

2014

City of Kirkland, WA
Assessment of Downtown Parking
Supply/Capacity, Technology and Solutions

DRAFT FINAL REPORT [v.5]



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I. Introduction and Summary of Options

The issue of parking and its availability is a long standing issue in Downtown Kirkland. Anecdotal and statistical information has been gathered over the years that support the perception that (a) parking supply in Kirkland is full for sustained periods of time throughout the week and (b) parking management could be improved to help meet the growing demand for parking in the downtown. Adding supply and improving management in order to increase parking availability are the main two goals of the options proposed in this study. Increases in supply and changes to management could also improve the ease of parking downtown. This report offers options for such changes within the areas highlighted in **Figure A**.

Figure A
Project Study Area



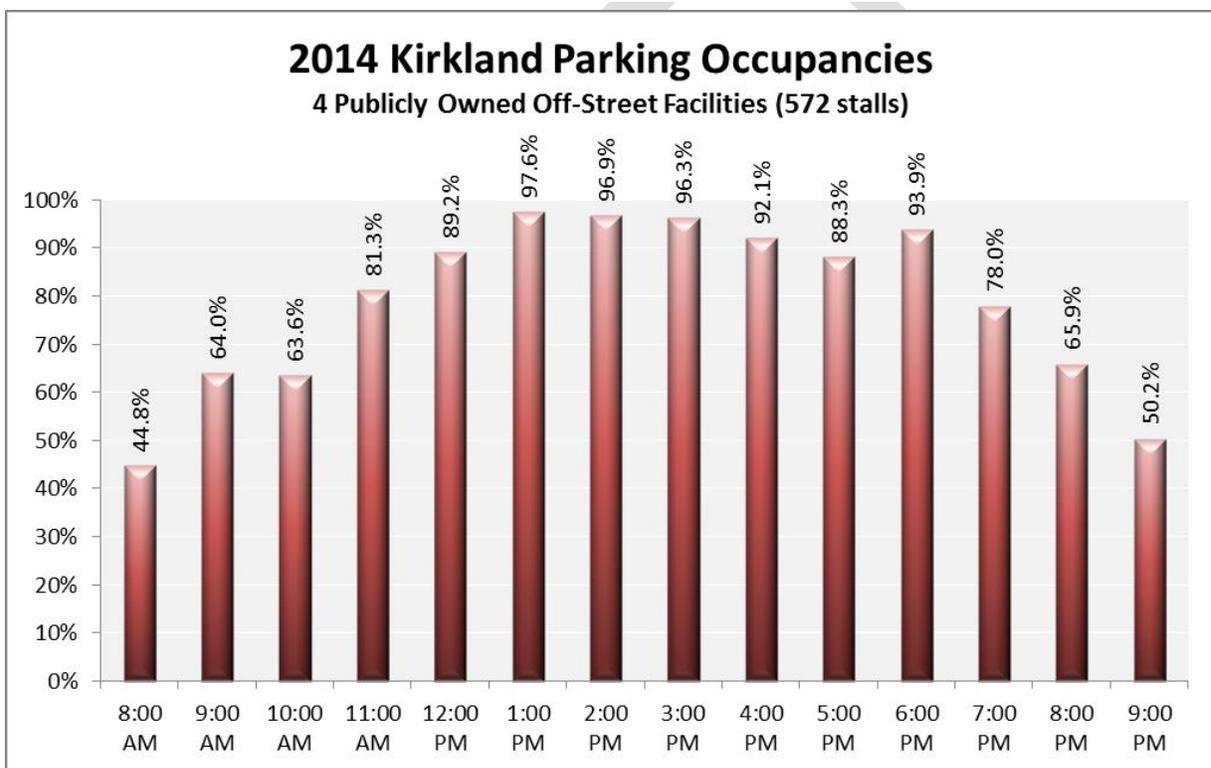
The City of Kirkland retained Rick Williams Consulting (RWC) to assess existing parking conditions and examine potential measures and strategies that could be implemented to improve access to parking, on-street and off-street. RWC interviewed staff to understand and assess parking services currently delivered by the City of Kirkland as perceived and recommended by City staff. Public comment/involvement must be considered before any options are implemented and is to be conducted by the City after this technical work is completed.

Based on these interviews, RWC completed separate assessments that were incorporated into detailed technical memoranda.¹ These assessments included evaluations of:

- Occupancy and utilization in sampled sites
- Options to maximize opportunity in existing supplies of parking
- Technology and wayfinding

Overall, these assessments found that the existing supply is routinely near capacity (see **Figure B**) and opportunities to further maximize existing supplies of parking are limited. New supply is an option that could be pursued as well, with a new surface parking site south of City Hall a possibility.

Figure B
2014 Sampled Parking Occupancies – City Facilities



A number of options are identified within this report in the areas of both supply and operations. They are categorized as either near or longer term solutions, with the near term solutions being less costly at the outset and “doable” within the context of City capacity.

We believe implementation of these options would result in more effective management of parking capacity. It would also result in improvements to the occupancy and user convenience problems that have been associated with downtown Kirkland parking for many years.

¹ See appendices.

Use of new technologies can bring efficiencies to the system, but should be combined with or preceded by a commitment to branding, marketing and communications that exceed current levels of staff time, management and budget that are devoted to parking.

Pricing parking can help realize more efficient use of new and existing supply. Though often difficult, discussion of paid parking and expanding its application in Kirkland should take place within the context of desired outcomes.

All the options come with cost and require a focused commitment to parking management that extends beyond current levels of effort. Tables 1 and 2 below list the options sorted by possible general implementation timeframes and by the categories of supply and operations; more detailed discussion of each phase and strategy is presented in Sections III and IV.

For planning purposes, initial capital costs are estimated levels of low, medium or high. Examples of Low cost items (\$50,000 or less) include a moderate amount of striping or signing, medium cost items (\$50,000 to \$500,000) require substantial signing or other capital, and high cost items (more than \$500,000) usually involve complicated infrastructure.

These proposed options should be viewed as a menu, not a final recommendation. It is expected that strategies and costs would likely be refined, modified, and prioritized through the City's internal plan review and approval processes, and possibly further adapted as implementation unfolds. In some cases, implementation would be complex, requiring an ongoing level of commitment, coordination, and resources that goes beyond what is currently in place. Public comment and involvement will also be necessary before choosing a final course.

Table 1. Summary of Supply options by time of implementation

| Time | Option | Purpose | Relation to other Options | Cost |
|-------------|---|--|--|------------------|
| Near term | 1(A). Surface Lot South of City Hall. Finalize planning, costing and decision to implement new surface lot south of City Hall | Provide New parking supply. Also provides options for valet programs | May have to combine with paid employee parking elsewhere to generate demand. | Low |
| | 2. (A) Add time limited parking on Lake Ave W Up to 45 stalls. Current permit zone becomes time limited stalls except by permit | Increase supply by allowing use of existing underutilized stalls. Targeted at providing customer parking | Increases supply for shorter term parking | Low |
| | 2 (B) Lake Ave W Builds on option A, sell monthly leases on stalls that are not utilized in option A. | Increase supply for longer term parking. | Number of stalls is based on performance of option A | Low |
| | 3. Add parking on the south side of Waverly way. Up to 25 stalls. | Increase supply for longer term parking. | May have to combine with paid employee (long term) parking elsewhere to generate demand. | Low |
| Longer term | 1(B). New surface lot south of City Hall. Construction of 144 – 166 stall surface parking facility for public parking. | Increase supply for employees and possible valet use. | May require pay parking in other areas to create demand. | High \$2 million |
| | 4. Investigate/implement agreements for shared use with existing or new private parking areas. Could be time-of-day specific. | Increase parking supply. | Requires substantial funding | High |

Table 2: Summary of Operations options by time of implementation

| Time | Option | Purpose | Relation to other Options | Cost |
|-------------|--|---|---|--------|
| Near term | 5 (A). Consider Expanding Pay parking to more hours and more locations. These could include on-street, off-street, employee parking, etc. | Understand how pay parking could result in better control of demand. Simplify rules, increase opportunities for customer parking. | Coordinate with supply options to increase the time when parking is utilized at 85% or less. | Low |
| | 6. Marketing & Communications. Create on-going program of marketing and communicating parking system benefits to users requires budget. Includes creating branding, logo, and “identity” and wayfinding with static signing. | Better utilize existing capacity by more clearly conveying parking locations and improving the perception of parking system. | Ties to all other options. | High |
| | 7. Improve operations at the Library Garage Open permit only stalls to all users after 5:00. Enhance cleanliness, security and improve attractiveness of facilities. | Supports increased use of existing supply. Make | Supports marketing of parking brand. | Medium |
| | 8. Install in-lane counters at all lots | Provide data to facilitate decision making and provide platform for dynamic signage. | Needed for dynamic signing. Supports existing supply and marketing of existing brand. Data allows better decisions on other options.. | Medium |
| Longer term | 5 (B). Pricing Implementation of pricing in option 5 (B). | Influence use of supply through pricing | Coordinate with supply based options. | Medium |
| | 6 (B). Wayfinding: Real time dynamic signage to communicate both stall availability and location. Includes installation of on-street sensors. | Better manage existing supply by improving data available to customers | Requires counters and integration with marketing and communications. Off-street first on-street later. | High |
| | 9. Apps that provides information to users on parking supply; directs users to available parking. Could also include pay-by-phone opportunities. | Better manage existing supply by improving data available to customers | Requires data, therefore would be off-street first, on-street later. Linked to Phase 1 strategies and increase in parking supply. On-street would require relatively expensive sensors. | Medium |

II. Existing conditions

In July 2014, RWC sampled parking occupancies in various locations within the downtown. The sample was comprised of 1,126 stalls. **Table 1** provides a breakout of the sample sites and **Figure A** (page 1) maps their location.

Table 1
Parking Facilities Surveyed

| On-Street Facilities | Number of Stalls |
|---|-------------------------|
| Market Street – East side (between Central & 4 th Ave) | 14 |
| Market Street – West side (between Central & 4 th Ave) | 15 |
| Waverly – North side (between Market & 2 nd St W) | 25 |
| Lake Avenue W – North side (from Market to 145' west of Market along Lake Ave W) | 7 |
| <i>On-Street Subtotal</i> | 61 |
| Off-Street Facilities | Number of Stalls |
| Market/Lakeshore | 17 |
| Lakefront | 99 |
| Lake/Central | 54 |
| Park and Main (Antique Mall) | 88 |
| Church Lot | 71 |
| Merrill Gardens | 33 |
| Accessory | 35 |
| Pay to Park | 18 |
| MG service/employee vehicles | |
| 2-Hour public parking | 15 |
| The 101 | |
| Bank of America | 41 |
| Pay to Park | 14 |
| Permit Parking | 13 |
| 1 st Avenue S surface lot | 97 |
| <i>Off-Street Subtotal</i> | 1,065 |
| Total On & Off-Street Stalls Surveyed | 1,126 |

Based on the sampling of parking supply occupancy conducted by RWC in July 2014, it is apparent that parking utilization in the downtown is at a very high level. This is reflected in numerous locations/areas where occupancies routinely exceed the industry threshold of 85%; in many cases reaching 100%. This finding is consistent with previous parking studies. Both the on and off-street supplies of parking are highly occupied for significant periods of the operating day. Employees often times use stalls that would be better used by customers, increasing occupancy and monopolizing prime parking for retail businesses.

Opportunities to create significant new options within existing supplies will be small scale and must be strategically linked to other options and potentially increased emphasis on non-auto modes. However, the data does allow for better coordination of areas where parking “surpluses” exist.

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III. Supply options

Options summarized below would increase the net supply of parking available in the downtown. Options range from a new surface lot to adjustments in on-street supply to potential arrangements/partnerships with the private sector.

As measures are implemented to better manage and leverage capacity within the existing supply of parking, new parking supply could be added through the construction of new surface lot(s) or parking garage(s). The cost of structured parking can range from \$35,000 - \$50,000 or more per stall, depending on factors like location, above/below grade, cost of land, soil condition and design features.² Given that parking is currently provided free of charge, it is not likely that structured parking would be financially feasible in the foreseeable future without significant public discussion of multiple funding sources and/or marked changes in how parking is provided.

However, the pursuit of additional parking on a surface facility could come at a lower cost and, therefore, could be a cost effective strategy to pursue in the near term as (a) an interim approach to mitigate current constraints/deficits until a future structure can be built, and (b) leverage other options outlined in this report.

Option 1 Surface Lot South of City Hall

The City owns a property adjacent to the existing City Hall site at 123 Fifth Avenue. This property could be developed into a surface parking facility that could provide between 146 and 166 parking stalls. **Figure C** provides an aerial illustration of the site.

The engineering firm W.H. Pacific was retained to develop a cost analysis related to construction of a surface parking facility at this site. Based on a number of factors related to lot coverage, storm drainage, filtration and detention and contingency costs, W.H. Pacific estimates the cost to construct a lot at the City Hall site to be in the range of \$1.4 million to \$2.3 million.

If a surface parking facility were developed on the City Hall property, its location on a hill above downtown would not likely be attractive to customer/visitors. However, it could be effectively managed as (a) a downtown employee facility provided at a lower rate than employee parking in the library garage and/or (b) a restaurant valet facility; which could be particularly attractive for uses on evenings and weekends. It should not be used by employees working at City Hall.

² Surface lot parking is estimated at \$13,000 per stall. Garage parking is estimated at \$40,000 per stall (above grade).

Timing

(A) Near term: Refine cost estimates related to creation of a surface parking facility at the City Hall site and determine whether or not to proceed with development of this property as surface parking.

Cost: Medium

(B) Longer term: Design and construct surface parking lot (144 – 166 stalls) and coordinate operation/management of facility to provide employee and/or valet parking opportunities.

Cost: High (\$1.4 to \$2.3 million)

Figure C
City Hall Parking Area – Potential Parking Site



Option 2 Lake Avenue West

This area is currently “permit only” for residential users. These 45 stalls are largely unused during normal hours of enforcement (9:00 AM – 7:00 PM). Additional supply could be made available if these stall were time limited (e.g., 2 hours) “except by permit.” This would allow customers of downtown to use Lake Avenue West. Note that time limits could also be implemented at the eastern end of Lake Avenue W,

which is not currently Permit Only. Public comment and involvement will be necessary before making final decisions.

Depending on how customers use this space, some of it could be leased to employees. For instance, if after implementing time limits it turned out that stalls were still regularly unoccupied, a appropriate number of permits for these stalls could be made available for employees. The number of permits offered would depend on the number of stalls available.

Timing Near term:

(A) Time limit “except by permit” up to 45 existing stalls. Keep permit system for residential users making them exempt from time limits.

Cost: Low

(B) If capacity remains after (A), evaluate selling a limited number of employee permits on Lake Avenue West to increase supply for downtown employees. This would exempt authorized employee permits from the time limits during hours of enforcement.

Cost: Low

Option 3 Waverly Way

Add parking on the south side of Waverly Way (along Heritage Park). The potential impacts to bicycle traffic should be evaluated and considered prior to a final decision on this option. There is potential here for 25 new stalls that could be managed similarly to the Option 2 strategy for Lake Avenue West. Note that Waverly Way is not currently designated as Permit Only. As with Lake Avenue West, public comment and involvement will also be necessary before choosing a final course.

Timing: This option could be completed in the near term.

Cost: Low

To encourage use of underutilized parking on Lake Avenue W and Waverly Way, Options 2 and 3 may need to be considered in the context of potential pricing scenarios for the downtown, which would create a cost incentive for use of these stalls/permits as opposed to higher pricing in more “premium” stalls/permits downtown.

Option 4 Shared use with private parking

This option consists of investigating and implementing agreement for the use of existing or new parking with privately owned stalls. Data collected in the sampling exercise suggests there are some opportunities to better utilize parking supplies at Merrill Gardens and The 101. This would, of course, require input and agreement from private owners. Engaging in conversations to consider more comprehensive shared use strategies/agreements to move downtown employees into available private parking supplies will need to

be pursued. In the 2005-2006 timeframe the City leased additional supply from the lot in the northwest corner of Central Way and Third Street. This supply was not well used.

Partnering with developers to obtain new public supply built as part of redevelopment is an idea that has been considered for some time. The Park and Main site (AKA former Antique Mall) may be a candidate site for such partnership since it is currently for sale.

Timing: This option is recommended for the longer term but will depend on timing of opportunities.

Cost: High

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IV. OPERATIONS

A more strategic approach to off-street parking management can lead to better efficiencies with existing supply. However, investments in new parking technologies and programs can be costly. Therefore it is important for Kirkland to consider strategies that are most appropriate to its current level of services and resources. It is also important to recognize that, downtown Kirkland has significant parking problems that limit access to parking and affect both near-term and future vitality. Addressing these issues will require changes and/or investments that exceed status quo approaches and resources.

Option 5 Pay Parking

Given Kirkland's very high parking demand, moving to a more comprehensive system of paid parking on- and off-street would maximize the availability of parking stalls for users of the downtown and could be a tool to influence demand. For example, paid on-street parking would be effective in moving employees - who may be parking on-street in customer areas – into other areas where capacity can be enhanced or added; or into alternative modes.

Although not necessarily a reason for implementing pay parking, pricing would provide revenues that could be used to re-invest in improving downtown parking (e.g., new parking, infrastructure, communications systems and/or encourage alternative modes as a way to mitigate current parking constraints and deficits). With any pay parking implementation, it is critical that the uses of revenue are clearly defined and agreed to by a wide range of stakeholders.

The City could explore opportunities to (a) strategically expand hours during which parking is pay-to-park at existing metered stalls, (b) expand the total number of paid parking stalls in areas of high occupancy and/or (c) initiate a pilot program of on-street pay stations to test their effectiveness in influencing demand and minimizing constraints.

Exploring expanded hours for pricing in City lots makes sense because there is little difference in occupancies when parking is free (before 5:00 PM) or when pay-to-park is in effect (generally after 5:00 PM). Implementing pricing would aid in freeing up spaces and moving users to less used spaces; particularly when integrated with Phase 1 strategies.

Consideration of charging for permits in the Library Garage is another pay parking strategy. Occupancies in permit stalls in the Library Garage generally exceed 90% and with the current economic up-turn these number are increasing. This suggests that there is a rate of demand that warrants a parking charge. Implementing rates at this facility would be coordinated with options that add new capacity and would complement varied rate/pricing to encourage employees into available (and possibly more remote) supply.

Timing: Opportunities for expanding pay parking should be studied in the near term. In the longer term, it should be implemented in coordination with complementary options.

Cost: Low for expanding hours at existing pay facilities, medium to high for purchasing pay stations and expanding pay parking to other locations.

Option 6 Branding and Marketing/Communications

Most of the strategies and technologies recommended in this report require a sustained level of support to communicate them to the public and ensure their success. Investments in branding, facility identification and presentation and signage are intended to increase awareness of a parking system by customers/visitors within an integrated parking inventory. To this end, any “new technologies” implemented in Kirkland need to be integrated into a sustained marketing and communications effort for the parking system.

A successful program for marketing and communicating parking to the public maximizes the supply of parking built and establishes a resource that benefits area businesses (particularly those that have meaningful customer bases). Through marketing and communications, customers identify with a *product*, learn how to use it and what to expect. This reduces confusion and frustration and increases customer satisfaction.

Developing a parking system “Brand” is a trademark of “Best in Class” parking programs. The brand should quickly and uniquely capture a customer’s attention and communicate a positive image that distinguishes the parking product from the rest of the market. The brand is more than just a logo - a community will know it has the right brand when the brand promotes the image the community wants people to have of the parking system (e.g., for customers, clean/safe, best in market, etc.).

The 2002 *Downtown Kirkland Parking Study and Plan* specifically called for the creation of “a uniform signage package that incorporates a unique logo and color scheme for public parking facilities to establish a sense of recognition, identity and customer orientation for users of the downtown parking system.”³ A simple system was developed in 2004 but the “brand” is not distinct (see photo to the right) and marketing and communications of the brand and parking system was not pursued.



Kirkland: Existing Parking “Brand”

Brand development can range in cost from \$10,000 - \$20,000, which would be the cost for designing a logo. Additional costs would be incurred as the brand is integrated into signage, collateral materials, web-sites and other communications.

Marketing and communications budgets vary by city and by size and complexity of the affected parking systems. Nonetheless, a commitment to a stable budget of funding for communicating the system will be required. Establish a marketing/communications budget and invest in on-going marketing and

³ City of Kirkland, *Downtown Parking Study and Plan* (October 2002), page 63.

communications efforts to support the Kirkland parking brand and raise awareness and use of parking assets.

- (A) Pursue a coordinated branding strategy for incorporation into a larger marketing and communications package for customer/visitor parking downtown. At present there is no unifying relationship between City owned/controlled parking assets. Branding will serve as the foundation piece for establishing a true parking system. Branding also provides a basis for launching supporting programs related to signage, wayfinding and coordinated marketing and communications with customers/users. Branding and marketing will get “the right car in the right place.”

Timing: Near term

Cost: Low to medium to create a brand and initial market/communications plan with an associated annual budget to sustain it.

- (B) Create a consistent visual standard “package” for facility entry areas that represents the Kirkland parking brand (exterior signage, coordinated message boards, etc.). This standard should then be applied to each City owned or controlled parking facility coupled with a format that labels the parking facilities by address.

Timing: Near term and subsequent to (A) above.

Cost: Medium

Option 7 Wayfinding/Dynamic Signage and Sensors

Parking guidance systems help drivers find their parking destinations more efficiently through the use of dynamic messaging street signs. Many cities now use dynamic signage within the public rights-of-way and on-site as a means to inform and direct customers to available parking. Showing drivers the right way to turn to find parking more quickly helps all drivers on the road find their way faster. That means reduced congestion, frustration, carbon emissions, and drive times. It also means happier drivers, and a greener city. It is also important that dynamic wayfinding be used where there is a reasonable assurance of available supply. As such, this is recommended as a longer term strategy, linked to efforts to increase capacity.

Dynamic signage is linked to occupancy information at individual or multiple parking sites (usually collected through loop detector/parking counter systems (see discussion of sensors below). Information is displayed on-site through reader boards/blade signs at the building entry plazas and/or at remote locations to downtown, usually major roadway entry portals. When parking stall availability changes, so do the signs. The signs provide guidance information (an address or facility name) and information on real time stall availability.



In-road Wayfinding: Portland, OR & San Jose CA

Programs that are the most successful tie into a parking “brand” (see Option 6 above). The brand is incorporated into both the on-site signage and the rights-of-way signage. This provides customers a visual cue that translates from their first encounter in the roadway to being able to conveniently identify a parking location. Such systems have been extremely effective both from a traffic/congestion point of view and in terms of stall management. Customers find the systems to be highly useful and “customer friendly.”

The City currently lacks the ability to track use of its off-street facilities so it is difficult to evaluate management strategies. Also, lack of usage data makes it difficult to communicate information to users in a manner that facilitates their decision-making and/or gives guidance on how to use City parking assets. Wireless counter systems (on and off- street) can generate a wealth of data, which can facilitate decision-making related to rates/demand and communicate beneficial information to users. The traditional off-street entry/exit lane counters are cost effective and have a track record of reliability and success. In-stall sensors (see recommendation 10 below) are still new to the market and relatively costly.

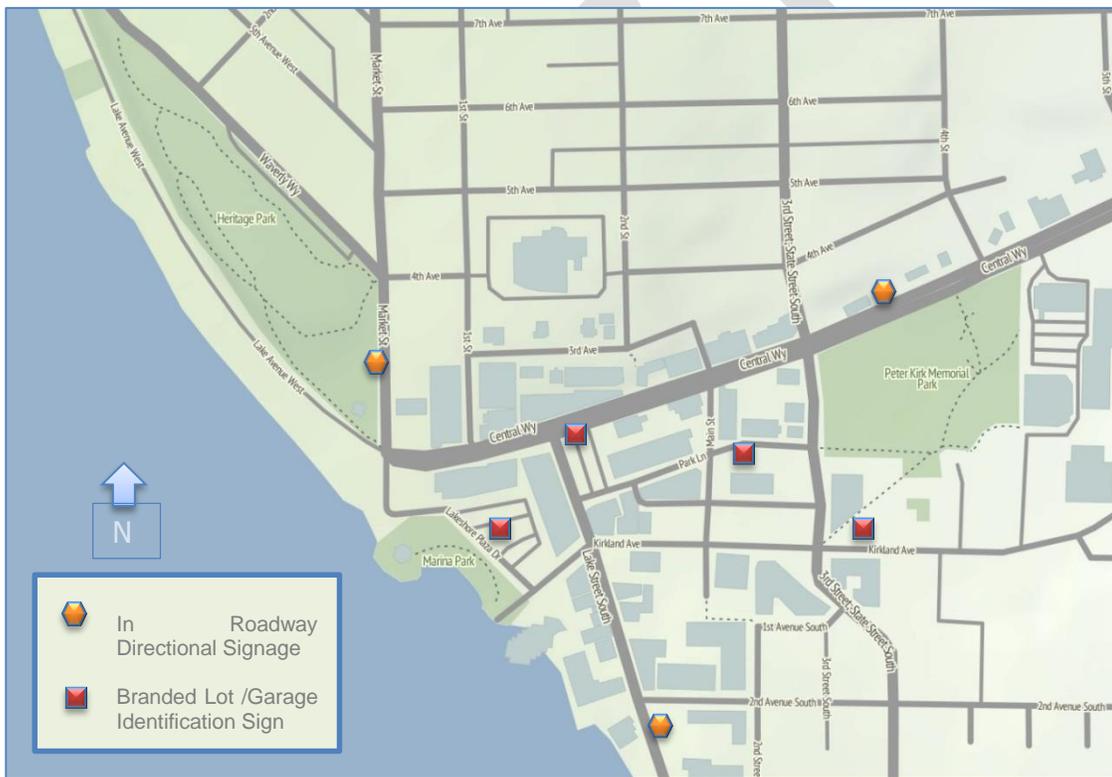
Install in-lane lot counter systems where feasible at City owned or controlled lots as a reasonable and cost effective strategy for (a) collecting real time data at City off-street lots and (b) creating a foundation for linking occupancy information to exterior signage or in road guidance systems.

Vendors now offer sensors integrated into smart -credit card-capable meters; but most current applications use stand-alone sensors embedded in the street (or less frequently, curbside) and linked to either multi-space pay-by-space meters, single-space credit card-capable meters and/or on-site and in-roadway informational and guidance signage. The leading firms provide robust back-end software that can take information from pay-by-space meters (and also pay-by-phone applications) to provide “real time” parking metrics data and analysis. These systems also have significant “directed enforcement” applications for on-street parking with interfaces to most major handheld vendors using open systems. This feature can improve the effectiveness of parking enforcement, reducing overall enforcement costs and/or increasing citation efficiency.

It should be recognized that much of the new sensor technology is still evolving and has not been fully proven in large-scale environments; for reliability and return on investment. Issues that are still being addressed include sensor accuracy, detection and delays in transmission of data, interference from other electrical sources, and the ability to handle all types of spaces (parallel, diagonal, and perpendicular) and all types of vehicles (motorcycles, oversized trucks, etc.). At present, the greatest obstacle to wide adoption of sensors is cost. Sensors have both substantial upfront and ongoing per-space costs.

Figure D illustrates where on-site and in-roadway signage could be placed in the downtown to coordinate and consistently communicate parking opportunities to users. The layout envisions three (3) in roadway signs and four (4) on site signs.

Figure D
Potential Lay Out of Coordinated Downtown Parking Signage Package



Timing:

Near Term: Loop detectors for data gathering

Longer term: Dynamic wayfinding signs linked to loops or possibly to other counter systems.

Cost: Medium to high

Option 8 Improve operations at the library

The implementation of a comprehensive maintenance program is critical to the on-going integrity of a facility and as a means to optimize the return on investment made by the City. Anticipating and providing for necessary maintenance and repair for any facility is an essential step (and best practice) in realizing a desired service life and maximizing the attractiveness of the site as a place to park.

Whether maintenance is provided by the City or through third party contracts, there are industry best practice standards that should be met. Many of these standards (cleanliness, lighting, safety/security and operating integrity) are no different for a parking garage than they would be the overall physical quality of any other public space.⁴

Currently, employee stalls are specifically designated for employee use at the Library Garage. After 5:00 PM these stalls are underutilized and visitors avoid them (constraining visitor stalls) because of the signage. If signage “blended” stall designations in the evenings (after 5:00 PM) for visitor use at the Library Garage; this would allow the stall to operate as a fully general use garage at night, when permit use drops and visitor demand increases. This could be accomplished through better signage and guidance systems within the garage.

Ensuring that facility conditions at public parking facilities are of the highest quality is a high priority. Ownership of public parking facilities is based upon a premise that these assets should be maintained in a manner that distinguishes them as premier locations for users (visitors, residents and employees) to park when using the downtown. Public parking facilities should be managed to the highest standard of quality, both as a reflection of the City of Kirkland and as an example of industry best practices. To this end, public lots and garages should have janitorial and maintenance guidelines that are clear, measurable and results oriented.

Timing: Near term, depending on funding

Cost: Signing changes are low cost, on-going high quality maintenance is medium cost and requires annual funding.

Option 9 Parking Applications apps including pay by phone

Another major “smart parking” innovation is the increase in public and private sector applications intended to make more parking data available to the parking public and offer new services to parkers.

⁴ See for instance the Building Owners and Managers Association (BOMA) Standards (<http://www.boma.org/standards/Pages/default.aspx>)

Made possible by the tremendous increase in smartphone usage and more recently the iPad and similar devices, all of which incorporate GPS capability, these applications can gather information about a parker's whereabouts while also offering differing levels of information about the environment in which the vehicle is located or to which it is heading.

Pay-by-phone as a parking payment option is just as it sounds – once motorists park their vehicles, they call a phone number usually located on a sign or the parking meter, enter their space or license plate number, and then hang up. Smartphones can link to an app that doesn't require a



phone call. An initial, one-time setup to link a credit card number with a phone number is required. This technology has great potential for making parking easier and providing a significant number of customer benefits in both on- and off-street parking formats. Market data shows an increasing interest in the availability of this type of technology by the growing base of younger and more “tech savvy” visitor/shopper.

Signage and communications systems would need to be implemented or augmented to ensure that customers are aware that the pay-by-phone is an option, as well as to establish start-up accounts. Additional equipment for enforcement personnel would also need to be evaluated.

Recent research conducted by CDM Smith Consultants in San Francisco indicates that pay-by-phone programs cost of \$25 - \$50 per associated stall to set up. Additional annual support costs of \$50 - \$75 per stall would accrue to the City.⁵ The number of areas where pay to park is currently in represents a small percentage of the total parking supply. If there were more pay stalls the benefit of this amenity would increase.

A parking app is best linked to a wireless system that gives real time information on parking availability. Given that Kirkland's on-street system is neither pay-to-park nor set up to wirelessly collect parking data; an on-street app is not a reasonable strategy to pursue at this time.

Timing: Longer term
Cost: High

⁵ Bill Hurrell, PE, Senior Vice President, Wilbur Smith Associates, *Technology and Parking*. Presentation to Metropolitan Transportation Commission on Design, Community & Environment, March 25, 2011.

V. SUMMARY

All cities have varying customer culture, operating and management structures and goals and objectives for their public parking systems. What may be unique to Kirkland is that its parking supply has consistently operated at high occupancies; a situation that indicates a vitality many cities would love to emulate but a situation that comes with frustrations and difficulty for those attempting to access businesses, services and amenities in downtown Kirkland.

When parking systems are highly occupied, new approaches to managing, operating, developing and pricing parking are necessary. Any of these approaches, however, requires new resources and a recognition that changes to the status quo operating system must be made. Kirkland is at a point where continued reliance on the existing supply of parking with the existing operational strategies is untenable. Unless meaningful efforts are made to direct users to specific parking areas (where new capacity may be available), transition users (particularly employees) to arrive by non-auto modes, and/or add new supply, the long-standing frustration with the system will continue.

The considerations contained in the background technical memoranda supporting this summary report were structured with this in mind. We have attempted to provide a starting point for Kirkland that is both strategic and reasonable. This begins with branding and identifying the parking system itself, followed by signage, wayfinding and marketing and communications. These initial steps, if implemented, would provide a solid foundation upon which to build additional and more sophisticated technologies. We also strongly recommend that Kirkland explore a strategic and incremental expansion of pay to park technologies. This is based on the premise that existing perceptions and realities related to parking constraints in downtown Kirkland cannot be effectively solved if the singular operating principle is that all parking remain free to all users of the public parking system. Finally, pursuing new supply is also reasonable, but expensive. New supply will function much more efficiently when linked to the overall “package” of strategies outlined here.