risk while also exposing the City to potential risk of theft or fraud. Provided the meters are old and electro-mechanical based, the reporting and reconciliation tools are limited and unlike smart meters, the data must be manually extracted by a physical audit on a regularly scheduled basis. Smart meters will allow staff to access the meter's back-office and identify real-time meter revenue within each meter.
The solo meter collector for single-space meters also demonstrates that Maintenance, like other areas within Parking Services, is understaffed.

❖ **Proposed Recommendation:**

As the City considers its roadmap as it relates to parking technology, it is **recommended** that Parking Services begin to replace its outdated existing single-space meters with pay stations. The City has recently ordered additional pay stations. If the City chooses to retain single-space meters in areas of its Downtown, it's the recommendation that the City upgrades to single-space credit-card enabled smart meters. As such the City should include the option to purchase Medeco NexGen electronic locks for each meter.

An e-lock is an electronic key system that is programmed for the daily collection route. If the City were to convert to E-locks, staff would need 2-3 NexGen keys for the entirety of the meters.

The current process is inefficient as well as outdated, putting the City at substantial risk of theft. The number of keys should be decreased from 1,500 and instead be keyed by collection route or zone. If the City chooses to retain mechanical keys, a typical zone would be rekeyed to accommodate approximately 200 – 300 meters. This reduction in keys to specific routes or zones **will also provide the staff with the ability** to track and count monies collected with improved accuracy. Based on the City’s existing meter count and the re-zoning of meters, an estimated 6-10 key solution should suffice.

Provided the current single-space meters do not provide any back-office reconciliation tools, a detailed collection of the meters in the field, is crucial. A central management system for data and reporting is needed for the department and should be integrated with the City’s financial system and allow for automated updates.

With the **recommendation** of increased staffing and the reallocation of PEOs and maintenance personnel, the City should have one additional staff member for the collection of single-space meters. Meter collection in tandem, like pay station collections, provides additional accountability between the two as well as increased safety for the collectors when out in the field.

❖ **Supplemental Recommendations:**

- **Create** Master Key Inventory Log, including key storage location.
- Conduct a complete key inventory audit quarterly.
- Renumber and label daily use keys, **implement Daily Key Control Log** and issue key extenders that can be belt attached to all meter maintenance staff

❖ **Cost to Implement:**

- Additional pay stations:
~\$9,300 per pay station
- Single-space credit card-enabled smart meters:
~\$500 - \$750 per meter
- NexGen E-locks and doors:
~\$175,000 - \$210,000

It is important to note that this estimate is based on the City retaining roughly 1,000 single-space meters.

Immediate (0 - 12 Months)

Operations: Proactively Increase City's Citation Collections Effort & Improve Customer Service Functions

❖ **Current Issue:**

As of March 2016, the City had **\$1,163,300 in unpaid outstanding citations**. This figure is likely to have increased since 2016. The current collection's agency used by the City averages approximately 20% in delinquent citation recovery, a low figure when compared to municipalities and collection agencies in the industry. The City writes off nearly \$200,000 annually under the current statute of limitations, which is part of the City's 10-year statute of limitations.

For an agency that routinely operates at a deficit but is **working to become self-sufficient**, letting potential revenue go uncollected for infractions that have already occurred is not considered a best practice among agencies. A fine is money that is owed to the City. Furthermore, for the City to not **proactively seek collections on these fines** sets a larger precedent that reflects upon the City as an agency which is strict in its enforcement. Individuals may feel as though they can park in Vancouver and if they receive a parking citation, the City does not collect on it, further promoting poor parking behavior.

The City has not enabled the online citation appeals function that is available via Flex, the existing citation management software program. In 2015, legislative changes now allow for electronic submission of appeals. The process was not changed since only 4% of issued citations were contested previously. Also, typically, first time appeals are granted as both a customer service function and for cost savings due to limited staff resources and potential court preparation costs.

❖ **Proposed Recommendation:**

With over one million dollars of parking citations currently outstanding, the City should adopt an aggressive collections policy. DIXON recommends that the City should expand collection agency services or solicit a secondary service in an attempt to further recover a portion of the funds for unpaid citations prior to writing off the debt.

Vancouver currently utilizes the vendor T2 Systems and its Flex permit and citation management software. **T2 also can provide citation collection services**, referred to through T2 as CCS. T2's CCS will proactively collect on unpaid parking citations through noticing. The City should solicit T2 for a proposed scope and quote for collection services.

Typically, unpaid citations are assigned to an agency once they have reached a certain age, and previous attempts to collect have been exhausted. DIXON recommends that citations are sent to secondary collection when they meet one of the following criteria:

- Vehicle owner has NOT received delinquent notification from the City and citation is least three (3) months overdue.
- Vehicle owner has received at least two (2) notifications from the City and citation is at least six (6) months overdue.

Collection agencies should be identified based on the following criteria:

- Experience with debt collection in the State of Washington.
- Experience with collection of parking citation debt.
- Ability to obtain registered owner information for State of Washington and out-of-state citations.

Collection agency efforts typically include:

- Identification of registered vehicle owner's name and address (both State of Washington and out-of-state vehicles).
- Minimum of two collection notices sent to the registered vehicle owner.
- Identification of the registered owner's phone number and outbound phone calls from the collection agency to the owner of record.
- Ability to accept citation payment online, by phone or by mail.

Collection agencies charge a percentage of revenue collected for their efforts, which could range from twenty to fifty percent, depending on the type of collection activity and age of citations, with most agencies charging between twenty-five and thirty percent.

Recovery of debt rates will vary based on age of citation when sent to collection and whether previous delinquent notices have been sent to the vehicle owner. Citations that are less than six months old will result in average collection rate of seventy percent, while citations that are more than six months old and less than one-year old will average a fifty percent collection rate. After a citation is more than one-year old, the rate of recovery drops dramatically to twenty to thirty percent.

Establish business rules and workflow processes to immediately enable the T2 Flex online citation appeals function. This feature should be mandated for all citation adjudication processes and will offer efficiencies that are not currently being utilized. Violators should be required to submit any protest via this automated function. The City can establish first offense dismissal processes that can be defined by license plate to ensure that the system is not abused by frequent violators. There is also an opportunity to create an electronic case file for citations that are protested to the court system.

❖ **Cost to Implement:**

The City receives 100% of the citation monies collection. The customer is charged an amount above the citation monies paid directly to the collection agency. This collection return is dependent upon the age of the citations. The more recent the citation the more likely it is to be collected.

It is safe to consider that if the City writes \$200,000 in collectible citations per year and all citations that exceed and are not paid within 90-days to the agency, the City may be likely to pay roughly \$40,000 annually for the service.

There should be no additional cost to enable the existing T2 Flex citation appeals function. Website updates will be required to provide the access to customers. Additionally, citation ticket stock must be updated to incorporate the website and online payment and appeal instructions.

Immediate (0 - 12 Months)

Policy: Residential Parking Permit (RPP) Optimal Tool Process Improvements

❖ **Current Issue:**

- Chapter 19.08 provides minimal guidance on forming or administering the RPP program. The process should be further defined and codified to ensure efficient management.
- The current program does not charge a permit fee, yet the program requires significant staff resources to administer. It is operating at a net loss.
- Existing procedures and IT systems are not user-friendly. Permits are not sold online. Additionally, the administrative and enforcement burden is very high as none of the permit enforcement is automated.

❖ **Proposed Recommendation:**

Modify Chapter 19.08 to **create an improved process** for forming and administering the Residential Parking Permit (RPP) program. Program guidelines and considerations should include:

- **Initiation process:** Residents would be able to request a permit program in their area with a petition of signatures from a threshold defined by the City (typically 50-75%) for addresses in the affected area.
- Boundaries: **RPP should apply** to residential streets only. Boundaries should be set and confirmed based on a parking spillover and occupancy study.
- Eligibility:
 - Some cities **allow** all residents within the boundary to purchase permits, while others only provide permits to only residents in buildings without on-site vehicle parking. Additionally, the City could calibrate the number of permits sold based on the supply of on-street spaces in the zone to avoid overselling permits (an oversell ratio of 150-300% is typical, but should be adjusted based on observed demand).
 - Residents would need to provide proof of residence (i.e. utility bill, driver's license, etc.).
 - Permits should not be sold to anyone with outstanding parking tickets.
- Permit cost: The City should **charge a fee to cover** the cost of administering the program. Some cities use a progressive rate structure to encourage households to minimize permit purchases.
- Guest permits: The RPP **should provide a limited number** of free daily permits for guest per year. Additional guest permits could be purchased at a reduced rate.

- Non-permit holders: Non-permits holders would still be eligible to park in the permit zones, but only for a designated amount of time (i.e. one or two hours).
- Systems: All permits **should be available** for online purchase and renewal. Permits should be electronically linked to license plates to allow for streamlined enforcement via license plate recognition systems.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.
- Additional costs to establish and administer Residential Parking Permit software program

Immediate (0 - 12 Months)

Policy: Adjust Parking Fines and Rates to Reduce Infractions

❖ **Current Issue:**

- The City's current penalties are too low to incentivize good behavior. For example, the expired meter fine is \$15.00, only \$2.50 more than the cost of parking all day at certain metered spaces.
- The lack of enforcement presence and minimal fine amount have combined to form a belief by motorists that there is not a need to pay to park. The effect on the City is ongoing losses in paid parking revenue and a reduction in consistent vehicle turnover commonly desired in a commercial downtown such as Vancouver.

❖ **Proposed Recommendation:**

- **Modify** Section 19.13.160 of the municipal code to increase parking fines and penalties for common infractions. Parking fines should ensure compliance to rules and cover administrative costs.
- **Monitor infractions to assess** how parking fines should be adjusted in future to ensure compliance.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.
- Likely net revenue positive with increased penalties.

Immediate (0 - 12 Months)

Policy: Modify Code to Provide Flexibility on Paid Parking Days/Hours

❖ **Current Issue:**

- The existing parking code only allows the City to charge for parking on weekdays from 8 a.m. to 6 p.m. This prevents the City from responding appropriately to parking issues areas that occur outside of these hours or during weekends. The flexibility for staff to modify times and days of paid parking would give them options to address specific issues appropriately.
- Downtown has recently experienced higher parking demand on weekends and in the evenings because of revitalization efforts and new development. The current code limits the ability to use management tools to address these parking challenges. Modifying the code would give staff maximum flexibility to adjust rates and hours of operation based on actual demand and changing patterns of parking behavior.

❖ **Proposed Recommendation:**

- **Modify** Chapter 19.11 of the municipal code to allow City staff to adjust meter days/hours in a flexible way to respond to changing parking demand.
- As Downtown Vancouver becomes more active in the evening and on the weekends with new housing, retail, and events, parking demand will continue to grow outside of existing meter hours.
- The **code should include flexible language** to provide city staff the option to set meter hours/days as needed to manage demand. For example, the City could include language allowing for modifications to hours of enforcement “up to 10 p.m., Monday – Saturday.” Hours would not necessarily need to go to 10 p.m. or Saturday at first, but such a change would allow staff to adjust management practices more dynamically. A more likely change in the short-term would be to allow for extended meter hours to 8 p.m. on Fridays.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.
- Extended meter hours would result in additional meter revenue, depending on the exact pricing and hours of enforcement.
- There would be an estimated cost of \$1,000 for updated meter decals

Immediate (0 - 12 Months)

Operations: Additional Enforcement Staff, Vehicles and Modification of Prolonged Parking Policy

❖ **Current Issue:**

- Based on observations there is an overall lack of appropriate staffing (currently 3.5 officers) to consistently and effectively manage the existing Downtown parking policies.
- Enforcement of the City's outer lying neighborhoods has put stress on the City's Downtown enforcement resources and created a situation of sporadic enforcement of the immediate Downtown, where core parking issues exist.
- As the enforcement perimeters and zones are constructed today, the areas in which officers are required to enforce is too large to adequately enforce.
- The 24-hour Prolonged Parking policy and other current field management processes are cumbersome and inefficient. The 24-hour period is a very brief time period for parking in a neighborhood, as stays of 24 hours are typical given normal patterns of residential demand. The policy creates a significant administrative burden and occupies one PEO full-time. The cost-benefit of dedicating one PEO to this issue does not appear justified, especially in the context of other significant parking challenges in Downtown and the Uptown district
- In addition, the authority divided across the parking enforcement officers and code compliance officers are at times resulting in duplication of services provided the current towing and abandoned vehicle procedural rules.
- Meter maintenance job classification does not encompass the current job duties.
- There is no active scofflaw program to recover delinquent parking revenues.
- Inadequate vehicle inventory to support the parking enforcement operation. There are only two operational vehicles (, a 16-year-old scooter that was slated for auction several years ago and a 2004 Go 4. There is also a non-operational vehicle (2014) that cannot be salvaged.

❖ **Proposed Recommendation:**

Based upon current staffing levels, it is **recommended** that the City hire at least one (1) additional full-time (FTE) combined parking enforcement and maintenance officer and acquire at least two vehicles for immediate support of Downtown parking operations. The vehicles are necessary considering the age and non-operational status of the existing fleet. The additional officer will allow the Parking Services to adequately manage parking operations Downtown, and provide support for program maintenance needs. The recommendation of one FTE assumes the **reassignment of the neighborhood enforcement** program to Code Compliance. The current neighborhood parking enforcement officer position should immediately resume Downtown assignment duties.

A reclassification / job title assessment is needed for the Meter Maintenance job position based upon the assigned job duties.

The City should implement a proactive scofflaw program that authorizes PEOs to boot and/or tow vehicles that have a minimum number of unpaid parking citations or a minimum amount of delinquent parking revenues owed to the City.

❖ **Supplemental Recommendations:**

- Policy **should** also be stipulated that Downtown parking staff cannot be pulled to support the Neighborhood program.
- If current PEO assigned to neighborhood enforcement position is not reassigned, then the **recommendation** should be made to employ two (2) FTE parking enforcement officer positions to adequately and consistently enforce the Downtown parking regulations.
- The City could consider hybrid or electric vehicles to support the parking enforcement vehicle needs. These standard vehicles are cost effective, more practical for the local weather conditions and more comfortable for the parking enforcement staff rather than the GO 4s or Smart Car.

❖ **Cost to Implement:**

One full-time (FTE)

- *\$85,983 for 2018*

Vehicle(s)

- *\$41,500 for a new GO 4 (Two new Go 4's were received in 2017)*

Short-Term (1 – 2 years)

Operations: City Parking Technology Hardware Enhancements

❖ **Proposed Recommendation:**

As the use of cash and coin become less frequent and customers are increasingly more likely to pay with credit or debit cards, its **recommended** that the City begins to consider replacing its existing single-space meters with smart meters that accept credit cards and coin and, continue the expansion of Parkeon pay stations in place of existing single-space meters. A cost-effective approach is to implement a combination of both single space smart meter and pay stations.

Smart single-space meters also **provide** enforcement lights that provide a visual indicator to PEOs of valid or invalid payment status as well as maintenance issues with the meter. These tools help to increase the efficiency.

❖ **Supplemental Recommendations:**

- If the City determines that smart single-space meters is the desired direction to move forward with, it is suggested that the Parking Services Department implement a **Medeco NexGen Electronic Locking system**. The Medeco NexGen electronic lock system is composed of electronic locks placed into the meter housing, programmable keys and management software. These components provide a significant level of security to the meters while also being programmed to specific routes, meters, and collection days. The system will also assist the City in reducing the total number of collection keys needed as the electronic keys are programmable to any set number of meter locks.
- If the City decides to continue the expansion of the Parkeon solution, the **goal should be to incrementally phase out** the current Cale and/or single-space meters and consider optimal locations to install single-space smart meters. A consolidation of parking technologies will reduce the staff's variety of spare part inventory.

❖ **Current Issue:**

- Currently the measures are not in place to optimally track, reconcile and analyze the money that is being collected from single-space meters because of the age of the meters.
- Managing an inventory of spare parts to support three different meter technologies is cumbersome and expensive for any City.

❖ **Cost to Implement:**

- *Credit-card Enabled Single-Space Smart meters*
Smart single-space meters that accept credit cards and coin are estimated in price near \$750 per meter (including pole and housing), with an additional approximate \$9 per meter per month for data management in addition to transaction fees. However, provided that the City has existing poles and meter housing, the cost per meter mechanism should cost an estimated \$400 - \$500.
- *NexGen Electronic Locking System*

~\$175,000 - \$210,000

It is important to note that this estimate is based on the City retaining roughly 1,000 single-space meters.

Short-Term (1 – 2 years)

Policy: Modifications to Parking Requirements

❖ **Current Issue:**

- Limited flexibility in the parking code does not allow projects to easily “right-size” parking, thereby reducing overall congestion and development costs. As an example, projects that include live/work units are not adequately addressed in the code.
- The municipal code has minimal incentives to encourage shared parking, especially in the Downtown where shared parking can significantly improve system efficiencies.
- The municipal code does not have the structure to provide for enhanced design requirements for surface or structured parking facilities.

❖ **Proposed Recommendation:**

- **Exempt all changes of use below** a certain size (e.g. 10,000 square feet) from all minimum parking requirements (Section 20.945.070.D). On-site parking requirements for small parcels and historic sites can reduce development viability.
- **Allow option for parking in-lieu fees**, enabling developers to pay a per space fee instead of providing the parking on-site. Use revenue to fund shared parking supply and/or multimodal improvements.
- **Allow for off-site parking** to satisfy the minimum parking requirement as of right, if the proposed off-site facility is within ¼-mile radius of the project site and a shared parking agreement is provided to the City. Limit off-site parking to a maximum of 50% of minimum required parking.
- **Reevaluate the City’s parking ratios for businesses to determine if they are adequately providing flexibility for staff.**
- **Evaluate new parking design** requirements that better support a walkable downtown environment, including:
 - Provide adequate setbacks from the building envelope, particularly on pedestrian-oriented street frontages
 - Limit driveways and driveway width along walkable corridors
 - Provide high-visibility pedestrian accommodations across curb cuts
 - Encourage joint access to multiple lots from the street
 - Establish garage “wrap” requirement throughout Downtown
 - Incentivize the design and construction of parking that can be converted to other active uses as mobility trends change

❖ **Supplemental Recommendations:**

- **Evaluate expanding parking maximums** to all of Center City and/or downtown districts. Allow projects to exceed the maximum, but only if all parking above the maximum is public and shared.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.

Short-Term (1 – 2 years)

Policy: Modifications to Transit Overlay District

❖ **Current Issue:**

- Developers have the option to adhere to the TOD rules if the development is within a TOD zone. Making these provisions optional limits the effectiveness and desired impact of TOD projects and is ineffective land use policy. The City should evaluate the potential impacts of changing the rules to require all developers to adhere to the TOD rules. In addition, both TOD tiers have the same allowances for reduced parking requirements. However, Tier 1 includes areas intended for higher densities and more transit friendly design. This land use pattern tends to reduce demand for parking. Therefore, Tier 1's allowances for reduced parking should be greater than Tier 2 to reflect the reduced demand for parking in those areas.

❖ **Proposed Recommendation:**

- **Evaluate eliminating the voluntary use** of the Transit Overlay District (TOD) and requiring all development in the TOD zone to abide by its policies. Consider modifications to parking requirements for Tier 1 and Tier 2 zones in the TOD code to implement a lower parking requirement (and/or lower maximum) for Tier 1.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.

Short-Term (1 – 2 years)

Policy: Establish a formalized TDM Program

❖ Current Issue:

- The municipal code does not require TDM as part of new development. Reductions in parking minimums can incentivize TDM, but the permitted TDM options in the code are limited and do not include the policies or programs that are most effective at reducing parking demand.
- The City’s code does not have requirements to install bicycle parking in developments or through site improvements. There currently are requirements as it relates to the type of bicycle racks if they are installed but there are not requirements to include bike parking in projects.

❖ Proposed Recommendation:

- **Incentivize** Transportation Demand Management (TDM) programs by allowing for greater and more flexible reductions in the minimum number of required parking spaces than currently allowed in Section 20.945.070.E.
- Alternatively, **establish minimum required TDM elements** for all new Downtown development above a certain size (i.e. 20,000 square feet and/or 25+ units). Provide developers with a flexible “menu” of TDM programs and services. Potential elements should include:
 - Pricing parking
 - On-site car/bike sharing
 - Lockers and showers
 - Transit pass subsidies
 - Provision of shared, public parking
 - Enhanced transit stops/amenities
 - Enhanced wayfinding and signage
 - Bike and pedestrian infrastructure
 - Unbundled parking
 - Priority rideshare parking
 - Rideshare subsidies
 - Shuttle services
 - Travel information and marketing
 - Annual monitoring/reporting
 - Other, as appropriate and feasible
- **Establish minimum** bicycle parking requirements for short-and long-term spaces, based on industry best practices. See *Bicycle Parking Guidelines, 2nd Edition*, Association of Pedestrian and Bicycle Professionals.

❖ **Cost to Implement:**

- Staff time to write and administer code changes.
- Additional staff to administer TDM programs and monitor outcomes.
- \$130,000 annually – 1 FTE and program resources

Short-Term (1 – 2 years)

Policy: Wayfinding, Branding & Parking Education Improvements

❖ **Current Issue:**

- A significant contributor to perception of a lack of parking is insufficient wayfinding in the form of signage. Based on observations, it was apparent that the City lacks a defined parking brand that would otherwise be messaged across the Downtown. Several of the City's public surface lots are not clearly identified as public parking. The inconsistency in wayfinding or public parking branding is further evident at the Vancouvercenter garage facility.
- The existing signage in the garage is inconsistent with the pay station configuration. Signage states to remember one's space number however the pay stations are configured as pay and display (like on-street pay stations).
- As Vancouver's Downtown continues to grow and expand, including the City's Waterfront Project Development, visitation should be expected to increase as well. As a result, parking available on-street parking will become a premium and making off-street public parking more appealing.
- Wayfinding in the form of parking regulatory signage such as loading zones and painted curb markings is also absent Downtown, especially throughout the commercial core.

❖ **Proposed Recommendation:**

The City needs to maximize currently available parking locations, educating the community and visitors through signage and communication as well as promoting longer term and off-street spaces via the web. It is **recommended** that the City of Vancouver **pursues** and **develops** a wayfinding and branding campaign throughout the Downtown. As part of this campaign, identifying a brand should incorporate the City's public parking assets including the Vancouvercenter garage and downtown surface lots. Today, the Vancouvercenter garage displays the sign and logo of '**PARK n' GO**'. This phrase and theme is a **viable option** for expanding throughout the rest of Downtown and city-operated public parking.

❖ **Supplemental Recommendations:**

- **The implementation** of electronic wayfinding system with sensors that transmit occupancy information in real-time to directional wayfinding display signs on each floor or at the entrance(s) of the garage.
- **Creation** of Parking Application to assist visitors in finding available spaces, identifying space availability and rates.
- To create more transparency for those parking in Downtown as well as to increase the efficiency of staff, it is **suggested** that the City promotes clear instructions for placing Pay and Display receipts in vehicles.

- The City’s current pay station vendor often includes within its standard pay station signage/sticker package the option for instructional signage to be placed on the front and/or side of the pay station.
 - The City should contact its pay station vendor to inquire about instructional signage and stickers
 - “Pay Here” signage should be included with all pay stations.
- Consider pairing curb paint with curb markings or regulatory signage.
 - Paint colored curb marking markings (i.e., short-term, loading/unloading, no parking) throughout Downtown to identify each curb with wording. (Not legally required, but recommended for customer convenience).
 - Red curb = No stopping, parking or standing
 - Yellow curb = Commercial loading only (can be time of day specific)
 - White curb = Passenger loading only
 - Blue curb = Accessible parking zones
 - Green curb = short-term parking (i.e., 15-minute parking)
 - Clear and consistent signage and curb markings will help ensure compliance and ease of enforcement.

❖ **Cost to Implement:**

- Static Wayfinding
~\$150,000 – \$250,000
- Vehicle Loop Detectors & Count Signs
~\$20,000 - \$25,000 per facility
- Parking Application development
~\$50,000 - \$75,000 (dependent on flexibility and functionality of the application)
- Pay station decal signage
The cost to the City should be minimal as the vendor should provide as part of the original pay station order (decal replacement is approximately \$1,000)
- Street Signage and Curb Paint Improvements
~ Less than \$5,000

Short-Term (1 – 2 years)

Policy: Improve Parking Opportunities for Employees of Downtown

❖ **Current Issue:**

- Downtown business owners are concerned about the amount of employee parking available and whether the hourly rates are affordable for their staff.
- Employees should not be occupying the parking spaces outside of businesses.

❖ **Proposed Recommendation:**

- Retain downtown-centric, convenient parking for short-term, customer access.
- Consider transitioning some periphery short-term parking to long term parking; consider the City's current Government District.
- Determine a nominal cost for employee parking that will sustain the program while allowing employees to park at a discount compared to on-street parking.
- The City should consider implementing a Service Worker (Evening) Monthly Permit that offers a low-cost monthly permit for after-hours parking in the garage or designated surface lots for downtown employees.
 - Utilize the same web portal as the residential permit program to accept applications and payments for the employee permits. Employees should be able to upload supporting documentation to the website. Proof of employment could be in the form of a paystub or a letter of authorization from an employer.
 - Employees should also have the ability to sign up in person with supporting documentation.
- Promote alternative transportation including carpooling and rideshare programs that are supplemented by a City guaranteed ride home program.

❖ **Supplemental Recommendation:**

- A satellite parking program should be evaluated, ideally accessible by the Vine.
 - If an independent shuttle service is necessary, the cost must be thoroughly assessed
 - Satellite parking access must be reliable, frequent, and provide a significant cost savings to its consumer and this can prove to be a costly program for the City.

❖ **Cost to Implement:**

- Maintenance staff time to adjust and reassign signage within the determined permit area.
- Staff time to write and administer code changes.
- Additional staff time to administer TDM programs and monitor outcomes.

- The City should explore = its current contract agreement with T2 and determine the cost of an additional permit portal for employee permits.

Long Term (2+ years)

Policy: Evaluate Performance - (Demand) Based Pricing

❖ **Current Issue:**

- The City's current policy framework does not allow for dynamic management of the downtown parking system. The meter hours/days/rates are specifically dictated by Chapter 19.11 of the municipal code. As a result, staff does not have the flexibility to respond to a changing downtown in which higher parking demand is no longer strictly limited to a few hours on weekdays.
- On- and off-street meter rates are largely static and do not reflect actual patterns of demand.
- Differentiated pricing would allow the parking system to better serve short- and long-term stays.
- Experiences in other cities has shown that performance-based management reduced search time for parking, resulting in less local congestion and vehicle emissions; reduced illegal parking and citations; better distributed demand and utilization of parking assets; and improved perceptions of parking through enhanced information, technology, and ease of payment.

❖ **Proposed Recommendation:**

Study and evaluate the impacts and feasibility of implementing a performance-based pricing program in downtown.

Rates and hours would **be adjusted based on demand** to achieve a desired availability target. The most popular spaces would be more expensive, while less convenient parking would be cheaper. On- and off-street regulations and prices should be coordinated to ensure on-street parking is prioritized for short-term trips, while off-street parking primarily accommodates residents, employees, and long-term visits.

To initiate a **performance-based management program**, the following program elements would need to be addressed:

- Adopt a formal policy or ordinance describing the program goals, objectives, and key parameters.
 - Set specific targets for the availability of on-street and off-street parking, such as 85% for on-street spaces and 90-95% for off-street spaces.
 - Grant the City Manager, his/her designee, or parking staff the authority to adjust meter rates, off-street parking rates, hours of enforcement, and on-street parking

- regulations at least annually, as necessary to meet adopted occupancy/availability targets, without action by City Council.
 - Set minimum and maximum hourly parking rates, and the amount that rates can be lowered or raised per rate adjustment.
 - **Establish boundaries, rates, and regulations by location and time**, reflecting patterns of demand. One option is to define “zones” or specific blocks and facilities corresponding to convenience and demand – “Premium,” “Value,” and “Discount.”
 - Communicate the program **through effective outreach** and messaging. A new, dynamic management approach requires clear, user-friendly, and diverse methods for communicating the proposed changes.
 - Ensure **signage, wayfinding, and information technology and payment systems** are in place to effectively operate the program and serve the customer.
 - **Monitor and evaluate parking availability on a regular basis**. Adjust rates and regulations on a periodic basis (one or two times per year) to meet adopted availability targets.
 - Codify policy that all downtown parking revenue shall be **reinvested into downtown** and not diverted to the General Fund. Continue to allocate revenue to the Parking Operation Fund. Utilize net revenue to not only fund improvements to the parking system, but also support trip reduction strategies, TDM programs, and multimodal infrastructure.
 - Monitor, enforce, and **adjust based on data**.
- ❖ **Cost to Implement:**
- Staff time to write and administer code changes.
 - To effectively manage a demand based pricing program, the City will likely need one dedicated full-time (FTE) to consistently manage paid parking and occupancy data related to parking transactions or sensor-based occupancy data.

Appendix A: Stakeholder Meetings



Stakeholder Overview

Stakeholder engagement is a critical component of the study to understand the City’s unique needs and desires. The initial stakeholder meeting was held on March 15, 2017. This meeting included participants representative of the community including business owners, employees, residents and Parking Advisory Committee (PAC) members. Attendees were invited to share their feedback, comments and suggestions about parking management in the City of Vancouver. It became immediately clear that the group of stakeholders were eager to find solutions that will benefit the entire community. Many of the topics discussed revolved around a theme of sustainability, with participants seeking to find solutions to parking management that consider transportation demand management and walkability. While the stakeholders took a progressive stance toward parking management, participants also wanted to make sure that the City takes a realistic approach to addressing parking needs. The following sections are main topics and themes discussed during the stakeholder meeting.

Along with the initial Stakeholder meeting on March 15, 2017, additional meetings were held on the following days:

- April 24, 2017
- July 28, 2017
- October 16, 2017

Stakeholder members included:

Name	Organization
Paul Schlesinger	Parking Advisory Committee
Bruno Amicci	Parking Advisory Committee
Carly Lowder	Parking Advisory Committee
Stephanie Rice	Parking Advisory Committee
Carmen Caraballo	Esther Short Neighborhood Association
Greg McGreavy	Downtown Developer
Mike McLeod	Hilton
Jenni Denton	Vancouver Center
Michael Lary	Downtown Business Owner
Jim Hagar	Port of Vancouver
Leah Jackson	Downtown Business Owner
Linda Glover	President - Vancouver Downtown Association
Derek Hofbauer	Destination Downtown
Tim North	Hough Neighborhood Association

Rate Structure

When asked about the recent rate change, many of the stakeholders agreed that the inconsistency between the single-space meters and the pay stations was problematic. The stakeholders expressed the

need for a more comprehensive rate structure that considers parking demand. Rather than basing rates off the type of meter, the **rates should be based off the location and demand**. It was suggested that the City incorporate more consistency and intuitiveness into the parking program. Many stakeholders agreed that the rate structure seems arbitrary as it is currently structured.

Many of the participants were not opposed to a rate increase because they felt that it would help promote a culture shift away from driving. However, they stressed the importance of ensuring that the rate structure does not discourage people from visiting the downtown businesses. Additionally, they want to make sure that there is an adequate amount of **affordable employee parking**.

20-Minutes Free

Another issue that came up was the 20-minute free button that is on many of the single-space meters. The stakeholders agreed that that City should **eliminate the 20-minute free option**. Not only is it being abused by many, but stakeholders also think that the short amount of free time forces visitors to rush their trips downtown within that 20-minute period. In general, they didn't see a need or a benefit to the free time. Additionally, many were concerned about the large amount of missed revenue for the City that could otherwise be invested in program improvements.

Employee Parking

Downtown business owners were concerned about the amount of employee parking available and whether the hourly rates are affordable for their staff. It is important that the employees are not occupying the spaces outside of the businesses. **Satellite parking** was discussed as a potential solution for an employee parking program. This parking could be coupled with a shuttle service, or accessible by the Vine. The stakeholders felt that for a satellite parking program to be successful, the **shuttle service** needs to be reliable, frequent, and provide a significant cost savings to its consumer.

Residential Permit Parking Zones

Stakeholders outlined one area as being a significant issue for parking, the Uptown Village area, particularly around Main Street Marijuana. With the upcoming paid parking implementation in Uptown, some of the stakeholders are concerned that the employees and some store visitors will start to park in the surrounding residential neighborhoods. **Spillover parking** was a concern consistent among stakeholders for any areas with paid parking and increasing development. The members agreed that residential permit parking zones will need to be expanded in areas such as Uptown to prevent spillover parking.

Parking Ratios

Another primary concern that many of the stakeholder's share is the **current parking ratios are not providing adequate parking** for downtown residents. Many indicated that they thought this would become particularly problematic surrounding the upcoming waterfront development. Some participants pointed out that spillover parking into the surrounding neighborhoods is likely to occur. Others worried that there won't be enough visitor parking to support the project. While the group does not want the City to overbuild parking, they want to ensure that there is a sufficient amount to meet the needs of the residents that pay to live downtown and invest in the City. There is perception that many of the recent development projects for apartment complexes are not building enough parking to serve their residents.

Enforcement

Stakeholders were asked about the potential benefits of expanding enforcement hours. Some of the business owners were concerned about the idea of Saturday enforcement because it may deter some of their visitors. However, others were in support of weekend enforcement because there are problem-areas downtown with parking where cars are left on-street for extended periods of time around, especially around the park and churches. Weekend enforcement could help manage parking during peak visitation periods downtown, and it may become increasingly important with the growth of Downtown and the waterfront development project.

Transportation Demand Management

Many stakeholders stressed the importance of utilizing transportation demand management (TDM) tools to mitigate parking shortages and utilize the current supply efficiently. Stakeholders indicated that the upcoming growth in downtown Vancouver will require more transit use and alternative modes of transportation. Strategies discussed included:

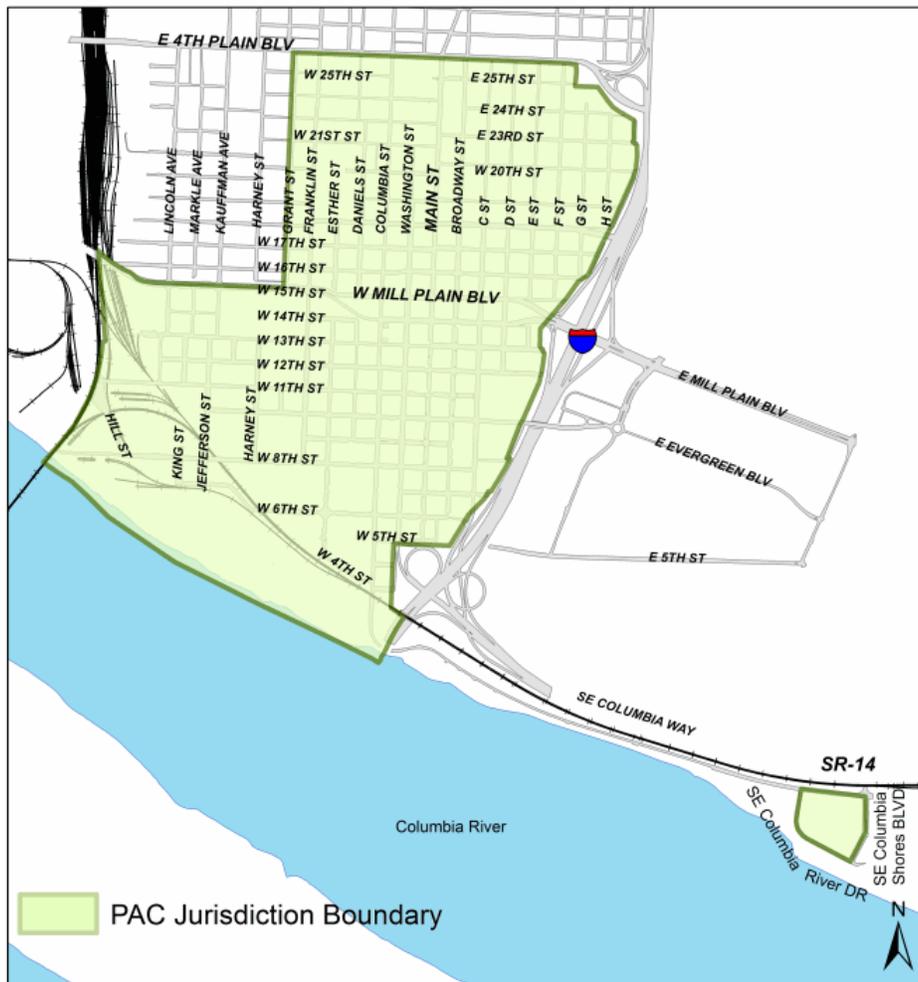
- ❖ Pricing parking rates based on demand;
- ❖ Implementing a shuttle system with a park and ride lot;
- ❖ Adding a circulating trolley line between the waterfront, Downtown, and Uptown;
- ❖ Promoting the use of the Vine; and
- ❖ Adding more bike storage throughout the City.

Outreach

Many of the stakeholders agreed that a **comprehensive public outreach program** should be coupled with program changes to ensure that the public is aware of the parking plan. Participants felt it will be important for the public to understand the reasoning behind rate changes. Educating and informing the public of the benefits of parking management and parking revenue is a stakeholder priority.

The City also maintains a Parking Advisory Committee (PAC). Though the project team did not meet with the PAC exclusively, many of the PAC members attended the first Stakeholder meeting. The PAC's purpose is to advise City Council on policy related issues pertaining to city-operated parking, including on-street and off-street and any associated parking facilities. The PAC makes recommendations on facilities and parking regulations. The Committee's parking jurisdiction comprises much of Downtown

Vancouver, its perimeters being E 4th Plain Blvd. to the North, west to Grant St (extending further to train tracks at W 15th St.), east to Interstate 5, and south to the Columbia River. A map outlined the PAC jurisdiction is provided below.



Source: cityofvancouver.us

Figure 12. PAC Jurisdiction Boundary

The Committee is compiled of seven members who must be a city resident, property owner, business owner, or an officer or partner in a city business. There is an exception that allows for one member to be a downtown business employee. Each member’s term length is four years, which is appointed by the City Council. The group operates under the PAC’s Vision, to support an exceptional parking system for the City of Vancouver. Its Mission is to provide a forum for the participation of the public in the discussion of downtown parking issues and policy development. Internal meetings are scheduled as needed but the Committee will advise and make recommendations to City Council and staff around the principles outlined below:

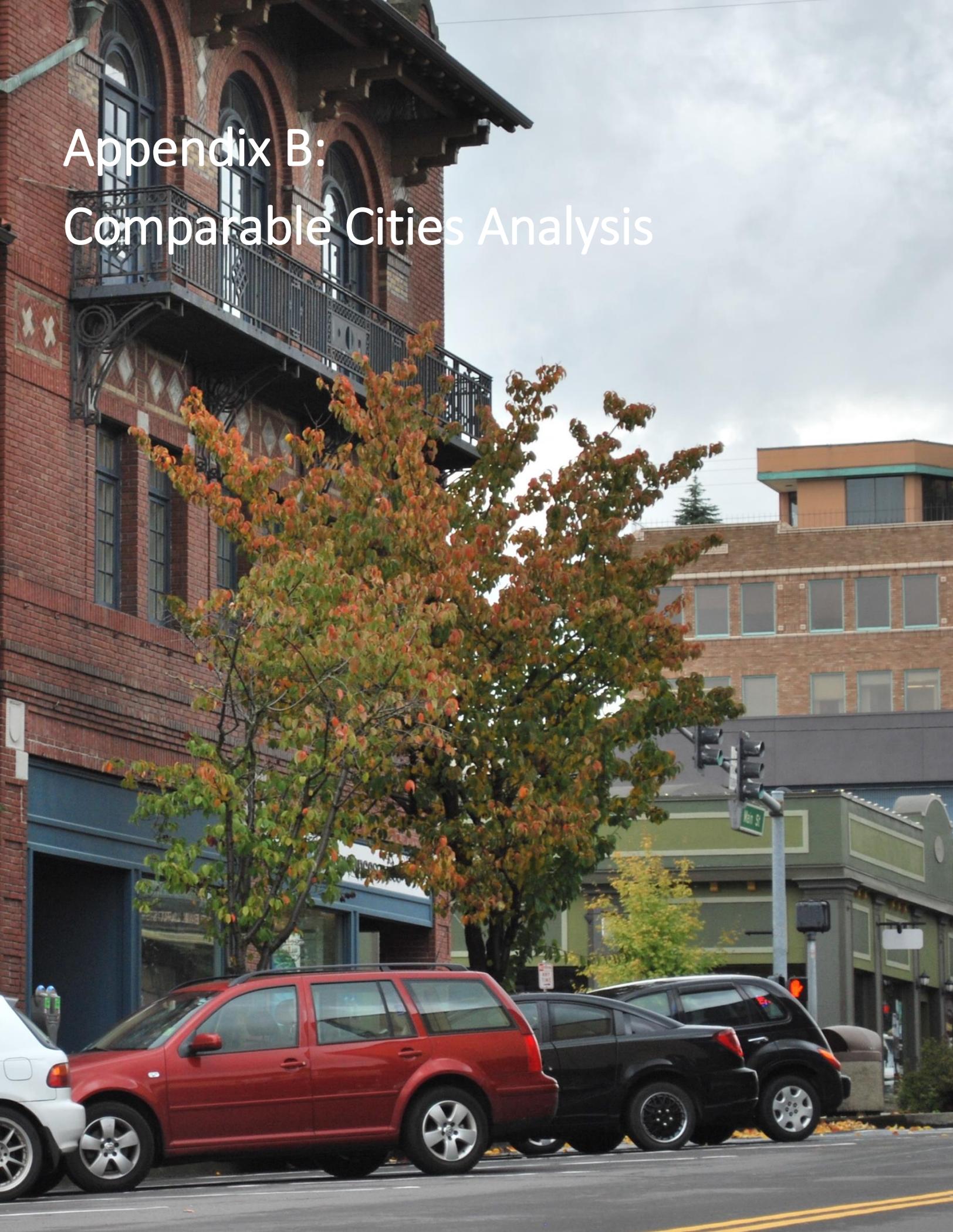
1. Customers seek availability, safety, convenience, security, confidence, and economy
2. Provide customer parking education and information
3. Parking Services staff serve as downtown ambassadors

4. Maximize utilization of municipal parking facilities to ensure full access and cost-effective, efficient operations
5. Manage parking operations based upon the 85% rule to trigger implementation of parking strategies to ensure adequate public parking is available
6. Conduct periodic capacity/utilization analysis of the parking inventory
7. Use a tiered rate system for the sale of monthly passes that recognizes the adverse impact of dedicated reserved parking on the efficiency of the parking supply
8. Provide the most convenient available spaces to customer/visitor access
9. Coordinate parking strategies with the State's Commute Reduction (CTR) Rule to support alternative mode use by customers
10. American's with Disabilities Act (ADA) compliance²³

The City's Parking Advisory Committee will play an important role throughout the Park Efficiency Study. As the City begins to implement improvements to its on and off-street parking operations and also redefines parking related policies and codes, having the support from the PAC will be crucial in the success of these developments. Furthermore, the PACs access as an information channel to the Vancouver community and local businesses is a key to educating these groups on the proposed changes throughout the Downtown.

²³ <http://www.cityofvancouver.us/pac>

Appendix B: Comparable Cities Analysis



1. Introduction

Assessing the parking strategies utilized in various comparable cities to Vancouver is important in developing an effective parking program for the City. Similar cities can offer insight into whether strategies will be feasible and successful in Vancouver. The City, DIXON and key stakeholders discussed possible comparable cities and then narrowed the options to six. Each city was solicited for information about their paid parking, technology and permit programs. The six cities selected for analysis were Austin, TX, Minneapolis, MN, Sacramento, CA, Saint Paul, MN, Spokane, WA, and Tacoma, WA. While these cities are not analogous to Vancouver in every way, their parking programs are considered in this study on a comparative basis because they offer insight into potential parking solutions that may be applied to the City.

1.1 Program Overview

The City of Vancouver currently manages its parking operation through its Parking Services Department that is responsible for much of parking operations within the city. However, recovery of unpaid citations, garage maintenance and armored transport are currently outsourced to a third-party vendor. The City utilizes Loomis for armored car pick-up of parking revenue and the City's Vancouvercenter garage is currently maintained by SP Plus. Through this analysis, it was determined that all comparable cities outsource some portion of their off-street parking operation to private operators or some other third-party vendor.

Staffing

The City of Vancouver maintains four full-time parking enforcement staff comprised of two Parking Enforcement Officers, two Parking Officers, and a single part-time Parking Enforcement Officer. In addition, the Parking Services has one full-time maintenance staff member who performs maintenance and upkeep on paid parking equipment as well as performs routine collections of meter monies. As it relates to the study's comparable cities, the largest city, with a population of 947,890, is the City of Austin, which is nearly five times larger than the City of Vancouver. Austin currently maintains a staff of ten, including eight Parking Enforcement Officers (PEOs), one supervisor and one administrative staff member.

Cities such as Sacramento and Minneapolis, who are larger in population than Vancouver, maintain a much larger work force. The City of Sacramento maintains a parking operation of sixty-two staff members while Minneapolis employs fifty parking related employees. A key distinction, however is that Sacramento and Minneapolis retain a substantial number of part-time staff. For example, Sacramento maintains twelve part-time staff members, a similar full time to part time ratio as Vancouver. The fifty Minneapolis staff members, however, are all part-time employees.

Based on the research, Vancouver reflects comparably with cities of similar population sizes. For example, the City of Tacoma, with a population larger by approximately 30,000 only maintains seven full-time parking staff and only 1,500 metered spaces. However, in Vancouver, the City maintains nearly 1,500 single-space meters plus an additional 50 on-street pay stations and is in the process of doubling that amount. Furthermore, the City is expanding its paid parking footprint into the Uptown District, which will put further strain on and already stretched enforcement staff. Though Tacoma is slightly larger in terms of population, their paid parking technology is smaller but is maintained by more officers than Vancouver.

In addition, two key issues identified in the study’s Initial Findings were the issue of lack of enforcement officers patrolling downtown and that motorists have become familiar with enforcement’s lack of presence. Today, enforcement is spread across a large area and is unable to adequately enforce as consistently as is needed. As a result, motorists are more reluctant to pay for parking, feeling that the risk of receiving a citation will be minimal. Moreover, in the analysis Vancouver is the only city that does not maintain any parking enforcement hours during the weekend. Spokane for example, maintains hours of enforcement that span seven days a week.

Parking Rates and Technology

On-street parking rates vary among comparable cities ranging from \$0.30 - \$6.00 per hour. The City of Sacramento has the highest rate ranging from \$1.75 - \$6.00 per hour. Off-street parking rates vary more widely from city to city. Among cities studied, Austin and Saint Paul have the widest range of off-street hourly parking rates ranging from \$1.00-\$9.00 and \$2.00-\$10.00 per hour, respectively. In comparison, Vancouver has the lowest off-street hourly rates, currently ranging from \$0.50-\$1.75.

All comparable cities offer an off-street daily maximum parking rate, which do not exceed \$25.00 per day. The City of Spokane has one of the cheapest off-street daily maximums, priced between \$3.00-\$10.00 per day, depending on the facility. Conversely, Austin has the most expensive daily maximums, priced from \$18.00-\$25.00 per day. Additionally, Sacramento offers flat rates at many lots throughout downtown that are priced between \$2.00-\$15.00 per day. All cities in this analysis offer lower rates at off-street parking facilities, which is a method of promoting longer-term parking in garages to provide more convenient and short-term parking on-street for customers and visitors.

Vancouver has the least variation in off-street monthly parking rates, ranging from \$67.00-\$100.00 per month. The permit fluctuation in Vancouver is far less than cities such as Austin and Sacramento that charge between \$50.00-\$500.00 and \$45.00-\$400.00 per month, respectively. Among comparable cities, Tacoma has the lowest monthly permit price, beginning at \$20.00 and increasing to \$140.00 per month. Additionally, Saint Paul and Spokane offer free parking at select off-street facilities throughout their downtowns. Table 1 below shows a summary of on- and off-street parking rates from the comparable cities.

Parking Rates			
City	On-Street	Off-Street	Off-Street Monthly
Vancouver	Hourly: \$0.50 - \$1.25	1 Hour: \$0.50 - \$1.25 Daily Max: \$9.00 - \$12.00, \$3.50 (Weekends)	\$67.00 - \$100.00
Austin	Hourly: \$1.00 - \$1.20	1 Hour: \$1.00 - \$9.00 Daily Max: \$18.00 - \$25.00	\$50.00 - \$500.00
Minneapolis	Hourly: \$0.50 - \$2.00	1 Hour: \$1.00 - \$6.00 Daily Max: \$4.00 - \$21.00	\$90.00 - \$265.00
Sacramento	Hourly: \$1.75 - \$6.00	1 Hour: \$2.50 - \$7.00 Flat Rate: \$2.00 - \$15.00 Daily Max: \$10.00 - \$20.00	\$45.00 - \$400.00

Saint Paul	Hourly: \$0.75 - \$2.25	1 Hour: \$2.00 - \$10.00 Daily Max: \$1.50 - \$20.00	\$101.00 - \$150.00
Spokane	Hourly: \$0.40 - \$1.20	1 Hour: \$0.50 - \$5.00 Daily Max: \$3.00 - \$17.00	\$25.00 - \$182.00
Tacoma	Hourly: \$1.00	1 Hour: \$1.00 - \$5.00 Daily Max: \$2.00 - \$15.00, \$2.00 - \$8.00 (Weekend)	\$20.00 - \$140.00

Table 1. Parking Rates Comparison.

In addition to the range of parking rates, the selected cities use a variety of single-space meter and multi-space pay station technology presented below in Table 2 (below). A more detailed explanation of parking rates and technology is outlined in the individual city summaries.

Technology Comparison		
City	Meters	
	Single-Space	Multi-Space
Vancouver	Mackay	Cale & Parkeon
Austin	IPS and POM (State Capitol)	Parkeon
Minneapolis	IPS	Cale
Sacramento	IPS	Parkeon / Amano (PARCS)
Saint Paul	N/A	Cale
Spokane	Duncan	Parkeon (Pilot)
Tacoma	N/A	Parkeon

Table 2. Meter Technology Comparison.

Permits

Comparing Vancouver’s employee and residential permit programs to those in various comparable cities can highlight potential program deficiencies or successes to be considered when the City considers making changes to its programs. This report examines price structures, permit regulations, and program features to better understand how different permit program structures operate. Table 3 shows a comparison between the annual cost for both employee and residential permits in the different comparable cities. While not every city offers the permits on an annual basis, the permit cost was converted to an annual amount for comparison. A more detailed description of the individual city permit programs is covered in Section 1.3.

The downtown permit program in Vancouver allows employees to pay for parking at monthly rates ranging from \$57.00-\$100.00. Employees choosing to participate in carpooling can receive subsidized permits at a rate of \$35.00 per month. A current disadvantage of the Vancouver’s permit program is that applications for permits must be made in person. When adjusting for annual costs Tacoma has the most expensive employee permits ranging from \$360.00-\$2,166. In comparison, Vancouver’s adjusted annual cost would range from \$684.00-\$1,200.00. Interestingly, Austin as the largest city has an adjusted annual cost of \$420.00 for its employee permit. Currently, Saint Paul and Spokane have no employee permit program. Sacramento has an extensive permit program that includes monthly permit rates for garages and surface lots. Garage monthly permit rates range from \$115.00-\$250.00 per month

while surface lot monthly permits range from \$45.00-\$400.00 per month. Furthermore, Sacramento has implemented several discount permit programs including carpool permits, electric vehicle permits, discount employee permits, part-time employee permits, and alternative mode commuter permits.²⁴ Minneapolis offers parking permits starting at \$25.00.

Concerning residential permit programs, most comparable cities do not charge for a permit. Residential permits help ensure that residents close in proximity to high demand parking areas are still able to find parking near their home. There are costs and benefits to either charging or not, and it is important to gauge the community’s response to program parameters. Austin and Saint Paul currently charge for residential permits at an adjusted annual cost of \$180.00. In Minneapolis, the adjusted residential permit cost is \$300.00 annually. Tacoma is currently in the progress of implementing a residential permit program and proposed costing figures are unavailable at this time. Moving forward, the City of Vancouver may want to consider changes to its permit programs, especially as the City continues to grow and in light of the Waterfront Development which is likely to increase traffic to the area. Increased parking rates and permit rates may incentivize those who work in Vancouver or frequent the City often, to consider other alternative forms of transport such as public transit, carpooling, or biking.

Permit Cost Comparison		
City	Employee Permit Program	Residential Permit Program
Vancouver	Monthly Permit: \$57.00-\$100.00 (\$684.00 - \$1,200.00 Annually) Carpool Subsidized Permit: \$35.00 (\$420.00 Annually)	Biannual Permit: \$0
Austin	Monthly Permit: \$35.00 (\$420.00 Annually) Loading Zone Permit: \$0 Musician Loading Permits: \$25.00 (Venue)	Monthly Permit: \$15.00 up to 4 (\$180.00 Annually) Guest/Visitor Pass: \$0 Scratch-off Day Pass: \$1.00 each up to 20 at a time
Minneapolis	Annual Permit: \$0	Annual Permit: \$25.00
Sacramento	Part-Time Employee Permit: \$0.50 per 30 minutes Discounted Employee Permit: \$0.25 per 30 minutes	Two-Year Permits: \$0 Guest Permit (24hr): \$0
Saint Paul	N/A	Annual Permit: \$15.00 (\$180.00 Annually) Guest Permit: \$15.00 (\$180.00 Annually)
Spokane	N/A	Monthly Permit: \$25.00
Tacoma	Monthly Permit: \$30.00 - \$180.00 (\$360.00 - \$2,166.00 Annually)	Program in implementation.

Table 3. Employee Permit Program and Residential Permit Program Cost Comparison

1.2 Cities

Austin, TX

The City of Austin is known for being the Capital of the State of Texas and countless festivals including City Limits and SXSW. As the largest of the comparable cities analyzed with a population of 947,890 covering 298 square miles (US American Community Survey, 2016), Austin has a vibrant downtown and nightlife earning it the moniker of “Live Music Capital of World.”

²⁴ <http://www.cityofsacramento.org/Public-Works/Parking-Services>

In Austin, the City's Parking Enterprise Division manages on-street parking and is responsible for many aspects of parking including meters, enforcement, commercial vehicle loading zones, residential parking permits, musician loading zones and permits. The City does not manage off-street parking lots and garages. Austin has had consistency issues with enforcement throughout the city in the past and recently adopted a parking management plan which has incorporated enforcement improvements.



On-Street

There is a total of 6,405 on-street parking spaces within downtown Austin, 5,309 of which are metered spaces. The City uses IPS and POM single-space meters, the latter located near the State Capital. Parkeon multi-space pay stations are configured for pay and display parking. Like Vancouver, pay and display requires that a receipt is displayed on the vehicle dashboard to confirm a valid parking session. On-street rates range from \$1.00-\$1.20 per hour restricted to 2, 3 and 5-hour time limits. Parking meters are in operation:

Monday and Tuesday	8:00am – 6:00pm
Wednesday to Friday	8:00am – 12:00am
Saturday	11:00am – 12:00am.

The City offers two mobile payment options including ParkX and EasyPark, an in-vehicle parking meter program.

Off-Street

Currently, the City provides off-street parking through a collection of twelve private operator contracts. Within downtown Austin, there are 65,099 public and private off-street spaces, 36% of which are city-owned. Parkeon pay stations and mobile payment options are provided by ParkX and EasyPark as mentioned earlier. Hourly rates range from \$1.00-\$9.00 per hour and daily maximums range from \$18.00-\$25.00. Monthly rates range more considerably from \$50.00-\$500.00 across the city. Free parking is provided after 6pm on Mondays, Tuesdays, Wednesdays, as well as all day on Sundays.

Enforcement & Technology

The City's eight PEOs provide enforcement consistent with the meter hours of operation. Annual citations total 147,638 processed by Brazos, the City's chosen citation processing vendor. Austin's PEOs enforce on foot and do not utilize License Plate Recognition technology (LPR) currently. Instead, PEOs are supplied with Brazos enforcement handhelds and Zebra 4" printers. Today, Austin utilizes CSDC Systems and its AMANDA platform, an enterprise platform for governments that provides permitting, licensing, and compliance programs.

Permits

The City currently operates an employee permit and residential permit parking program. A \$35.00 monthly employee permit is available for the Waller Street Garage. Additionally, Loading Zone permits and Musician Loading permits unique to Austin are also available. Musician Loading permits costing \$25.00 are paid for and requested by venues and allow musicians to unload equipment for 30-minutes in designated zones. Responsibility for retrieving the permit back from musicians lies with the venue.

Annual residential parking permits are available for \$15.00. Applicants can purchase up to four permits per household. Guest and Visitors hang-tag permits are available at no cost, but are limited to two per household. Scratch-off day passes can be purchased throughout the year for \$1.00 each and each eligible Residential Permit Program residence can purchase as many as 20-day passes at one time. Finally, a strong advantage of Austin's Residential Permit Program is that the City allows applicants to apply for permits via a variety of means including in person, on-line, and via mail.

Minneapolis, MN

The larger of Minnesota's Twin Cities, Minneapolis is known for its urban downtown that consists of art, culture, and food for residents and visitors to enjoy. According to the 2016 American Community Survey, Minneapolis has a population of 413,651 covering 53.97 square miles. The city provides excellent transit options including light rail and buses and according to The Minnesota Daily as many as 60% of downtown workers commute by transit helping to relieve some parking demand.



Parking is managed by Public Works - Parking Services. Parking services are responsible for both on-street and off-street parking located in the warehouse, entertainment and business districts in downtown Minneapolis. In relation to other comparable cities studied, Minnesota's Parking Services Staff is comprised entirely of 50 part-time parking employees. There is currently no full-time staff position for citation issuance.

On-Street

There are approximately 8,000 metered-spaces throughout downtown Minneapolis. Single-space and multi-space meters are provided by IPS and Cale, respectively. Multi-space meters are configured for pay-by-space parking which requires that each space is numbered and the transaction is processed using this information and does not require any receipt to be displayed. On-street meter rates range from \$0.50-\$2.00 per hour restricted to 2, 4, 8, and 10-hour time limits. Meters hours across Minneapolis are typically in operation Monday to Saturday from 8:00am-10:00pm, and Monday to Friday from 8:00am or 9:00am-6:00pm depending on location. The City offers mobile payment through Passport and MPLS Parking, a parking smart phone application that provides information relating to available parking and rates.

Off-Street

The City's off-street parking system consists of 17 parking ramps and 7 lots located in the downtown warehouse, entertainment, and business districts. Off-street hourly rates range from \$1.00-\$6.00 for the first hour and daily maximum rates range from \$4.00-\$21.00 for up to 12-hours. Monthly off-street rates vary more widely across parking ramps and lots ranging from \$90.00-\$265.00. Special event rates are available between \$5.00-\$30.00.

Enforcement & Technology

As noted above, the City does not have any full-time PEOs. Part-time enforcement staff are responsible for an annual citation revenue of \$4.5 million. Staff are equipped with Duncan Autocite handhelds with attached printers for issuing citations. Duncan Solutions provide both the citation processing and permit management systems. There is a concern in the city that new handhelds will be required in the future as the current Autocite models have a temperature issue when the weather gets too cold. Enforcement staff have the use of enforcement vehicles, however, despite LPR technology being in use in the city, it is currently not configured for parking enforcement.

Permits

Both a monthly permit parking program and residential permit parking program is currently offered by the city. Monthly permit costs vary by facility but range \$60.00-\$235.00 per month. Annual residential permits including visitor permits, known as Critical Parking Permits are available for \$25.00. The city has identified a number of critical parking zones in which these permits are valid. Licensed drivers are limited to two residential permits and visitor permits are limited to one per dwelling unit. Critical Parking Permits have to be renewed in January regardless of time of purchase, but are offered at pro-rated fees.

Sacramento, CA

Sacramento is the state capital of California and is currently the fastest growing city within the state. The city is home to 495,234 residents and covers 97.9 square miles (US American Community Survey, 2016). Sacramento's growing downtown has numerous shops and restaurants and the popular Old Sacramento State Historic Park, a major tourist attraction.



Parking within Sacramento is managed by the City's Parking Services who is responsible for both on- and off-street parking. No services are outsourced. The City maintains a staff of 50 PEOs and 12 part-time parking staff. Additionally, unique to comparable cities Sacramento offers the ability to pre-book parking for special events online through its SacPark service.

On-Street

Sacramento Parking Services manages 4,000 on-street spaces. IPS smart meters serve many of those spaces. Multi-space Parkeon meters are also in use in select areas of downtown Sacramento configured for pay and display parking. On-street parking rates range from \$1.75-\$6.00 per hour. Locations with colored SacPark branding (Figure 1) allow motorists to extend their parking session at a tier-based rate by either adding money on the meter or via Parkmobile, the City's mobile payment service. On-street meters are in operation Monday to Saturday 8:00am-10:00pm west of 16th Street and Monday to Saturday 8:00am-8:00pm east of 16th Street. Meters are in operation 7-days a week in Old Sacramento from 10:00am-10:00pm.



Figure 2. Designated Tiered-Pricing On-Street Meters

Off-Street

Off-street garages throughout downtown Sacramento are equipped with Amano McGann parking access revenue control (PARC) equipment. As with on-street meters, users have the option of paying for parking with the Parkmobile smartphone application. Hourly rates range from \$2.50-\$7.00. Many off-street facilities have flat rates that range from \$2.00-\$15.00 per day. Daily maximums vary from \$10.00-\$20.00 depending on location. Additionally, evening flat rates are offered from \$5.00-\$25.00 also dependent on location. Special event rates are flat rates ranging from \$13.50-\$15.25 or hourly rates of \$1.75-\$3.00. Special event and other parking rates and programs can be found online at the City’s SacPark website.

Enforcement & Technology

PEOs are equipped with Autocite handhelds. Duncan Solutions provide citation processing management software. Currently, permits are manually processed before being added to the Duncan Solutions management system. Sacramento is one of two comparable cities that has LPR technology in use for timed parking zones. PEOs have the use of 11 enforcement vehicles equipped with LPR technology to aid in enforcement.

Permits

The City of Sacramento has successfully implemented a Discounted Employee Parking Program (DEPP) and a Part-Time Employee Parking Program (P-TEP) in order to offer a low-cost parking solution for downtown employees. In order to qualify for the DEPP, an employee hourly wage must be \$16.00 or less and they must work within the designated program boundaries. DEPP permit holders pay only \$0.25 per half hour in their assigned parking garage. The P-TEP requires that an employee earn less than \$22.00 per hour and work less than 30-hours per week. Similar to DEPP, after providing proof of qualifications, the annually renewed permit is valid in a designated facility and the P-TEP permit pays \$0.50 per half hour and discounted rates are applied upon exiting the garage.

Electronic permits (ePermits) enforced by LPR technology or parking access cards are the City’s chosen method for employee parking permits. Like other cities, Sacramento has difficulty in providing on-street parking for residents. The Residential Parking Permit Program currently covers over 25,000 on-street parking spaces. However, metered on-street spaces do not apply to the program and it is a violation to use a residential parking permit more than three city blocks from the address for which it is issued. Bi-annual permits are available at no cost to residents and are enforced until 10:00pm. Online 24-hour temporary residential permits are also available to those with valid vehicle or visitor permits.

Saint Paul, MN

Forming part of the Twin Cities with its much larger neighbor Minneapolis, Saint Paul is home to 302,398 residents spread out over approximately 52 square miles (US American Community Survey, 2016). As the capital of the State of Minnesota, Saint Paul maintains a strong government presence and is defined by its presence on the banks of the Mississippi River.



Parking is managed in Saint Paul by the City's Public Works Department that supports on-street parking and some off-street parking across the city. Saint Paul has implemented a summer parking program, termed "Park and Play²⁵", a program for validated retail parking from participating retailers. The program is valid at the Lowertown Parking Ramp. Any business is able to participate in the validation program.

On-Street

On-Street parking spaces in Saint Paul are served by Cale multi-space pay stations. Pay stations are configured for pay-by-space parking as in Minneapolis. Payment can also be paid via the Passport mobile payment application. Parking meter rates vary depending on location costing from \$0.75-\$2.25 per hour. Parking meters are enforced Monday to Saturday from 8am-10pm. Time limited paid parking is enforced from 8am-6pm. Paid parking remains in effect until 10pm but after 6pm, there is no time limit, only an hourly rate.

Off-Street

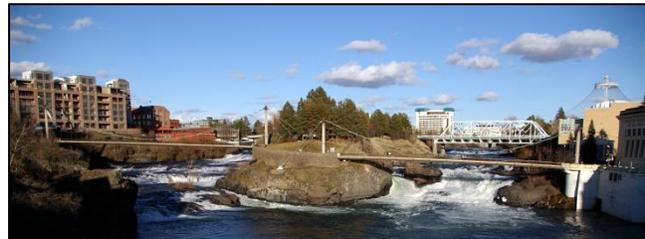
Currently 65% of off-street parking is owned and operated privately. Allied Parking is the largest operator of off-street parking and there is a total of 26,994 off-street spaces within the city. Hourly rates start from \$2.00-\$10.00 for the first hour with daily maximums of \$1.50-\$20.00. Evening rates are relatively inexpensive costing \$1.00-\$6.00. Monthly and special event rates range from \$101.00-\$150.00 and \$3.00-\$20.00, respectively.

Permits

The City of Saint Paul is one of two comparable cities to not offer an employee parking permit program. Currently, the City is in the process of reviewing its residential parking permit program. Presently, annual residential parking permits are available for \$15.00 to residents who reside in permit areas where vehicles are subject to posted parking regulations. Guest and temporary residential permits are also available for \$15.00.

Spokane, WA

The City of Spokane is located in eastern Washington, near the Idaho border. Nicknamed the "Lilac City" the city is home to 215,973 home residents covering approximately 59 square miles (US American Community Survey, 2016). The City is famous for the Spokane Falls. The Spokane River plays an important role in



²⁵ <https://www.stpaul.gov/departments/planning-economic-development/parking-services>

the City and the Riverfront Park that houses the US Pavilion Tent during Expo '74 and a section of the Centennial Trail has been key to the City's redevelopment efforts.

Parking is managed in Spokane by Code Enforcement, Neighborhood Services, and Parking Services. The City is the sole operator of both on- and off-street parking, including meter maintenance and collections, and has a staff of fifteen including fourteen PEOs and one temporary/seasonal position. The City has also invested in rolling out the "ParkSimple" brand focused on making parking simpler for users eliminating the need for paying with cash. Finally, a major issue in Spokane is its use of multiple vendors supporting both hardware and software. The City is currently working toward a long-term integrated strategy for parking management of systems, technology, and hardware.

On-Street

There is a total of 3,000 on-street spaces located within the City of Spokane of which 800 are metered spaces. Duncan Solutions is the City's single-space meter vendor. At this moment, a pilot project is using Parkeon multi-space meters and the Passport mobile payment application is being rolled out in the city. Meter rates range from \$0.40-\$1.20 hour and the City's time limited meters include 2-hour, 4-hour and all-day options. Meters are in operation Monday to Saturday from 8:00am-7:00pm.

Off-Street

Parkeons are the pay stations in use across city lots and garages in Spokane. The Parkeon equipment is outfitted with bill note acceptors, meaning they accept cash. Currently, mobile payments are not enabled as the off-street parking is not integrated with the City's on-street parking program. Off-street hourly rates range \$0.50-\$5.00 with daily maximums from \$3.00-\$17.00. Monthly rates start as low as \$25.00 increasing to \$182.00 depending on location and special event rates range from \$5.00-\$20.00. Free parking is available at many lots outside of the downtown core. The City has also instituted the Premier Pass Validation program organized by the Business Improvement District (BID). This program has been implemented for Downtown businesses looking for a method to thank customers for their business. The program allows businesses to pay for up to two hours of their customer's parking time at participating garages. Businesses supply customers with validated coupons that can be used at participating Premier Pass parking facilities.

Enforcement & Technology

Parking Enforcement Staff are equipped with Motorola MC75 enforcement handhelds and Zebra MZ320 printers. Staff work shifts across 7-days a week from 7:00am-12:00am. Annual citations are approximately 60,000 accounting for \$1.5 million in annual revenue. Duncan Solutions is the City's citation processing management system. Currently, parking permits are issued by the Building & Planning Department using Accela.

Spokane currently utilizes LPR technology via the Genetec AutoVu equipment. LPR is utilized for scofflaw enforcement. In 2014 the City had reached upwards of \$1 million in unpaid parking fines. Despite having a fair amount of technology at its disposal a major concern for Spokane is lack of integration between its permit, LPR and mobile payment systems.

Permits

The City of Spokane currently does not operate an employee parking permit program. A monthly residential permit program is in operation that is enforced all hours. This permit is for use at all-day meters for residents in downtown in lieu of payment costing \$25.00/month.

Tacoma, WA

The City of Tacoma with a population of 211,277 and land area of 49.7 square miles is the closest city in terms of distance and population to the City of Vancouver in this analysis (US American Community Survey, 2016). The City is located in close proximity to Seattle and is home to the Seattle-Tacoma International Airport.



The City of Tacoma's parking program manages on-street and off-street parking and maintains a workforce of seven full-time employees. Off-street parking services are contracted out to private parking operators.

On-Street

There is a total of 4,500 on-street parking spaces within the City of Tacoma of which 1,500 are metered. Tacoma utilizes Parkeon pay and display multi-space pay stations. Meter rates are \$1.00 per hour and restricted to 1 ½ hour and 2-hour time limits. Meters are in operation Monday to Saturday 8:00am-6:00pm extended to 8:00pm around the University of Washington, Tacoma.

Off-Street

The off-street parking system has a total of approximately 2,550 parking spaces and includes seven facilities:

- A Street Garage
- Carlton Center Building & Garage
- Convention Center Garage
- International Museum of Glass Garage
- Municipal Garage and Lot
- Park Plaza North Garage
- Pacific Plaza Garage

The City contracts with Republic Parking Northwest to provide daily operational oversight of the off-street parking system. Off street hourly rates range from \$1.00-\$5.00 per hour. Daily maximum rates range from \$2.00-\$15.00 and \$2.00-\$8.00 on weekends. Evening parking rates range from \$2.00-\$10.00 based on location. Finally, monthly rates range from \$20.00-\$14.00. The City does not provide special event parking rates.

Enforcement & Technology

The City of Tacoma equips its Parking Enforcement Staff with Panasonic Toughbook enforcement handhelds. Citation processing and permit management utilize Gtechna software. As of now, the City has no LPR technology or enforcement vehicles but is on the path to implementing LPR technology in the near future.

Permits

The City of Tacoma operates an employee monthly parking permit program in off-street facilities throughout the city. Employee permits range from \$30.00-\$180.56. The City is in the process of rolling

out a new residential parking permit program and permit zones are not currently delineated. Details are limited at this time; however, it is a proposed annual permit program with proposed enforcement hours of 8:00am-6:00pm.