WALKER
PARKING CONSULTANTS

2015 LFCPA TEN-YEAR PARKING ANALYSIS

LEXINGTON, KY

May, 2015
FINAL

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EXECUTIVE SUMMARY

The Lexington & Fayette County Parking Authority ("LFCPA") retained Walker Parking Consultants ("Walker") to evaluate the parking supply and demand in downtown Lexington, perform an alternatives analysis to discuss potential management and operational improvements, assess downtown's need for a new parking structure including potential location and design elements, and provide a 10-yr and 20-yr system financial analysis.

The purpose of this report is to provide a quantitative and qualitative evaluation of the current and future parking adequacy that clearly identifies the parking inventory, utilization and availability in downtown Lexington, while providing insight on how the current inventory may be used more efficiently and whether additional supply is warranted. The overall intent of this evaluation is to provide LFCPA with the fundamental vision and strategic plan for the downtown Lexington parking system over the next 10 years. Since parking is such a costly asset, LFCPA is carefully considering the need for additional parking and opportunities to maximize use of current parking assets. As a result, the impact of the resulting analysis and recommendations will then be measured against parking system's future financial sustainability.

Public parking plans should not lead community development; rather the broader community goals for the downtown should be supported by any proposed parking strategy. With that in mind, the parking strategy should serve as a tool to help ensure downtown success and embody the following guiding principles:

- Maintain the unique sense of place that downtown Lexington has cultivated, while also providing proximate and convenient parking options;
- Support for a park once, pedestrian friendly vision that improves connectivity for visitors, residents, and employees through improved wayfinding and partnerships with local public and alternative transportation systems;
- Provide a customer-friendly experience for visitors, residents, and employees centered on convenience, access, and fairness by providing parking options based on an economic choice;
- Continue to help facilitate and encourage a diverse economy through partnerships with Downtown Development Authority, private developers, and the local community to enable economic development;
- Maintain a responsibility to optimize public investment in parking infrastructure by improving access to under-utilized private parking supply and better distributing demand.

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STUDY AREA

The defined study area is generally bound by West 3rd Street to the north; Maxwell Street to the south; Eastern Avenue to the east; and Jefferson Street to the west.

A secondary study area, outside the main downtown corridor, known as Chevy Chase, has also been included. This area is bound by South Ashland Avenue, Chevy Chase Place, and High Street, with Euclid Avenue running through the middle.

STAKEHOLDER FEEDBACK

Subject	Comment
Off-Street Parking	Financing of parking structure's remains an issue and we need to address how to effectively pay for parking structures.
Parking Operations	We have parking spaces available, not necessarily where a person may want them. Possible partnership with private property owners to take advantage of existing underutilized parking space.
Parking Rates	Parking downtown is cheap, and the price can afford to be raised. This will support infrastructure needs… parking convenience justifies a higher cost.
Parking Rates	Restaurants downtown (many upscale) should help absorb the cost of parking. More restaurants/businesses downtown should participate in a parking validation program
Parking Supply	Parking must be accessible and close to building and must be able to maneuver trucks in and out of parking area.
Parking Supply	There is a perception problem from the suburban population that they "don't know where to park" and "don't think there is availability".
Parking Supply	Owners and business workers want to park within very close proximity to their workplace
Parking Supply	Parking problems mostly occur at night when there is no parking enforcement. Larger nighttime market than daytime market.
Parking Rates	Parking rates are very reasonable, would rather increase night time parking cost than day time.
Parking Policy	Parking requirements for business zoned property should not require a specific amount of parking spaces. This creates underutilized parking.
Parking Alternatives	Bike lockers and public restrooms could encourage more bike riders.
Off-Street Parking	Adequate lighting of parking structures, artwork and technological features are needed to make the garages more inviting and welcoming. The Helix Garage and its improvements is a good example of what can be done with a parking structure.
Parking Operations	Property owners and real estate representatives need to work together more closely when marketing parking as part of its development or leases. There appears to be little or no interface or not as much as should be. Realtors and developers need to work more closely with the LPA. LPA can play a broker role in development.

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CURRENT PARKING CONDITIONS

The supply and demand study focuses on the on-street and off-street components of public parking spaces within the study area. Parking supply and utilization details for the LFCPA managed garages and privately owned and managed public parking locations were provided by LFCPA and their sub-contractor Republic Parking. On-street parking supply and utilization were gathered by Walker.

This study's combined fieldwork identified:

- **9,352 ±** parking spaces within the defined study area;
- **6,487±** (69%) spaces are located in private off-street public parking garages;
- **2,057±** spaces (22%) are in LFCPA managed garages;
- **808±** (9%) are located on-street.

CURRENT PARKING ADEQUACY

The current parking supply located in the study area was found to be sufficient for the current demand.

Weekday parking conditions at 10:00 AM on Thursday:

- **5,466±** vehicles parked in public parking spaces(58% occupancy);
- **3,886±** unoccupied public parking spaces.

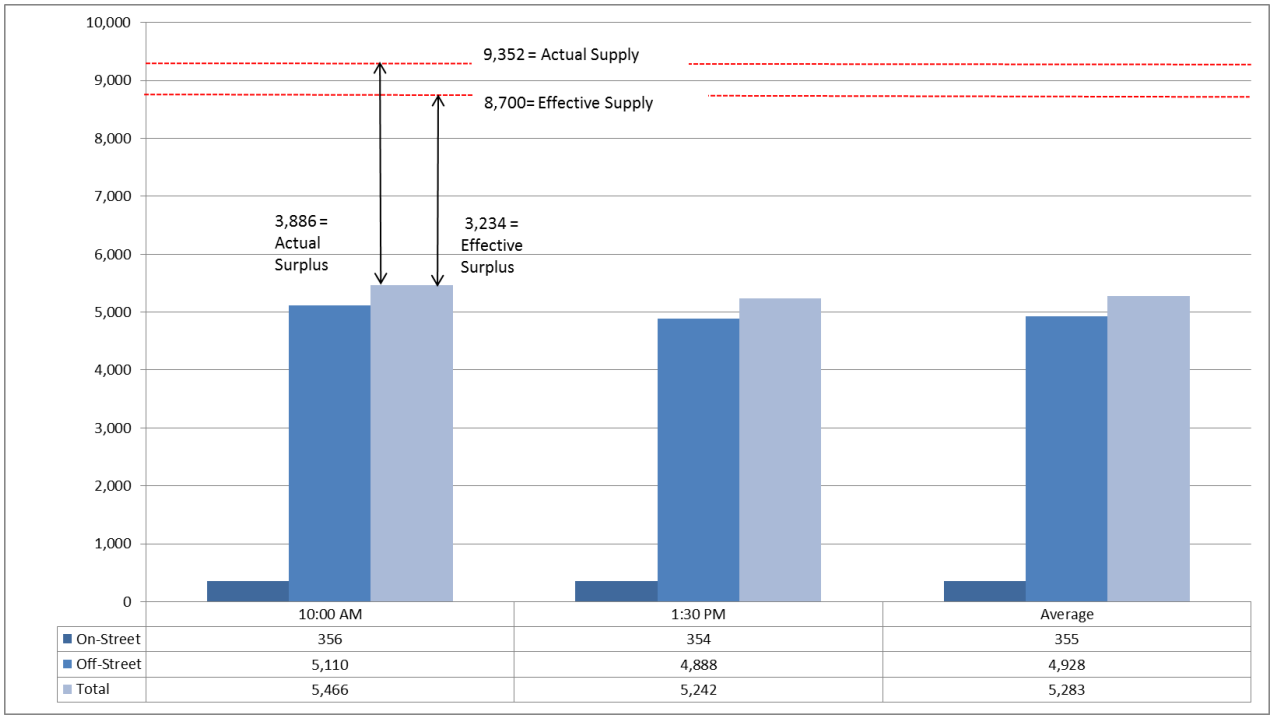
Weekday evening on-street parking conditions at 8:00 PM on Friday:

- **512±** vehicles parked in public on-street parking spaces(63% occupancy);
- **296±** unoccupied public on-street parking spaces.

Observed peak parking conditions by parking supply type:

- **56%** peak Non-LFCPA Public Off-street occupancy = **2,884±** unoccupied spaces
- **73%** peak LFCPA Public Off-street occupancy = **550±** unoccupied spaces
- **63%** peak Public On-street occupancy = **296±** unoccupied spaces

Current Parking Supply Adequacy



	10:00 AM	1:30 PM	Average
On-Street	356	354	355
Off-Street	5,110	4,888	4,928
Total	5,466	5,242	5,283

Source: Walker Parking Consultants
Definition: Effective Supply is the maximum number of parking spaces that can realistically be used within a given parking system.

FUTURE PARKING CONDITIONS AND PROJECTED DEMAND

Of the known details for identified future developments there is approximately 57,814 ft^2 of Retail; 11,638 ft^2 of Restaurant space; 376 Hotel rooms; 75 Residential Apartments; 87 Residential Condos; a 7,958 ft2 bank; and 152,853 ft^2 of additional Office space. The following projects encompass the identified future development activity:

- Centrepoint
- 505 on Main
- Old Courthouse
- Main and Vine
- The Square
- 21c Museum Hotels

RECOMMENDATIONS

- Long-term consideration for a new parking garage in Zone 5 should be considered once the Centrepointe development project is completed.
- Short-term consideration for a new parking garage in Zones 1 or 2 should be considered for completion within the next 2 years.
- Increase enforcement and meter hours from the current 8:00 AM to 5:00 PM to at least 8:00 AM to 8:00 PM
    - Consider an associated offset by changing to an evening rate schedule for LFCPA garages that sets the first 2 hours for free.
- Increase the number of bike racks in downtown Lexington. Similar cities have found great success promoting biking to downtown by removing just a few, strategic on-street spaces and installing central bicycle "parklets" that can "park" 10 to 20 bicycles
- Consider bicycle parking areas within parking facilities. These areas can be locked, fenced, or secured individually to provide access and security to permitted patrons. Permits to access and utilize the secure bicycle parking areas can be free or a very low annual fee to gain critical adoption. As adoption improves, fees can be adjusted to provide economic choice and fund further bicycle friendly programs.
- Expand the existing residential parking permit program to additional neighborhoods around Chevy Chase as demand grows.
- Improve wayfinding in the Chevy Chase neighborhood to improve overall consistency and parking choices to parking patrons.
- On-street rate increase of $.25-.50 per hour with planned ongoing annual or bi-annual increases
- Off-street (garage) daily max increase by $1.00. Determine off-street (garage) average length of stay for each facility and consider a small, $.50 increase to the corresponding rate band.
- Off-street permit rate increase of $10 for each permit with planned ongoing annual or bi-annual increases, and introduce the following new permit options:
    - Evening Only Permits
    - Parking Debit Cards
    - Day Permits
    - Frequent Parker Program
- Citation base fine increase from $15 to $25
    - Consider a graduated or incentive based fine schedule for repeat offenders
- Longer-term consideration for demand based pricing. As new on-street technology is introduced, LFCPA should consider demand based pricing by adjusting fees, higher and lower, based not only on location but also time of day variables.

- Increase use of underutilized public and private parking assets by employing a community shared parking program. A shared Parking program will allow private owners to market and lease unused excess supply and generate additional local revenue.
    - The LFCPA can fill the broker position by introducing available private spaces to the public market by providing signage, connecting private owners to monthly parkers, or inventorying available private spaces and selling them online for the private owner.
    - The LFCPA can work with private parking supply owners to allow hourly or evening fee based parking in the evenings when their demand is low. This can be accomplished through piggy-backing on the existing Pay by Phone application.
- Walker recommends that the zoning code allow reduction of the required number of parking spaces based upon a shared parking study performed in accordance with the latest edition of Shared Parking, by a qualified traffic or parking consultant
- The parking requirement in the zoning ordinance may be reduced or eliminated by a Payment In Lieu of Parking (PILOP), or Fee-in-Lieu ordinance. The fee (per space) could initially be set at the estimated cost per space for LFCPA to build new supply, but adjusted, as needed, per project and per year.
- Work with LFCPA's parking system and hardware vendors to coordinate and implement a plan and timeline for EMV compliance in 2015
    - EMV regulations are expected to be released in October 2015, and are expected to impact the risk and cost for processing credit cards, as well as the physical hardware used to read credit cards
    - Parking system vendors should work with their customers (LFCPA) to determine the proper path and timeline to bring non-compliant hardware to compliance in 2015
- Work with the Downtown Development Authority to determine the appropriate metrics for evaluating and grading potential parking supply additions and requirements for new development opportunities
    - This report provides guidance on the following criteria to assist both LFCPA and the DDA determine appropriate evaluation criteria:
        - Walking Distance – Level of Service by patron type
        - Operating and Capital Costs
        - Structural Repair Budget Assumptions
        - Minimum Parking Structure Dimensions
        - Fee-In-Lieu (Payment In Lieu of Parking) options

- Shared Parking opportunities:
  - Walker recommends the adoption of the base parking ratios developed by the Urban Land Institute, the Institute of Transportation Engineers (ITE), or the Parking Consultants Council of the National Parking Association.

PRELIMINARY IMPLEMENTATION PLAN

2015 – 2016 (PHASE 1: SHORT TERM)

- Increase sidewalk bicycle racks downtown, along with a pilot of 1 bicycle parklet that would remove 1 on-street space
- On-street and Off-street hourly increase of $.50 per hour
- Off-street daily max increase by $1.00, including off-street rate band changes based on average length of stay data
- Increase Victorian Square permit pricing by $10.00 for each permit type
- Introduce new permit types to increase monthly parking
- EMV migration for credit card hardware both on- and off-street
- In coordination with the Downtown Development Authority, determine appropriate evaluation criteria for potential economic development opportunities and standardize the guidelines for ongoing management
- Improve wayfinding in the Chevy Chase area and expand the residential parking permit program to the adjacent neighborhood, as demand warrants in order to provide easy short-term implementations to prepare the area for increased development growth and the resulting parking demand

2017 – 2020 (PHASE 2: MID-TERM)

- Increase on-street operations and enforcement until, at a minimum, 8:00 PM M – F
- Work with the Downtown Development Authority to determine the appropriate evaluating and grading metrics for potential parking supply additions and requirements related to new development opportunities
- Re-assess overall downtown parking supply and demand
  - Consider construction of a new structured parking facility in Zone 1 or Zone 2
- Re-evaluate on-street and off-street rates for continuous, but modest increases to adjust for inflation and any other variables affecting market pricing
  - Citation base fine increase by $10.00
  - Consider a graduated or incentive based fine schedule for repeat offenders

- Depending on the success of the increased bicycle racks and parklet(s), consider installing secure bicycle access controlled areas
- Outline and implement an 'LFCPA Downtown Shared Parking Program' as described in this report

2021 – 2025 (PHASE 3: LONG-TERM)

- As on-street hardware is replaced, consider how demand based pricing mechanisms with new technology can help manage and distribute demand
- Re-assess overall downtown parking supply and demand along with unique characteristics of specific downtown areas to determine potential needs and locations for new parking structures
- Continue to evaluate local and national trends related to single-occupancy vehicle usage and changes modal trends, which can impact current and future parking demand characteristics

INTRODUCTION

Downtown parking systems serve numerous stakeholders, demand flexibility for growth, and integrate with transportation helping move significant traffic volumes. As such, development of an integrated, long-term, strategic parking management and financial plan is critical. To assist with this approach, Walker Parking Consultants performed a parking study for the Lexington & Fayette County Parking Authority ("LFCPA") focusing on future parking needs and their associated financial impact.

Lexington's Downtown Central Business District is a unique space. In addition to the usual retail shops, restaurants, office buildings and government complexes, this district is adjacent to the University of Kentucky campus. This proximity to a large university, along with the diverse needs of a thriving downtown creates unique challenges for a parking operation. The Lexington-Fayette County Parking Authority has done a tremendous job managing their parking infrastructure in accordance with the downtown area's varied needs and serves as a model parking management system. This report is intended to support their efforts to continuously improve the parking experience in downtown Lexington.

PROJECT UNDERSTANDING

The LFCPA has engaged Walker Parking Consultants to provide a parking study that anticipates future parking needs and develops a ten-year plan aimed at supporting future development and promoting an effective parking system. Included within this consultation is a parking supply/demand analysis, projected future parking demand and recommended improvements to meet future parking needs, recommended changes to existing LFCPA policies and practices, and evaluation of potential locations for additional parking and development of a 10- and 20-year financial forecast.

A number of previous parking studies have been performed for the LFCPA within the last few years. Walker was able to build on these previous studies and relied on previously-collected information where appropriate.

Building structured parking is expensive and therefore we view this as a last resort to address the growth challenges facing the LFCPA. Before recommending additional structured parking, we advocate for the optimization of existing parking facilities, the usage of alternative transportation modes, and parking management strategies to create a more uniform parking distribution.

To complete the Plan, Walker engaged in a review of existing parking policies and practices and developed recommendations for LFCPA to execute. This includes a review of downtown public parking pricing, time restrictions, parking citations fines, parking enforcement hours, the employment of on-street versus off-street management strategies, the use of parking technologies, parking permit programs, and more. In cases where others have commented on parking management policies and practices, we will review and augment recommendations.

Additionally, based on Walker's experience with the successful design and construction of thousands of parking facilities over the past 49 years, we identified and analyzed multiple sites that may be candidates for future parking facilities and supply decision-making information such as design efficiency, project cost, cost per added space, context relative to adjacent uses, traffic impact, etc.

SCOPE OF SERVICES

- Worked with EHI Consultants to conduct numerous stakeholder meetings to gather and provide community feedback on the parking system.
- Identified 10 cities, similar to downtown Lexington, were included as a reference set to benchmark citation, permit, and hourly pricing.
- Observed the day and evening parking system utilization through a supply and demand analysis.
- Evaluated the current parking policies and technology options implemented within the study area.
- Performed a parking alternatives analysis.
- Lastly, a 10-yr and 20-yr financial analysis was developed to present two future cases including a base case showing modest changes and a system optimization case.
    - The system optimization case also considered the financial impact of a new parking garage. The potential new garage is similarly analyzed under two scenarios, a high financial performance case based on the highest two performing LFCPA garages and a low financial performance case based on the lowest two performing LFCPA garages.

METHODOLOGIES USED

Walker used a variety of methodologies to successfully complete this project, including the following:

- Performed field data collection using standard forms that we have successfully used for hundreds of similar studies. These forms were used to gather information regarding the existing parking inventory including name and location of spaces, capacity, user restrictions, and rates. Forms were also used to collect parking occupancy, turnover and duration data. The field data has been entered into an MS Excel spreadsheet for tabulation and analysis and the results have been provided within this report.
- Best practices employed by other municipalities have been considered when developing a plan for Lexington. Walker maintains a database for future reference.

- Walker utilized various databases that we maintain for purposes of making comparisons and projections. These databases include those relating to parking generation rates and recommended parking demand ratios, parking facility and system operating revenues and expenses, parking facility construction costs, and parking access and revenue control system costs.
- The technical aspects of our work were based on industry-accepted standards that have withstood the tests of time. This includes our work relating to parking supply/demand analysis, parking facility site analysis, and parking facility financial planning.
- Our operational theories, recommendations, policies, and practices were reviewed by one of our operations consultants – someone with significant experience as a parking operator – before making their way into our deliverables. This ensures that our recommendations go beyond theory and actually work in the real world.
- Our parking facility site planning and construction cost opinions have been based on our experience with the design of thousands of parking structures, significantly more than any other firm.
- Our parking facility cost opinions are informed by thousands of projects that have made it through the complete design and construction process.

PARKING SUPPLY AND DEMAND

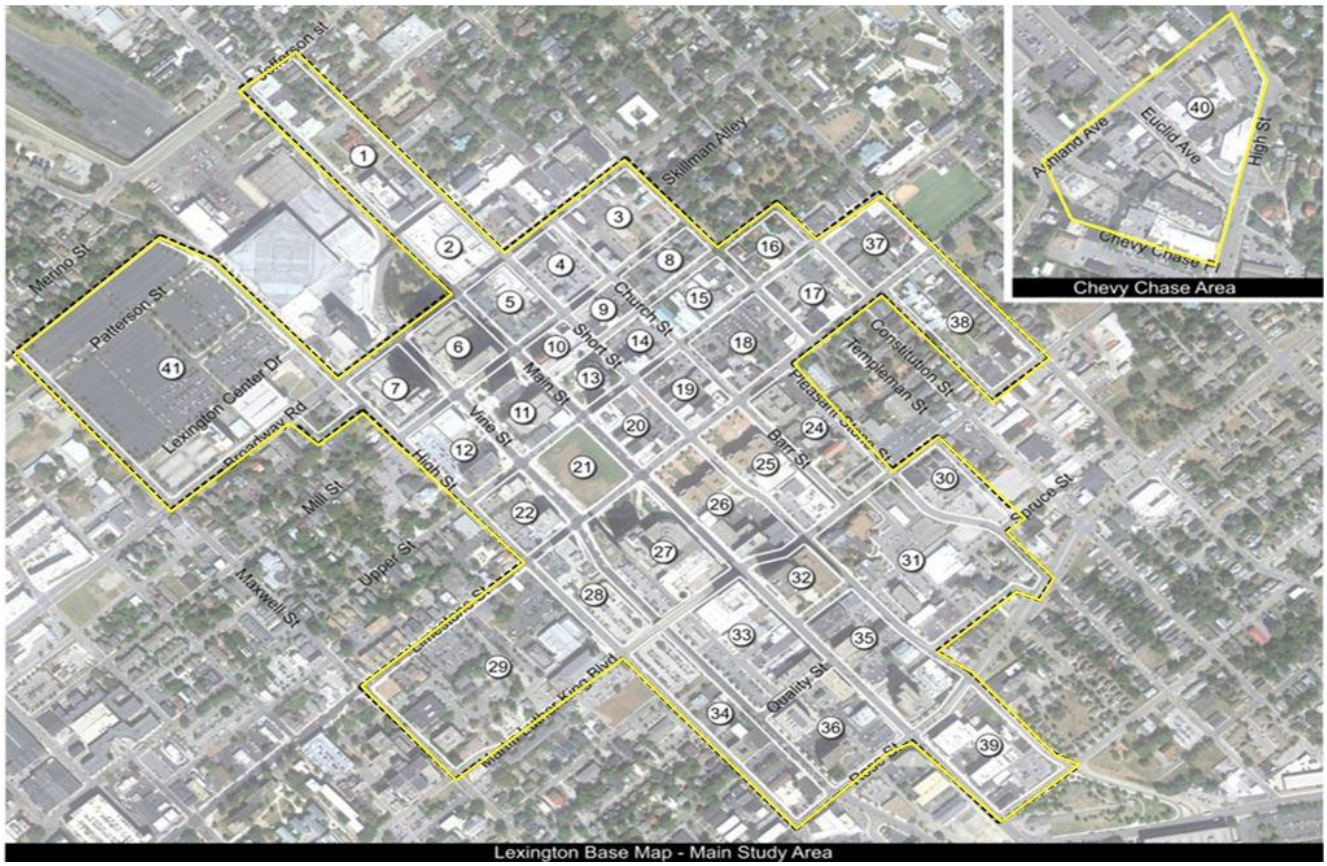
The assessment of current conditions includes a comprehensive review of parking inventory, the effective parking supply, parking occupancy trends, and parking adequacy during peak conditions.

STUDY AREA

The defined study area for this analysis is generally bound by West 3rd Street to the north; Maxwell Street to the south; Eastern Avenue to the east; and Jefferson Street to the west. A secondary study area, outside the main downtown corridor, known as Chevy Chase, has also been included. This area is bound by South Ashland Avenue, Chevy Chase Place, and High Street, with Euclid Avenue running through the middle. This purposeful configuration encompasses the wide variety of land uses and captures the unique parking characteristics within downtown Lexington.

The study area is defined in the following Figure 1.

Figure 1: Study Area



Source: Walker Parking Consultants

CURRENT PARKING CONDITIONS

CURRENT CENTRAL BUSINESS DISTRICT

The primary source for the current Lexington CBD data was found in the *Central Business District Office Market Studies* (Fourth Quarter 2013) performed by the Coleman Group. Additional data was gathered from the *Downtown Lexington Market Inventory 2014,* produced by the Lexington Downtown Development Authority. The purpose of this effort was to build a picture of the central downtown district, including the number of restaurants, hotels, offices, and residential units. The following data, gathered from these two reports provides a snapshot of all existing demand drivers on the current parking supply:

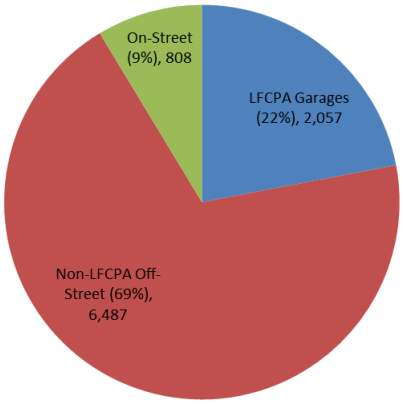
- 151,875 ft^2 of Retail establishments
- 50,625 ft^2 Specialty Retail and/or Grocery
- A total of 121 Restaurants and Bars
    - 54 Fine to Casual Dining establishments
    - 45 Fast Casual or Fast Food establishments
    - 24 Bars
- A 900 seat Performing Arts Theater
- 123,000 ft^2 Convention Center
- The 23,000 seat Rupp Arena
- 773 total Hotel Rooms
- 211 Apartments and Condos – split evenly among 1 and 2 bedroom condominiums and apartments
- An estimated 2,070,577 ft^2 of Office space located in the defined study area
    - This estimate ranged between 2,400,000 to 2,600,000 between the two CBD market studies, however these totals included buildings located outside of the defined study area
    - Of this 2,070,577 ft^2, approximately 15% is currently vacant

CURRENT PUBLIC PARKING SUPPLY

Walker conducted a physical inventory of all on-street parking spaces within the study area. Off-Street public parking inventories, for both LFCPA and non-LFCPA managed locations, were provided to Walker Parking Consultants by the LFCPA. The inventory was tabulated by block and categorized as either on-street, LFCPA managed public off-street, or non-LFCPA public off-street.

For the defined study area, the parking supply totaled 9,352 spaces. This inventory does not include private parking spaces, which were excluded from our analysis at the direction of the client.
The total parking inventory includes:

- 808 on-street parking spaces (primarily metered)
- LFCPA managed off-street public parking:
    - The Transit Center Garage – 777 spaces
    - The Victorian Square Garage – 382 spaces
    - The Helix Garage – 380 spaces
    - The Courthouse Garage – 518 spaces
- 6,614 off-street non-LFCPA managed public parking spaces



EFFECTIVE PARKING SUPPLY

When discussing the utilization of a parking system, it is important to consider the concept of *effective* supply. Effective supply is the maximum number of parking spaces that can realistically be used within a given parking system. An effective supply cushion helps to protect against the inevitable loss of spaces resulting from temporary disturbances such as construction, incorrectly parked cars, snow removal, etc. This cushion also helps to decrease traffic congestion by minimizing the amount of time visitors must spend looking for an empty space. For on-street parking, Walker generally recommends an effective supply equal to 85% of the total capacity. This allows a sizable cushion of spaces so that traffic does not back up on surface streets.

Off-street parking requires less of a cushion, generally 90% to 95% of the actual supply, depending on the type of facility and the anticipated user group. Smaller cushions are calculated for long-term parking locations because long-term parkers (ex: downtown employees) tend to be familiar with the facilities and spaces. These locations are not as subject to frequent turn over or unfamiliar parkers. For this study 95% was used for the non-LFCPA off-street locations due to the assumption that they would have a higher number of long-term parkers.

For the off-street public lots, it is expected that much of the traffic is generated by a combination of frequent visitors and employees, and therefore use an effective supply of 90% of the total capacity. Short-term off-street parkers are assumed to have a higher concentration in LFCPA managed locations due to lower price-points therefore, 90% of the actual supply was calculated as the LFCPA managed effective supply.

The study area includes an actual total of 8,544 off-street spaces and 808 on-street spaces, before any adjustments are made to account for an effective supply. After the effective supply factors are applied, the study area's effective supply is 8,014 off-street spaces and 687 on-street spaces for a total effective supply of 8,705 spaces, as shown in the following table:

Figure 2: Effective Supply Factor

Effective Supply Calculations				
Parking	Actual Supply	Effective Supply Factor	Effective Supply	Operating Cushion
LFCPA Garages	2,057	90%	1,851	206
Non-LFCPA Off-Street	6,487	95%	6,163	324
On-Street	808	85%	687	121
Total	9,352	90%	8,701	651

Configuration

Scattered surface lots operate less efficiently than more compact facilities

Type of User

Regular parking patrons often find available spaces more efficiently than infrequent visitors

On-Street

On-street parking is less efficient than off-street due to the time it takes patrons to navigate traffic and find the last few vacant spots

Source: Walker Parking Consultants

CURRENT PUBLIC PARKING DEMAND

A series of parking utilization counts were conducted over multiple days to identify local parking characteristics. LFCPA staff provided daytime off-street public parking occupancy counts for September 9th, 10th, and 11th. The primary field observations for on-street occupancy counts occurred on October 9th (daytime) and 10th (evening).

DAYTIME OCCUPANCY

The total public parking system was estimated to have an **effective occupancy of 63%** over the observation dates.

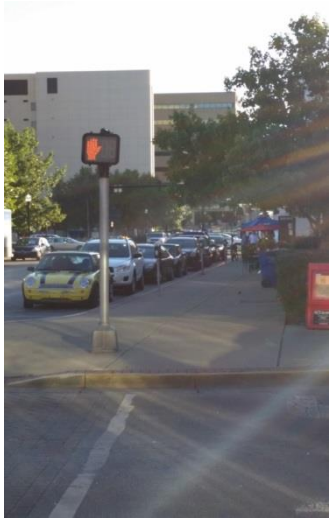
Daytime on-street counts from 10/9/2014 had a peak **413 (51% effective occupancy) vehicles parked** around 4pm. There are areas and times that stress the current public parking supply but the current parking conditions indicate that the supply satisfies the demand.

The LFCPA managed garages exhibited a daytime occupancy peak of **1,507 (81%) vehicles parked**, around 10:00 AM on September 9th.

Non-LFCPA managed, private surface lots and garages had a peak of **3,063 (58%) vehicles parked**, around 10:00 AM on September 9th. The average occupancy for all three days of non-LFCPA occupancy counts was slightly lower with an average of **3,478 (56%) vehicles parked**.

EVENING OCCUPANCY

Evening on-street counts, performed on 10/10/2014, exhibited peak occupancy of **512 (63%) vehicles parked at 8:00 PM**. The evening on-street occupancy counts averaged 100 more vehicles parked than the daytime.

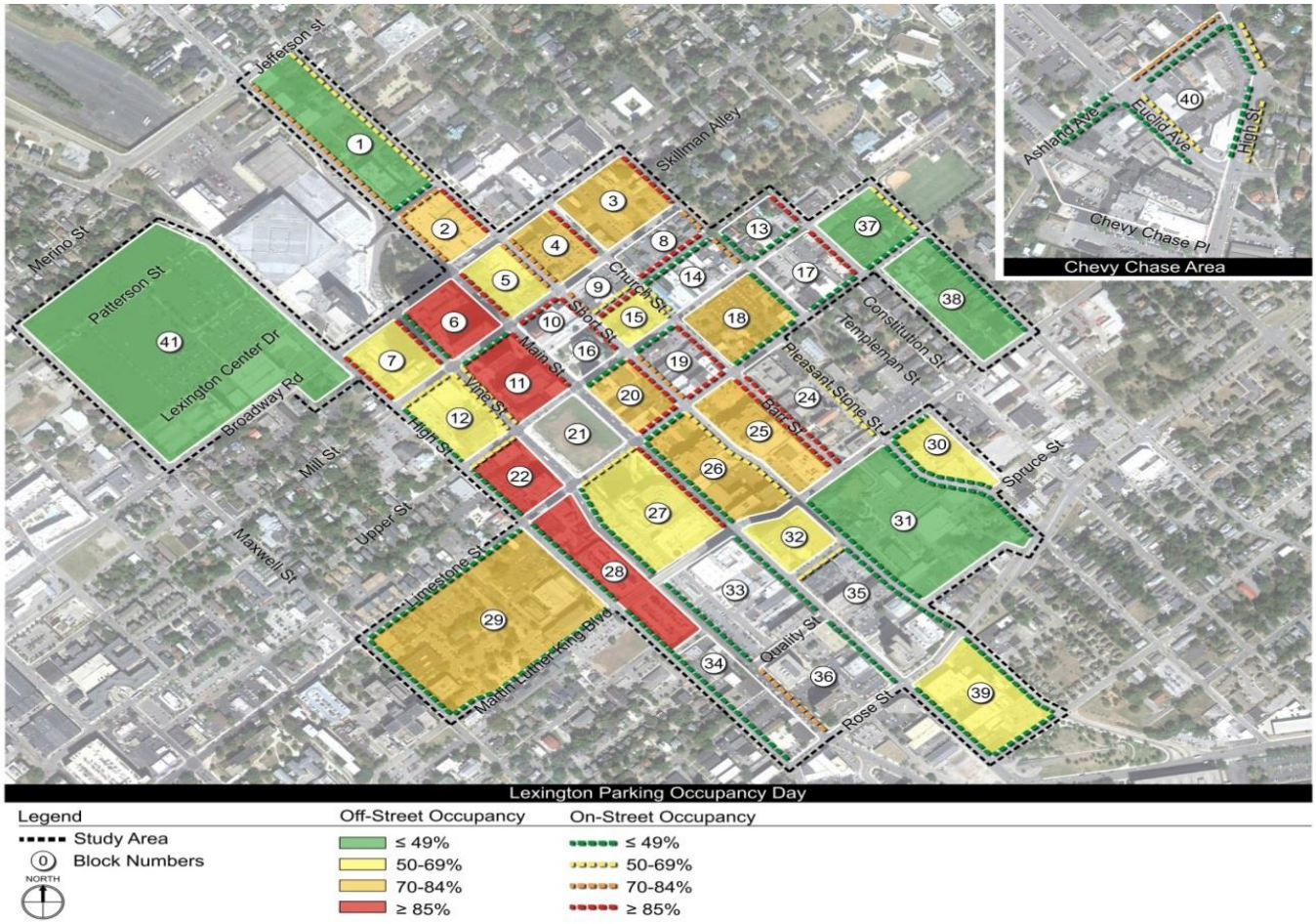


The majority of this increase is concentrated on Short and Church Streets in the area east of Broadway and West of N. Limestone. This area is defined by blocks 3, 4, 9, 10, 13, and 14. A significant contributor to this demand concentration is due to the high volume of restaurants, bars, and night-time activities. In the table below, nearly every one of the blocks in this area were at or **greater than 100% occupancy for the entire evening.**

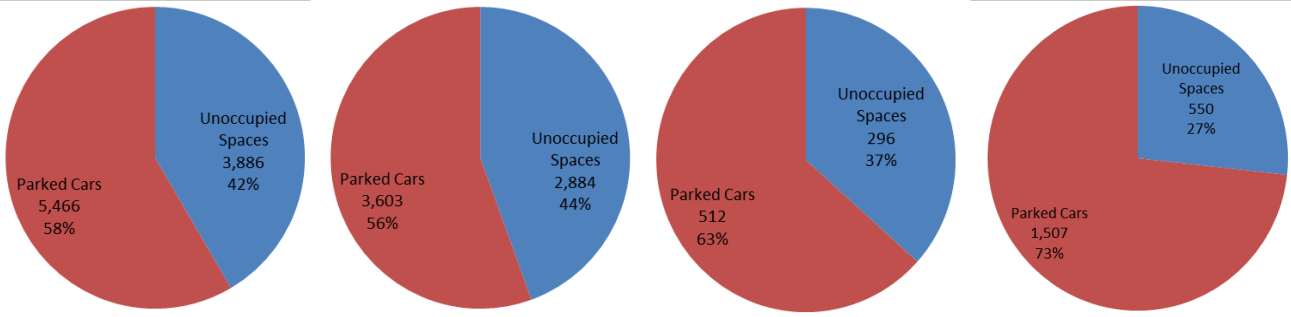
Although the restaurant and bar concentration does drive visitors to this small area in downtown Lexington, free parking that starts after 5:00 PM is the main parking demand driver towards on-street spaces. Alternatively, the Victorian Square facility, located in the same area, had more than **280 (14% effective occupancy) spaces available** throughout the same evening.

The overall system can support some increase in downtown parking demand, there are locations within the study area that experience very high demand. These areas have been identified in red within the following figures.

Figure 3: Weekday Parking Occupancy Heat Map

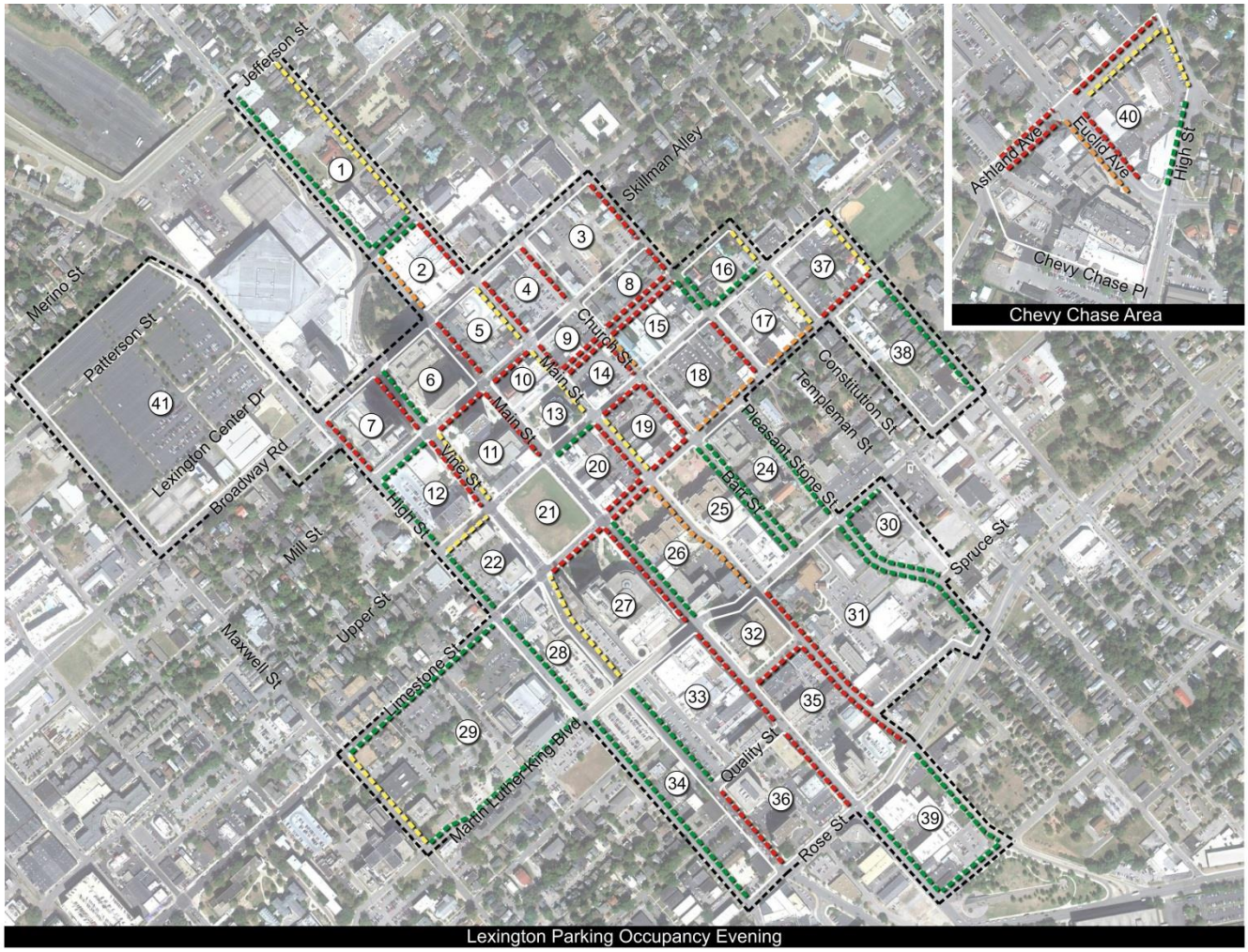


Total Parking Supply	Non-LFCPA Public Supply	Public On-street Supply	LFCPA Public Supply



Source: Walker Parking Consultants

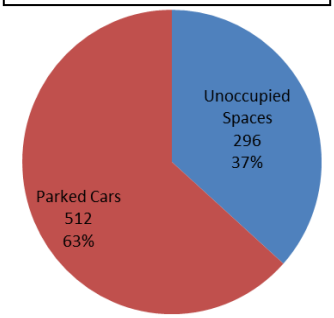
Figure 4: Evening On-street Parking Occupancy Heat Map



Legend
- Study Area
- Block Numbers
- NORTH

On-Street Occupancy
- ≤ 49%
- 50-69%
- 70-84%
- ≥ 85%

Public On-street Supply



Source: Walker Parking Consultants

CURRENT PARKING ADEQUACY

Combining the on-street and off-street counts, although gathered on separate days, can provide an estimate for peak occupancy across the entire public parking system within the defined study area. This analysis shows a mid-morning total of **5,523 parked vehicles.**

Comparing this peak occupancy to the effective parking supply of 8,701 spaces, results in a **3,178 (63%) effective space surplus (adequacy**).

The non-LFCPA parking locations experienced the highest effective adequacy during the observed daytime conditions. The effective parking adequacy (surplus) for these locations, at peak was observed to be 2,561 spaces, less than 59% occupancy.

Table 1: Weekday Adequacy

Weekday Adequacy Summary						
Off-Street Public Effective Supply	**Peak Occupancy**	**Adequacy**	**On-Street Effective Supply**	**Peak Occupancy**	**Adequacy**	**Total Adequacy**
8,014	5,110	2,904	687	413	274	**3,177**

Source: Walker Parking Consultants

ANALYSIS BY ZONE

The previous section of this report provided an overview of the current parking conditions in downtown Lexington. The data shows an operating surplus during peak weekday conditions in public off-street and on-street supply. To further analyze the local market conditions and assess adequacy, the study area is divided into six zones (1, 2, 3, 4, 5, and 6).

Conclusions:

- While each zone exhibits unique parking demand patterns and levels of adequacy, all zones have unoccupied parking supply with peak occupancy rates that range from 33% (Zone 6) to 80% (Zones 1 & 4).
- There is an actual surplus and effective surplus of parking in all zones.

The study area zones are provided in the following Table.

Table 2: Weekday Adequacy by Zone

ZONE 1

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	277	85%	235	144	61%	133	91
Non-LFCPA Public Off-street	2,244	95%	2,132	1,750	82%	494	382
LFCPA Off-street	382	90%	344	271	79%	111	73
Total	2,903	90%	2,711	2,165	80%	738	546

ZONE 2

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	192	85%	163	93	57%	99	70
Non-LFCPA Public Off-street	418	95%	397	326	82%	92	71
LFCPA Off-street	518	90%	466	304	65%	214	162
Total	1,128	90%	1,027	723	70%	405	304

ZONE 3

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	120	85%	102	32	31%	88	70
Non-LFCPA Public Off-street	788	95%	749	408	55%	380	341
LFCPA Off-street	-	90%	-	-	0%	-	-
Total	908	90%	851	440	52%	468	411

ZONE 4

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	73	85%	62	33	53%	40	29
Non-LFCPA Public Off-street	1,780	95%	1,691	1,376	81%	404	315
LFCPA Off-street	-	90%	-	-	0%	-	-
Total	1,853	90%	1,753	1,409	80%	444	344

ZONE 5

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	152	85%	129	54	42%	98	75
Non-LFCPA Public Off-street	526	95%	500	305	61%	221	195
LFCPA Off-street	1,157	90%	1,041	890	85%	267	151
Total	1,835	90%	1,670	1,249	75%	586	421

ZONE 6

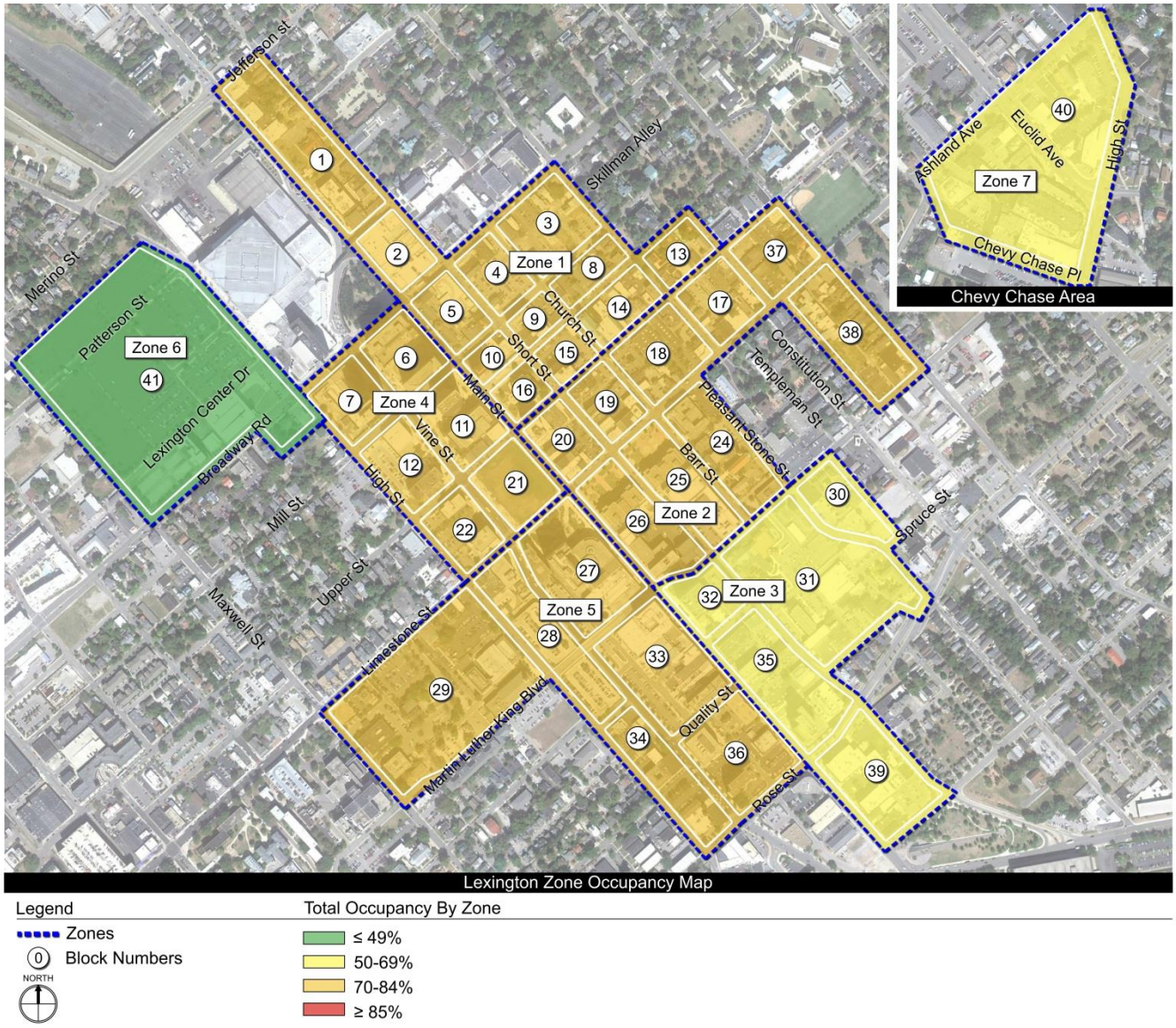
Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	-	85%	-	-	0%	-	-
Non-LFCPA Public Off-street	2,511	95%	2,385	794	33%	1,717	1,591
LFCPA Off-street	-	90%	-	-	0%	-	-
Total	2,511	90%	2,385	794	33%	1,717	1,591

ZONE 7

Type	Actual Supply	Effective Supply Factor	Effective Supply	10:00 AM Occupancy	Effective Occupancy %	Actual Surplus	Effective Surplus
On-street	67	85%	57	33	58%	34	24
Non-LFCPA Public Off-street	-	95%	-	-	0%	-	-
LFCPA Off-street	-	90%	-	-	0%	-	-
Total	67	90%	57	33	58%	34	24

Source: Walker Parking Consultants

Figure 5: Weekday Public Parking Occupancy by Zone



Source: Walker Parking Consultants

FUTURE CONDITIONS

ATTITUDES ON DRIVING ARE CHANGING

'Millennials' (those born between 1980 and 2000) are having a significant impact on transportation and parking these days because their attitudes toward driving are different than the historical norm.

Recent studies of this group's behavior suggest that the "driving boom may be over." After decades of adding more cars to the household fleet while moving further and further out into the suburbs, Americans are waiting longer to get licensed, driving less and increasingly turning to alternatives such as mass transit or car-sharing programs, according to a new study by the U.S. Public Research Interest Group, or PIRG.

This report says that "the time has come for America to hit the reset button on transportation policy – replacing the policy infrastructure of the driving boom years with a more efficient, flexible and nimble system that is better able to meet the transportation needs of the 21st century."

The changes are apparent among virtually all demographic groups, but especially so with Millennials. Millennials are showing an increased desire to move back into urban centers where cars are often a hindrance, and they are increasingly receptive to mass transit – a factor that can be seen in a steady growth in ridership on both city bus and rail systems

According to a recent study conducted by the University of Michigan Transportation Institute:

- The percent of 19 year olds who held a driver's license decreased from 87% in 1983 to 75% by 2010.
- The percent of 18 year olds who held a driver's license decreased from 80% in 1983 to 75% by 2010.
- The percent of 17 year olds who held a driver's license decreased from 69% in 1983 to 46% by 2010.

According to an article reported at www.Businessweek.Bloomberg.com, in a recent study university students rated the following as "most important."

Friends	52%
Studying	29%
Mobile Phones	24%
Games	13%
Facebook	11%
Sex	9%

One of the conclusions is that electronic communications are reducing the need for face to face personal interaction, and reducing the necessity of driving.

LIMITING FACTORS

Walker has relied on community stakeholders, market reports, and City representatives to provide the projections for future build-out and reabsorption of vacant space. This report analyzes the results of full project completion, but no change in vacancy absorption given that the current status of 14-15% is not expected to change significantly. This assumption is based on the local market averaging over 14% vacancy and available sub-lease space from 2004 to 2013.

Table 3: Vacancy Rate Trends

	2004	2005	2006	2007	2008	2009	2010	2012 Q2	2012 Q4	2013 Q4
Vacancy	14.13%	12.84%	9.93%	11.94%	12.92%	17.10%	17.01%	15.89%	14.46%	11.91%
Vacancy + Sublease	11.83%	12.84%	10.00%	11.94%	13.26%	17.10%	17.53%	16.82%	14.46%	14.86%

Source: Coleman Group, LLC: *Central Business District Fourth Quarter 2013 Office Market Study*

Walker also assumes that new downtown businesses will be successful and generate parking demand at a level consistent with national averages. If, for any reason, there are changes to the size or land-use projections, future parking demand may also be affected. Also, the addition of new parking facilities or the destruction of existing supplies will have an impact on the future adequacy projected in this report.

The Future Conditions Shared Parking Model only considers the identified projects and is not to be considered an estimate of total future system demand across all potential parking demand drivers.

FUTURE DEMAND ANALYSIS

To calculate the projected future parking demand for specific projects identified as "in-queue" Walker reviewed the proposed future developments and vacancy absorption assumptions in downtown Lexington. The data used in this study were found in the following:

- *Central Business District Fourth Quarter 2013; Office Market Study*
- *Central Business District Office Space Surveyed 2009*
- *Real Estate Development Economic Gap Analysis*
- *Downtown Lexington Market Inventory 2014*

The Walker model is initially based on parking ratios that have been established for many different land uses by transportation industry research. The ratios describe the number of cars that are generated per 1,000 square feet (measured in gross leasable area when available) of a given land use. A restaurant, for example, can generate many more people per square foot than an office, and thus requires a higher ratio.

Some of the typical base, unadjusted ratios include the following:

Table 4: Current Weekday Parking Occupancy (9/3/2014)

Land Use	Community Retail	General Office	Quality Restaurant
Employee	0.8 cars/1,000 SF GLA	2.85 cars/1,000 SF GLA	1.8 cars/1,000 SF GLA
Visitors	3.2 cars/1,000 SF GLA	0.15 cars/1,000 SF GLA	15.2 cars/1,000 SF GLA
Peak Period	1:00 PM	11:00 AM	6:00 PM

Source: Walker Parking Consultants

Any given study area will have unique characteristics that make it different from the averages developed through national research. Walker uses its knowledge of parking patterns, research on the study area, and client input to adjust the model to reflect conditions in the project area. Specifically, we look at local use of transit (or other alternatives to driving), captive market effects, and other local factors that may affect parking demand (such as a particularly dense office complex that may be generating at a higher rate than average).

Having adjusted the ratios used in the model to reflect conditions in the local area, further adjustments to the model account for the fact that not all land uses will be at their peaks at the same time. For example, restaurants peak on weekend evenings when offices are at their lowest. Therefore, it would be an error to plan the parking system such that spaces are built to accommodate both peaks at once (though this is how spaces are planned according to many city codes) – this would result in an oversupply of parking, which is wasteful. The adjustment for hourly, daily and seasonal fluctuations is the basis of a shared parking analysis.

Walker also applied parking demand ratios according to the type of land use for the specified projects. From these ratios, parking demand was projected for the following projects:

CENTREPOINTE

- 7,814 ft² of Retail space; 11,638 ft² of Restaurant space; 286 Hotel rooms; 16 Condos; 75 Apartments; 127,853 ft² of Office space; and a 7,958 ft² Bank
- **700±** parking spaces provided as part of the project
- **1,265±** total parking spaces for typical non-event weekdays
    - **565±** typical non-event weekday parking space **deficit**
- **848±** total parking spaces for typical non-event weekends
    - **148±** typical non-event weekend parking space **deficit**

505 ON MAIN

- 17 Luxury Condos
- **Zero (0)** change in net parking demand

MAIN AND VINE

- 18,000 ft² of Retail space; 54 Residential Units
- **209±** parking spaces provided as part of the project
- **139±** total parking spaces for typical non-event weekdays
    - **70±** typical non-event weekday parking space **surplus**
- **138±** total parking spaces for typical non-event weekends
    - **71±** typical non-event weekend parking space **surplus**

THE SQUARE

- 32,000 ft² ground floor Retail (size unknown) and Restaurant space (size unknown)
- **72±** parking spaces for typical non-event weekdays
- **58±** parking spaces for typical non-event weekends

21C MUSEUM HOTELS

- 90 room Hotel; Art Museum (size unknown); Restaurant (size unknown)
- **99±** parking spaces for typical non-event weekdays
- **89±** parking spaces for typical non-event weekends

OLD COURTHOUSE

- 25,000 ft² of Office space
- **95±** total parking spaces for typical non-event weekdays

In order to project the demand generated by future developments in downtown Lexington, a shared parking model for all identified and potential new development was created. These projects are estimated to bring an additional demand for 1,671 spaces to downtown during typical daytime conditions. Some of this demand can be absorbed into the current surplus, given the assumption that some private parking, through shared parking agreements, can be absorbed into available public parking options during peak conditions.

The projected new parking demand generated during peak weekday and weekend conditions are presented in the following tables:

Table 5: Future Weekday Parking Demand

	Weekday						
Land Use	Unadj Demand	Month Adj Mar	Pk Hr Adj 2:00 PM	Non Captive Daytime	Drive Ratio Daytime	Demand Mar 2:00 PM	Demand Aug 6:00 PM
Community Shopping Center (<400 ksf)	168	64%	95%	96%	100%	99	107
Employee	40	80%	100%	100%	95%	30	29
Fine/Casual Dining	177	95%	65%	82%	100%	89	149
Employee	32	100%	90%	100%	95%	27	30
Hotel-Leisure	338	100%	70%	100%	100%	237	287
Restaurant/Lounge	70	95%	33%	90%	60%	12	21
Meeting/Banquet (20-50 sq ft/key)	257	100%	65%	60%	75%	75	116
Employee	94	100%	100%	100%	95%	89	36
Residential Guest	16	100%	20%	100%	100%	3	9
Residential Reserved - Condo	166	100%	100%	100%	97%	161	161
Residential Unreserved - Condo	0	100%	70%	100%	97%	0	0
Residential Reserved - Rental	119	100%	100%	100%	97%	115	115
Office 25k to 100k sq ft	8	100%	100%	100%	100%	8	0
Employee	81	100%	100%	100%	100%	81	19
Office 100k to 500k sq ft	32	100%	100%	100%	100%	32	2
Employee	366	100%	100%	100%	100%	365	87
Bank (Drive In Branch)	24	100%	70%	96%	100%	16	0
Employee	11	100%	100%	100%	100%	11	0
Employee	40	100%	100%	100%	100%	40	40
Subtotal Customer/Guest	1,090					364	375
Subtotal Employee/Resident	624					603	201
Subtotal Reserved Resident - Condo	166					161	161
Subtotal Reserved Resident - Rental	119					115	115
Subtotal Reserved Office 24/7	40					40	40
Subtotal Valet Retail/Dining						9	9
Subtotal Valet Hotel						379	379
Total Typical Day No Event	2,039					1,671	1,280
Total Parking Spaces Required	**2,039**					**1,671**	**1,280**

Source: Walker Parking Consultants

Table 6: Future Weekend Parking Demand

				Weekend			
Land Use	Unadj Demand	Month Adj Aug	Pk Hr Adj 8:00 PM	Non Captive Evening	Drive Ratio Evening	Demand Aug 8:00 PM	Demand Late Dec 5:00 PM
Community Shopping Center (<400 ksf)	185	69%	65%	96%	100%	80	123
Employee	46	80%	75%	100%	95%	26	37
Fine/Casual Dining	198	99%	100%	90%	100%	177	89
Employee	35	100%	100%	100%	95%	33	33
Hotel-Leisure	376	100%	90%	100%	100%	338	301
Restaurant/Lounge	70	99%	70%	30%	70%	10	4
Meeting/Banquet (20-50 sq ft/key)	257	100%	100%	70%	75%	135	135
Employee	68	100%	55%	100%	95%	35	48
Residential Guest	24	95%	100%	100%	100%	23	10
Residential Reserved - Condo	166	100%	100%	100%	97%	161	161
Residential Unreserved - Condo	0	95%	98%	100%	97%	0	0
Residential Reserved - Rental	119	100%	100%	100%	97%	115	115
Office 25k to 100k sq ft	1	95%	0%	100%	100%	0	0
Employee	8	95%	0%	100%	100%	0	1
Office 100k to 500k sq ft	3	95%	0%	100%	100%	0	0
Employee	37	95%	0%	100%	100%	0	3
Bank (Drive In Branch)	24	100%	0%	96%	100%	0	0
Employee	13	95%	0%	100%	100%	0	0
Employee	40	100%	100%	100%	100%	40	40
Subtotal Customer/Guest	1,138					375	386
Subtotal Employee/Resident	207					94	122
Subtotal Reserved Resident - Condo	166					161	161
Subtotal Reserved Resident - Rental	119					115	115
Subtotal Reserved Office 24/7	40					40	40
Subtotal Valet Retail/Dining						9	9
Subtotal Valet Hotel						379	379
Total Typical Day No Event						1,173	1,212
Subtotal Event Patrons						0	0
Subtotal Event Employees						0	0
Total Parking Spaces Required	**1,670**					**1,173**	1,212

Source: Walker Parking Consultants

Table 7: Future Parking Demand

	Centrepointe	505 on Main	Main + Vine	The Square	21c Museum	Old Courthouse	Total
Customer/Guest, All Uses	257	0	32	55	11	8	364
Employee, All Uses	475	0	9	17	21	81	603
Reserved Resident	178	0	98	0	0	0	276
Reserved Office 24/7	34	0	0	0	0	6	40
Retail/Dining Valet	9	0	0	0	0	0	9
Hotel Valet	312	0	0	0	67	0	379
Total Typical Day No Event	1,265	0	139	72	99	95	1,671
Total Parking Spaces Required	1,265	0	139	72	99	95	1,671
Planned Supply	700	0	209	0	0	0	909
Surplus (+)/Deficit (-)	-565	0	70	-72	-99	-95	-762

Source: Walker Parking Consultants

Table 8: Future Conditions by Zone

ZONE 1	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	235	144	-	235	55	36
Non-LFCPA Public Off-street	2,132	1,750	-	2132	95	287
LFCPA Off-street	344	271	-	344	17	56
Total	2,711	2,165	-	2711	167	379

ZONE 2	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	163	93	-	163	-	70
Non-LFCPA Public Off-street	397	326	-	397	21	50
LFCPA Off-street	466	304	-	466	67	95
Total	1,027	723	-	1027	88	216

ZONE 3	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	102	32	-	102	-	70
Non-LFCPA Public Off-street	749	408	-	749	-	341
LFCPA Off-street	-	-	-	0	-	-
Total	851	440	-	851	-	411

ZONE 4	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	62	33	-	62	-	29
Non-LFCPA Public Off-street	1,691	1,376	700	2391	1,265	(250)
LFCPA Off-street	-	-	-	-	-	-
Total	1,753	1,409	700	2453	1,265	(221)

ZONE 5	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	129	54	-	129	-	75
Non-LFCPA Public Off-street	500	305	49	549	41	203
LFCPA Off-street	1,041	890	160	1201	98	213
Total	1,670	1,249	209	1879	139	491

ZONE 6	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	-	-	-	-	-	-
Non-LFCPA Public Off-street	2,385	794	-	2385	-	1,591
LFCPA Off-street	-	-	-	-	-	-
Total	2,385	794	-	2385	-	1,591

ZONE 7	Current Conditions		Future Conditions			
Type	Effective Supply	Occupancy	Supply +	Adjusted Supply	New Demand	Projected Adequacy
On-street	57	33	-	57	-	24
Non-LFCPA Public Off-street	-	-	-	-	-	-
LFCPA Off-street	-	-	-	-	-	-
Total	57	33	-	57	-	24

Source: Walker Parking Consultants

STAKEHOLDER INPUT

Stakeholder interviews, conducted by EHI Consultants, were held with a sample of individuals and leaders in the downtown community. These stakeholders provide valuable insight because they are directly impacted by parking policies and decisions. The following summary highlights common subjects and reflects key comments obtained from community members.

The comments, summarized in the table below, provide key insights to the public community's perceptions on the LFCPA parking system. A common theme to the feedback was that additional parking supply, specifically structured parking is desired. Multiple individuals also indicated that parking downtown was inexpensive or "cheap". Price increases that fund new supply or other public interest projects may garner public support.

Table 9: Stakeholder Comments

	Subject	Comment
1	Off-Street Parking	With the funding and construction of the 160 unit parking structure on the east end of downtown Lexington, will alleviate the need for parking and also spur development opportunities, such as the Main and Midland development and the Midland Avenue corridor.
2	Off-Street Parking	Long term there is a need for an additional 600 parking spaces in the eastern part of downtown. The Mill and Short St. lot needs a garage Short St. between Upper needs a connecting garage.
3	Off-Street Parking	Financing of parking structure's remains an issue and we need to address how to effectively pay for parking structures.
4	Parking Operations	More restaurants/businesses downtown should participate in a parking validation program.
5	Parking Meters	Partner (UK) with LPA to place meters on Linden Walk on-street parking. Currently this street is zoned residential and free to park on.
6	Off-Street Parking	Create parking structure on the corner of University Dr. and Cooper Dr. or place parking structure on the Scott St. surface lot
7	Parking Operations	Possible partnership with private property owners to take advantage of existing underutilized parking space.
8	Off-Street Parking	The High St. surface lot can be replaced with a parking structure.
9	Off-Street Parking	Chevy Chase area has opportunity for a structured lot.
10	Off-Street Parking	Underdeveloped campus area west of Limestone, between Virginia Ave and Avenue of Champions. Consider parking for the Medical Center in this area.
11	Parking Supply	21c Hotel- will require more parking than the 21c Hotel in Louisville, due to the majority of Lexington visitors using/renting a car. This hotel will utilize the Court House parking garage.
12	Parking Rates	Parking downtown is cheap, and the price can afford to be raised. This will support infrastructure needs… parking convenience justifies a higher cost.
13	Parking Rates	Restaurants downtown (many upscale) should help absorb the cost of parking.
14	Off-Street Parking	Short St. should have a shared parking structure instead of private surface lots.

15	Parking Supply	Parking must be accessible and close to building and must be able to maneuver trucks in and out of parking area.
16	Parking Supply	With limited availability of parking areas, it could become harder to attract events to Rupp and the convention center.
17	Parking Supply	Parking is a concern for the public exposition areas: small exhibitors need accessibility and parking nearby for the drop off and loading of merchandise.
18	Parking Supply	With the eventual development of the Town Branch Commons Project, it could have an impact on LCC's parking spaces.
19	Parking Supply	Future needs could be a parking structure on the High St. site, with a preference of the LCC managing the parking structure.
20	Off-Street Parking	A 3 level parking structure is preferred customers prefer not to park or go higher than 3 levels.
21	Parking Supply	There is a perception problem from the suburban population that they "don't know where to park" and "don't think there is availability".
22	Parking Supply	Owners and business workers want to park within very close proximity to their workplace
23	Parking Supply	Parking problems mostly occur at night when there is no parking enforcement. Larger nighttime market than daytime market.
23	Parking Rates	Parking rates are very reasonable, would rather increase night time parking cost than day time.
24	Residential Parking	Need for residential parking permits in Jefferson St. corridor.
25	Residential Parking	Residential parking permits should (continue to) be the role of the Lexington Parking Authority and not LFUCG. Council members steer the public in the LPA's direction when dealing with parking issues.
26	Parking Policy	Parking requirements for business zoned property should not require a specific amount of parking spaces. This creates underutilized parking.
27	Parking Policy	Delivery/loading areas should be enforced by LPA and zoning. This problem could be solved with alleys.
28	Parking Alternatives	Bike lockers and public restrooms could encourage more bike riders.
29	Parking Policy	Parking is a public private venture and Lexington's plan should mimic what has been done in Greenville, South Carolina.
30	Parking Policy	Short St. should be designated as a parking corridor, to take traffic and parking off of Main St. and transfer it to Short St. Once this is accomplished, the potential for Church St. becomes a service street for parking accessibility.
31	Parking Policy	High St. could also become another parking corridor to the south of downtown. You could then take parking off of High St. which could then be used as another vehicular corridor. Main St. could then be retaken as a retail corridor.
32	Parking Supply	On Main St. you could add parking meters with angular parking on one side. Algonquin Ave. next to Victorian Square (from Main to Short St.) could include angular parking.
33	Parking Supply	A strategy for property condemnation should be discussed in order to make way for parking decks and structures.
34	Off-Street Parking	LPA should construct state of the art parking garage with technological features multi-faceted 2 level system.
35	Off-Street Parking	Adequate lighting of parking structures, artwork and technological features are needed to make the garages more inviting and welcoming. The Helix Garage and its improvements is a good example of what can be done with a parking structure.

36	Parking Rates	The cost to park in Lexington is relatively cheap compared tom other cities.
37	Parking Operations	Property owners and real estate representatives need to work together more closely when marketing parking as part of its development or leases. There appears to be little or no interface or not as much as should be. Realtors and developers need to work more closely with the LPA. LPA can play a broker role in development.
38	Parking Operations	Public does not understand that Central parking is not LPA.
39	Off-Street Parking	Parking structure that has retail on main level should be more appealing i.e. Festival Market.
40	Parking Supply	We have parking spaces available, not necessarily where a person may want them.
41	Parking Supply	Public Private Partnerships as an alternative to fund parking in the future. Downtown Lexington will need another new office building in the future and parking will be needed to meet the demands for that new building.
42	On-Street Parking	The public does not like the public metered space where you have to walk to a designated space to pay for your parking. (LUKE machines)
43	Parking Operations	LPA could consider parking promotions to get local or suburban people to come downtown to park. Can the LPA develop strategies or promotions to assist restaurants on slower nights?
44	Parking Supply	Studies have shown that people will park in suburban malls and walk further than they will if downtown when it comes to parking.
45	On-Street Parking	Problem loading elderly adults into a vehicle, especially when street parking is not available (8 – 10pm enforcement). ADA standards should be in place for ADA marked parking spaces.
46	Residential Parking	No place for service companies to park (ex: Carpet cleaners, Hospice) in order to service homeowners.
47	On-Street Parking	Mill Street On-Street parking is full of employee parkers by 10am. Underutilized private parking lots. (Liability is a problem)
49	Residential Parking	If homeowners want to host a party, they have no room for guests to park. Can a system be put in place to distribute guest parking permits? Is there a way to have disposable parking passes? Print on demand was discussed as one option for visitor permits.
51	Parking Operations	Enforcement patrol should be more neighborly and more understanding of some situations.
53	On-Street Parking	Too many signs in some areas and limited sign visibility due to traffic and trees. Better signage, especially for handicap, could be designed.
54	On-Street Parking	The painting of street curbs and striping is a need. Consider diagonal parking to differentiate parking spots.
55	Parking Operations	The Parking Authority could play a role as a goodwill ambassador to broker parking in neighborhoods.
56	Parking Operations	Parking enforcement has been a positive for permitted parking. Parking enforcement and permits have had a significant impact on addressing UK students parking.

Source: EHI Consultants & Walker Parking Consultants

PARKING ALTERNATIVES ANALYSIS

Based on the analysis of current and future parking adequacy, there is a surplus of parking in downtown during peak conditions. This section of the report presents opportunities to make better use of existing parking resources and capitalize on the strengths already in place. In addition, this section provides information on parking management, an overview of parking economics, and basic parking geometrics for LFCPA to consider.

There are areas of downtown that temporarily experience high levels of demand that strain public parking supply, while at the same time nearby areas experience a parking surplus. Even though available supply may exist within one or two blocks, these localized 'hot spots' form perceptions that parking is inadequate. The community can either address the parking challenges by building more supply or by better managing the existing resources. Many suburban communities are rethinking how best to address the challenges of parking and pursuing management solutions before committing to a long-term capital investment. This course of action may improve perceptions and increase access to available existing supply.

While parking is clearly one important part of downtown's development, it should not detract from intrinsic qualities such as a pedestrian-friendly environment, a unique sense of place, and architectural feel that make downtown Lexington a distinctive and desirable destination. This unique environment and combination of attractions bring people to downtown. With that in mind, parking should be viewed as a supportive tool to help make downtown attractions easier to access.

The following Table provides an overview of how communities are starting to think about parking planning.

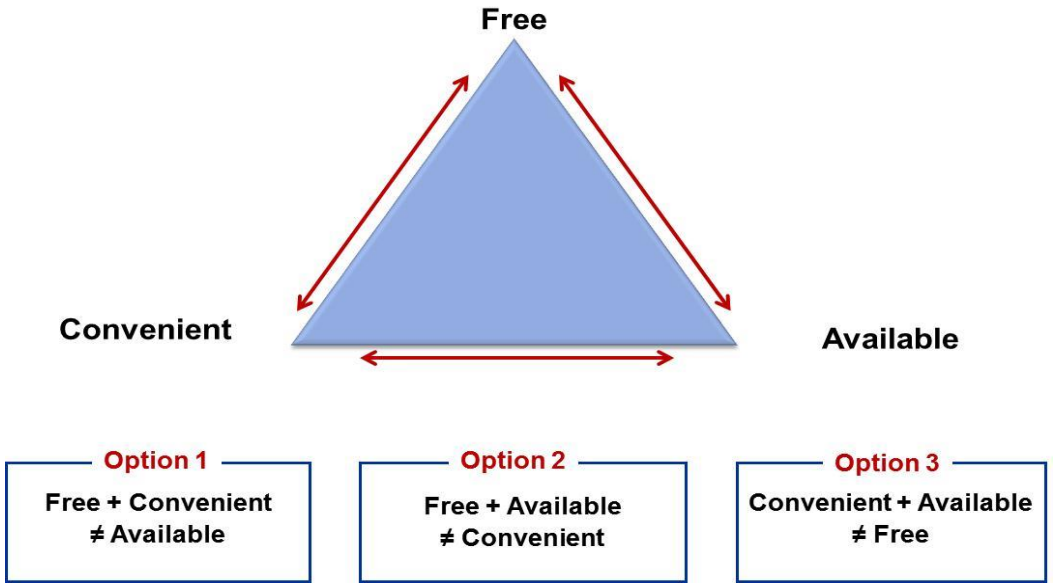
Table 10: Community Approach to Parking Planning

Old Parking Paradigm	New Parking Paradigm
• "Parking Problem" means inadequate parking supply.	✓ There are many types of parking problems (management, pricing, enforcement, etc.)
• Abundant parking supply is always desirable.	✓ Too much supply is as harmful as too little. Public resources should be maximized and sized appropriately.
• Parking should be provided free, funded indirectly, through rents and taxes.	✓ Users should pay directly for parking facilities. A coordinated pricing system should value price parking with on-street the highest.
• Innovation faces a high burden of proof and should only be applied if proven and widely accepted.	✓ Innovations should be encouraged. Even unsuccessful experiments often provide useful information.

• Parking management is a last resort, to be applied only if increasing supply is infeasible.	✓ Parking management programs should be applied to prevent parking problems.

Source: Walker Parking Consultants

Figure 6: Parking Triangle



Source: Walker Parking Consultants

SHARED PARKING

Shared parking is defined as parking spaces that can be used to serve two or more individual land uses without conflict or encroachment. The resurgence of many central cities resulting from the addition of vibrant office, residential, retail, and entertainment developments continues to rely heavily on shared parking for economic viability. In addition, mixed-use projects in many different settings have benefited from shared parking. Numerous benefits of shared parking exist to a community at large, not the least of which is the environmental benefit of significantly reducing the square feet of parking provided to serve commercial development.

It has been Walker's experience that an overall performance based parking ratio of approximately 3.0 parking spaces per 1,000 square feet of commercial space represents a generally acceptable level of parking supply for mature business districts with a semi-urban character such as downtown Lexington. Specific conditions vary from location to location, but this provides a useful "rule of thumb" to determine the overall adequacy of the available parking supply.

The ability to share parking spaces is the result of two conditions:

- Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses.
- Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

For example, office buildings require parking spaces during daytime hours on weekdays, while restaurants and entertainment venues have peak parking needs during the evening and weekends. The interplay of land uses in a mixed-use environment also produces a reduction in overall parking demand. For example, a substantial percentage of patrons at one business (restaurant) may be employees of another downtown business (office). This phenomenon is referred to as the "effects of the captive market." Because these patrons are already parking, they contribute only once to the number of peak hour parkers. In other words, the parking demand ratio for individual land uses should be factored downward in proportion to the captive market support received from neighboring land uses.

Although the interplay of land uses can reduce the overall demand, it should be noted that there are limits imposed by proximity of land uses to each other and to parking facilities. While "shared parking" by definition is capitalizing on the different demand period for a combination of land uses, it is not logical to assume that a hotel (with peak demand in the evening) can share with an office building (with peak demand during the day) if the two land uses are too far apart. Human behavior restricts shared parking opportunities by limiting the distance users are willing to walk from a parking facility to their final destinations.

SHARED PARKING LOCATIONS

In some communities there is an informal version of shared parking. Many owners tacitly allow public parking in their private lots. Some are lots marked expressly for a given use, but customers are never booted or towed for using these areas. In other cases, lots are divided between spaces marked for the businesses on that site and unmarked or "customer only" spaces that can (informally) be used by anyone despite being associated with a particular building. This is an informal approach to providing more public parking, and one that requires little on the part of the owner and LFCPA. The downside of such an approach is that if the lot is not "advertised" as public, it remains ambiguous and many visitors will avoid using it.

A more thorough approach is to make formal agreements and implement a program to allow public parking on private lots, and direct cars to these areas. The program would aim to entice local businesses and property owners to partner with LFCPA for public access to under-utilized parking supply. Potential program benefits to LFCPA and the downtown community include, but are not limited to:

- Reduce overall investment, both public and private, in expensive new parking supply

- Improve the overall parking experience for all downtown Lexington visitors, residents, and employees
- Make all parking assets, public and private, more efficient through increased utilization
- Provide a monthly financial return to private parking supply owners
- Assist private parking supply owners market and sell unused spaces

Given the low occupancy Walker informally observed in some of the surface lots, an LFCPA shared parking program should be strongly considered even where lot owners are reluctant to allow overflow onto underutilized portions of their lots during their busy daytime hours. Walker would recommend LFCPA consider a pilot program in the Chevy Chase neighborhood for shared parking. There are many roles the LFCPA could play in this program, but LFCPA should consider:

Monthly Lease (Permit) Parking:

- Discuss the possible revenues and benefits of increased proximate parking space availability to local private parking supply owners
- Work with the private supply owners to create a database of private parking space inventory that is available for public consumption
- Create a map of location rates by area or zone that would provide the private supply owners a guideline for potential monthly rates
- Market the available spaces to the public through providing physical signage, marketing pamphlets, email campaigns, and opening the inventory database up to the lexpark.org website for potential patrons to search, find, and connect to available spaces
- LFCPA could potentially provide the following services to the private supply owners for a fee:
    - Provide parking permits / hangtags
    - Sell the permits for the private supply owner through the current T2 Systems application
    - Track the permit payments and provide collections services for unpaid permit fees
    - Enforce the location with current enforcement staff and tools
    - Provide additional insurance coverage

Daily or Evening (Transient) Parking:

- Work with paybyphone and the local private supply owner to open available spaces up to public transient consumption through the current mobile payment application
- Market the available spaces to the public through providing physical signage, marketing pamphlets, email campaigns, the ParkMe application, and the lexpark.org website
- LFCPA could potentially provide the following services to the private supply owners for a fee:
    - Provide parking permits / hangtags
    - Track the paybyphone revenues and distribute individual location profits to the private supply owners
    - Enforce the location with current enforcement staff and tools
    - Provide additional insurance coverage

FEE-IN-LIEU

A number of cities have tried to find a means to advance the concept of shared parking by motivating developers or property owners who create the need for additional parking to contribute some or all of the cost of developing additional parking in municipal facilities. The fee-in-lieu approach provides the developer with an opportunity to contribute a predetermined amount for each required parking space not constructed on site.

Funds contributed to the in-lieu account are used by the City to provide an appropriate number of spaces in municipal parking facilities. Such a fund must be sufficient to cost-effectively develop adequate parking in reasonable proximity and in a timely manner to each new development. The City must charge a sufficient fee-in-lieu to cover the cost of land acquisition and construction, even when it isn't immediately turning the fee into parking spaces.

We note that a number of developments are often needed to create the critical mass to fund a parking facility. Therefore the timing of facility completion may not coincide with that of the development, which may create a challenge. While in lieu fees are typically set at a level low enough to encourage developers to pay them rather than engage in constructing new, exclusive and expensive parking, these fees are typically near or at the cost, per space, for a municipal parking operation to build new supply.

Walker has analyzed 22 in-lieu programs and found an average fee of $26,000 per space, with a range of $1,572 per space at the lowest and $66,260 per space at the highest. One in-lieu program from the data set implemented a graduated fee based on a scale of:

- 1 to 5 spaces = $15,000 per space
- 6 to 15 spaces = $20,000 per space
- 16 to 25 spaces = $25,000 per space

- 26+ spaces = $30,000 per space

The vast majority of these programs included a disclaimer that the fee amount was adjusted on an as-needed basis based on cost of construction, and many also review and adjust the per space fee annually.

Existing Fee-in-Lieu Programs:

- Town of Davie, FL
- Orlando, FL
- City of Bend, OR
- Corvallis, OR
- Town of Jackson, WY
- Berkley, CA
- Davis, CA
- Laguna Beach, CA
- Wheaton, IL
- Sioux Falls, SD

The Fee-in-Lieu model provides a mechanism for developments to fund shared parking improvements. This model includes the following components:

- Developers are provided an incentive to pay an in-lieu fee to the City to reduce their construction requirement, which will increase the density and the overall feasibility of the project;
- The City can use the in-lieu fees to finance the construction of shared-use municipal parking facilities with collected fees to meet project completions in a timely manner

It should be noted that new zoning code changes should be enacted that will effectively demand construction of 100% to 110% of the zoning requirement (after some shared parking consideration). Developments will still require some on-site space for visitors and VIPs, but employees can be accommodated in shared parking facilities.

ZONING CODE REVIEW

Walker reviewed sections of the Lexington Zoning Ordinance that govern parking (articles 8 and 16). There are three primary zoning classifications within the study area, B-2, B-2A, and B-2B. Walker was asked to provide comments and suggestions to better serve economic development and protect property owner rights while minimizing waste and promoting sustainability. The Zoning Ordinance ("Code") is used by the Planning Department to ensure sufficient parking is provided for new and re-development in Lexington.

CURRENT REQUIREMENTS

According to Section 8-18(n) Off-Street Parking, the B-2 district requires parking be provided at a rate of 25% of the least parking area required in any zone. The B-2A and B-2B districts do not require off-street parking, unless residential use for 25 or more units is proposed (section 8-19(n)). Off-street parking is a conditional use in the B-2B district, requiring a special permit (section 8-19(d)).

RECOMMENDED ZONING PARKING CODE CHANGES/CONSIDERATIONS

The zoning provisions used by Lexington are fairly comprehensive and thorough. The reduced parking requirement in the B-2A zone and virtually no parking requirement in the B-2 and B-2B zones provide an economic incentive for continued development by reducing potential upfront development costs for parking. Discussions with the city planning department staff indicate that present policies on reduced or no parking requirements have been working well for some time.

As a point of discussion and consideration, we introduce the following issues and strategies that Lexington may consider in order to further enhance the current code.

PROHIBITION OF NEW SURFACE PARKING WITHIN THE CBD

As an alternate approach, some cities have gone as far as prohibiting the development of new off-street parking anywhere in the downtown to help achieve the goals of New Urbanism and Smart Growth planning goals, and then collect fees-in-lieu to build municipal parking, usually on the periphery. While prohibiting all off-street parking in a CBD may not be the choice of every community, prohibiting new surface parking lots can improve the "pedestrian ambience" of the downtown.

Based in part on the previously discussed shared parking concepts, Walker makes the following recommendations to better promote shared parking within the study area. These also are based in part on "Recommended Zoning Ordinance Provisions" published by the National Parking Association.

- Walker strongly recommends that the Code allow reduction of the required number of parking spaces based upon a shared parking study performed in accordance with the latest edition of Shared Parking, by a qualified traffic or parking consultant. The process may be facilitated by prescribing acceptable mode adjustments, particularly for employee parking, based upon local census data on modal splits. The ordinance should continue to set a maximum reduction in parking requirements for shared parking that can be administratively approved without a public hearing or approval by the zoning board.

- The parking requirement may be reduced or eliminated by the payment of the Fee-in-Lieu of parking. This fee would be established and occasionally updated by vote of the city council, for each space not provided on-site. This fee should be equivalent to the cost of construction of a structured parking space.

- No changes are recommended for the reduction in parking in each zone.

Note: The previous recommendations are not represented to be suitable as written for inclusion in an amendment to the existing Code, nor are they represented to be exhaustive. Walker Parking and its consultants do not represent these points as a legal document or model ordinance.

TRANSPORTATION DEMAND MANAGEMENT (TDM)

As population growth continues to place greater demand on transportation systems, strategies that focus on operations rather than increased capacity will become more and more a part of the solution to future problems. With this realization, many cities have begun to employ Transportation Demand Management (TDM) Programs to improve operations. The general idea of these programs is to reduce the number of automobile trips in a given area by offering incentives and providing alternatives to driving alone.

In order to develop and market successful TDM Programs defined areas, such as central business districts, create Transportation Management Associations (TMA). These public-private partnerships provide the institutional structure to develop and employ the strategies best suited for a particular area. One funding strategy, utilized by a majority of TMAs, is the collection of membership dues. These annual dues, based on the number of individuals a participating member employs, typically account for an average of one third of a TMA's revenue.

TDM strategies implemented by TMAs focus on reducing work-related single occupancy vehicle trips. These strategies provide incentives for individuals to choose different modes of transportation such as transit, carpooling, bicycles or walking when traveling to work. With the right mix of TDM alternatives and strategies, vehicle trips can be significantly reduced in relation to background conditions. Various marketing techniques such as distributing free transit maps, offering "free transit days", and putting up promotional posters can help attract more riders. TMAs can also encourage ridership by offering monetary incentives in paid parking areas, as well as other specific strategies to employees who ride transit to work.

SHARED VEHICLE PROGRAMS

Car-sharing is a program that has been very successful in a number of North American cities. The basic concept of this strategy is to provide an option for convenient vehicular travel without owning a car. It provides a medium between having no vehicle and personal vehicle ownership. These programs offer access to a fleet of cars that can be used on an hourly basis.

After signing up online and reserving a car, customers simply show up at the lot and drive off with a car. Many municipal parking operations will dedicate, or reserve, parking spaces in strategic areas in order to provide the most convenient pick-up and return locations for the shared vehicles.

Walker recommends that the LFCPA be prepared to reserve on-street parking spaces that could be dedicated for car and ride sharing providers. This could also include reduced or free access to LFCPA managed parking garages in order to minimize the impact to the limited on-street parking supply.

BICYCLE RACKS

Many employers have trouble covering shifts due to their employees' lack of transportation. An alternative to expanding the bus schedule or shared vehicle services is using bicycles. By providing bicycle racks either on-street or at employment centers, employers can encourage individuals who live in close proximity to their places of work to bike or walk.

Installing bicycle racks alone, will not solve transportation issues, partly because safety will also need to be addressed in tandem. Lighting, security, bike paths, and signage all need to be considered when creating a bike program. Promotional opportunities can include, but are not limited to local bike shops run seminars to teach children and adults alike in order to ensure that biking remain a viable alternative transportation source.

Cities where a successful Bike Rack program exists:

- Madison, Wisconsin
- Chicago, Illinois
- Portland, Oregon
- Santa Cruz, California
- Bloomington, Indiana

WAYFINDING / SIGNAGE

We recommend implementing a comprehensive signage program to maximize visitor awareness to public parking locations. The signage improvements should be prepared in conjunction with any enhancements to the parking resources, in addition to any streetscape improvements along the corridor roadways. As is true with any good communications medium, signs should be brief, precise and appropriate, such as "Public Parking" or "Two Hour

Parking." Further, the signage should guide the driver from the main thoroughfares into the parking lots.

Each parking area has its own set of wayfinding/signage requirements. These requirements present specific questions concerning the needs and concerns of the users to be answered during the design of the signs, including:

COLORADO SPRINGS, CO

- What are the points at which information is needed?
- What information is needed?
- How should this information be presented?
- Will there be a high percentage of first-time visitors to the district, or is the parking supply used by the same people every day?
- Are there special sign requirements for accessible parking or bilingual patrons?
- Are there choices in traffic patterns that must be presented to drivers such as directions to parking near the entrance to an anchor tenant or exits to different streets?

It is also important that general rules for sign design and placement be followed when planning the streetscape improvements.

- All signage should have a general organizing principle consistently evident in the system.
- Direction signage for both pedestrians and vehicles must be continuous (i.e., repeated at each point of choice) until the destination is reached. Very minimal signage exists at the point of parking that directs patrons back to the merchants.
- Signs should be placed in consistent and therefore predictable locations.

More sophisticated space count signage could be incorporated into the existing off-street garage PARCS system. Many municipalities are considering dynamic space availability signs in coordination with wayfinding signage at central access points and corridors. For example, at the east and west ends of Vine and Main, dynamic signs could be placed advertising current LFCPA garage space availability and incorporate associated directional signage to navigate parkers to specific garage locations. The space availability information could also be added to the lexpark.org website, showing current garage space availability, while also incorporating an interactive map that provides directional information guiding users to the garages with space availability.

NEW PARKING GARAGE ANALYSIS

There are cases where parking management alone is not the solution. While an organized parking system provides the framework for future growth, additional supply in the form of a parking structure may be required to support new development. It is rare that a community would build a fully subsidized, stand-alone parking ramp without clear plans for new commercial development. The preferred approach is to develop new parking in coordination with highly dense mixed-use projects. This approach maximizes development space by integrating parking into the development program.

This section provides a general overview of basic parking economics that must be considered when planning for a new parking structure. A brief discussion is provided on capital costs, operating expenses, breakeven pricing, structural repair budget, and minimum parking dimensions.

CAPITAL COSTS

Walker understands that future parking improvements may be developed as a stand-alone parking ramp or incorporated with the design of a future mixed-use building. A parking facility that is built into a project, as either the upper or lower floors of that development compared to a stand-alone parking facility, requires that the garage use short-span construction. Short-span construction uses an increased number of columns to support the weight of the structural elements above it.

In short-span construction, the column grid is roughly 30 feet on center. The efficiencies of short-span construction are less than long-span construction because of the column projections that interfere with the parking layout. A typical short-span construction garage has design efficiency in the range of 400-450 square feet per space, depending upon the geometrics of the footprint.

If the ramp is a stand-alone structure, utilizing long-span construction, the columns can be located at the front of the parking stalls so that there are no column projections. The efficiency of the garage can be increased to an approximate range of 315 to 350 square feet per space, depending upon the geometrics of the footprint. The increase in efficiency is due to the ability to increase the number of parking spaces inside the same footprint.

A general guideline for determining the conceptual estimate of probable cost for a parking ramp is to apply a cost per space figure to the target capacity. The cost of parking ramps vary greatly based on location, architectural features, sustainability features, and whether the facility is above or below-grade. A reasonable range for an above-grade, 200-300 space parking facility is $14,000 to $18,000 per space, assuming long-span construction. The cost per space can increase significantly when built below ground, or includes multi-use retail and office space.

OPERATING COSTS

Expenses can vary dramatically since these depend on a number of independent variables. Traditional expenses can include costs associated with labor, utilities, daily maintenance, supplies, management and accounting, and insurance. Key factors in determining operating costs include the proposed hours of operations, type of parking access and revenue controls, and the application of active or passive security measures.

The operating expenses for a parking facility are typically presented on a cost per space basis. Walker's 2012 research indicates actual operating expenses that range from $150 to over $1,000 per space annually. The operating costs are lower at facilities that do not maintain revenue and access controls, and have limited hours of operation. Conversely, operating costs are higher at facilities that are staffed, that monitor access to the property with revenue and access controls, and operate 24 hours 7 days a week. All facilities require some degree of daily janitorial service that includes trash removal, sweeping, and minor repairs and maintenance such as lighting replacement. These responsibilities are often delegated to a city's public works department, if a parking department does not exist.

STRUCTURAL REPAIR BUDGET

For new parking structures, in addition to operating expenses, Walker highly recommends that funds be set-aside in a sinking fund, on a regular basis, to cover structural maintenance costs at a minimum of $75 per structured space annually. Once a sinking fund is established, contributions to this fund accumulate over time and are available to cover structural maintenance and structural repairs. Even the best designed and constructed parking facility requires structural maintenance. For example, expansion joints need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further damage.

The structural maintenance cost typically represents the largest portion of the total maintenance budget. Property owners tend to grossly underestimate the structural maintenance cost and do not budget adequately for timely corrective actions that must be performed to cost effectively extend the service life of the structure. The cost of structural maintenance is relatively small considering the potential waste of the improvements associated with the failure to perform proper maintenance on a timely basis.

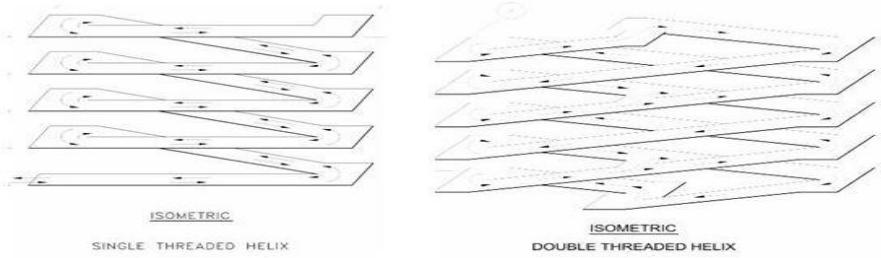
Periodic structural maintenance includes items such as patching concrete spalls and de-laminations in floor slabs, beams, columns, walls, etc. In many instances there are maintenance costs associated with the topping membranes, the routing and sealing of joints and cracks, and the expansion joint repairs. The cost of these repairs can vary significantly from one structure to another. The factors that will impact the maintenance cost include, but are not limited to: the value the owner places on the maintenance of the facility, the local climate, and the age of the structure.

MINIMUM PARKING STRUCTURE DIMENSIONS

There are several variables and options to consider when selecting the type of structure, including the desired traffic flow (one-way or two-way), the type of users, the Level of Service (LOS), and height restrictions. The following table provides the minimum dimensions for two types of structures, as well as a variation on the level of service. Characteristics of a single-threaded helix include two-bays, two-way traffic flow, and 90-degree parking, with the motorist ascending one floor for every 360-degree revolution. By contrast, a double-threaded helix features angled parking and one-way traffic flow, providing a continuous travel path up and then down through the structure. In a double-threaded helix, the motorist climbs two levels for every 360-degree revolution, thus requiring a longer site than a single-threaded helix.

Figure 7: Minimum Parking Structure Dimensions

Garage Type	Traffic	Space	LOS D Dimensions	LOS A Dimensions
Single Threaded Helix	Two Way	90°	120' x 135'	120' x 187'
Double Helix	One Way	75°	112' x 188'	112' x 282'



Source: Walker Parking Consultants

Parking structures could be built on smaller footprints. However, implied in this discussion is the desirability to achieve a relatively efficient parking structure design, as measured by square feet of floor area per each parking space.

WALKING DISTANCE

Pedestrian Safety involves two factors: the ability of vehicles to move to and from the area without pedestrian conflict and, the ease of use by pedestrians with consideration of the walking path and distances to and from the facility.

Walking distance varies based on the patron user group as well as the environment of the surrounding area in which the patron must walk. To aid in estimating the appropriate walking distance, a Level of Service (LOS) rating system is used for evaluating appropriate walking distances based on specific criteria. Several factors impact the walking distance that a typical person will consider reasonable. These include climate, perceived security, lighting, and whether it is through a surface lot or inside a parking structure. LOS "A" is considered the best or ideal, LOS "B" is good, LOS "C" is average and LOS "D" is below average but minimally acceptable.

The following table includes the level of service walking distances for various parking environments. Walker applies the level of service for outdoor/uncovered parking when considering shared parking opportunities in Downtown Lexington.

Table 11: LOS Conditions: Walking Distances

Level of Service Conditions	A	B	C	D
Outdoor/Uncovered	400 ft.	800 ft.	1,200 ft.	1,600 ft.
Through Surface Lot	350	700	1,050	1,400
Outdoor/Covered	500	1,000	1,500	2,000
Climate Controlled	1,000	2,400	3,800	5,200
Inside Parking Facility	300	600	900	1,200

Source: Parking, Butcher, T. and Smith, M.

In comparison, the parking used during typical days at shopping centers is designed to provide LOS A and B, while the parking that only gets used for a few hours on the busiest days of the year might be designed for LOS C. Additionally, employee parking at a shopping mall is most often provided at LOS C, due to the willingness of employees to walk farther than customers and the desire to provide customers with the most proximate parking options. We recommend striving to provide adequate parking to specific user groups using the following LOS guidelines.

VISITORS

Because visitors are most likely unfamiliar with the area and/or are short-term parkers, we recommend providing walking distance LOS A to all visitors.

EMPLOYEES

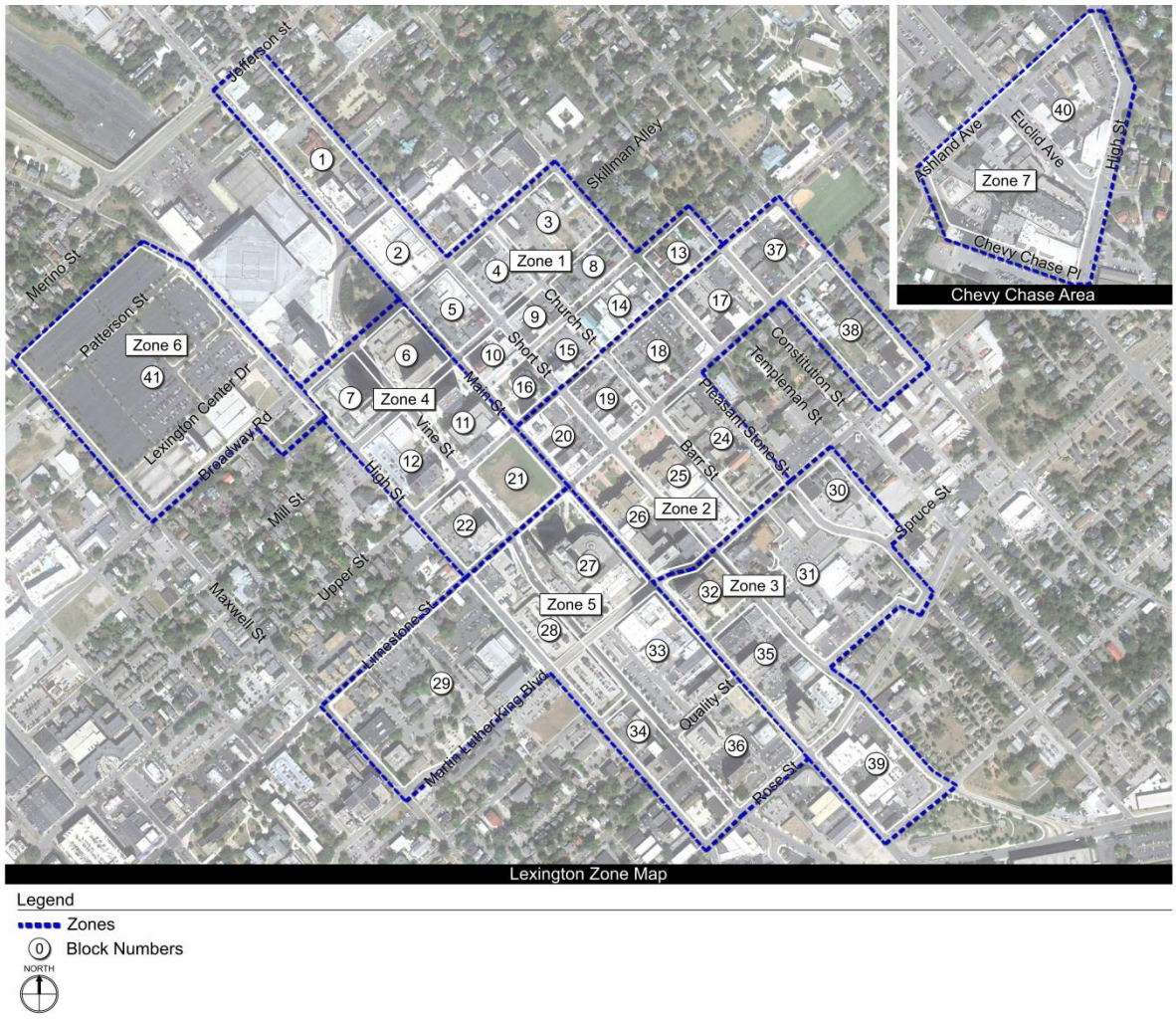
We recommend striving to provide LOS C and/or D to employees, which park for longer periods and may not require the use their vehicle throughout the day.

POTENTIAL PARKING STRUCTURE SITES

The study area was evaluated to determine the optimum locations for a parking structure based on independent Walker evaluation, conversations with LFCPA staff, recommendations from the *Parking Study Report 2014 (Draft), and* the current parking surplus. As the city grows and parking demand increases, it is important to plan the parking to grow with the expansion, in order to continue to meet the growing parking demands.

- Zone 1 includes Blocks 1, 2, 3, 4, 5, 8, 9, 10, 13, 14, 15, and 16
- Zone 2 includes Blocks 17, 18, 19, 20, 24, 25, 26, 37, and 38
- Zone 3 includes Blocks 30, 31, 32, 35, and 39
- Zone 4 includes Blocks 6, 7, 11, 12, 21, and 22
- Zone 5 includes Blocks 27, 28, 29, 33, 34, and 36
- Zone 6 is Block 41
- Zone 7 is Block 40

Figure 8: Potential Structured Parking Locations by Zone



Source: Walker Parking Consultants

SITE CONSTRAINTS

- Potential high acquisition costs.
- Potential significant street changes to surrounding area.
- Potential small site footprint that could increase the number of levels.
- Potential location in the same zone as the existing LFCPA managed garages.
- Potential high demolition costs.
- Potential long walking distance from primary drivers for downtown visitors.
- Potential interruption of downtown green spaces.
- Potential low monthly parking rates which could result in lower revenues.

DESIGN CAPACITIES

- Estimated potential capacities range from 600 to 650± spaces.
- Estimated potential heights range from 5 to 9 levels.

ESTIMATED RELATIVE CONSTRUCTION COSTS

- Estimated potential costs range from $8,625,000 to $10,838,750.
    - The estimates do not include potential land acquisition costs.

Table 12: Alternative Site Matrix

City of Lexington Alternative Site Matrix Structured Parking						
Criteria	Weight	Zone 1	Zone 2	Zone 3	Zone 5 #1	Zone 5 #2
Added Net Capacity	25.0%	7	10	8	9	7
Revenue Projection	15.0%	7	6	5	5	7
Construction Cost	20.0%	7	5	7	6	8
Demolition Costs	10.0%	8	6	8	8	6
Parking Displacement	5.0%	6	6	7	5	5
Location	20.0%	9	5	4	4	8
Vehicular Access	5.0%	5	6	5	6	6
Average Score	100%	7.4	6.6	6.4	6.4	7.2

Source: Walker Parking Consultants

MATRIX COMPARISON OF THE ALTERNATIVES

The matrix was developed to assist LFCPA for individual and collective ranking of the potential parking garage locations. The previously identified parking site alternatives are evaluated on the basis of a number of subjective criteria. Each criterion is scored relative to the others. A value (10 = excellent, down to 1 = poor) is awarded to each. Next, each criterion is weighted by percentage. The criteria used to evaluate the alternatives are as follows:

ADDED NET CAPACITY 25%

Considers the total number of new spaces to be added for each site less the number of spaces removed, if applicable, in order to arrive at a net new supply number.

REVENUE PROJECTION 15%

Estimated financial performance based on site characteristics and parking demand drivers.

CONSTRUCTION COST 20%

Total estimated per space construction, design fee, and other costs multiplied by the total spaces for each location.

DEMOLITION COST 10%

Total estimated cost to remove existing buildings, parking garages, surface lots, or other existing site structures.

PARKING DISPLACEMENT 5%

Considers the impact on current users if supply needs to be removed for short- or long-term periods of time.

LOCATION 20%

The ability of a solution to satisfy parking needs within a reasonable walking distance.

VEHICULAR ACCESS 5%

The ability of vehicles to move to and from the area without conflicting negatively with traffic patterns.

PARKING POLICIES AND PRACTICES

The Lexington-Fayette County Parking Authority is a very sophisticated parking operation that incorporates many operational and management best practices, utilizes the latest enforcement, meter, and PARCS technologies, and consistently invests in their parking assets. As evidenced by the following programs and investments:

- Installation of leading PARCS technologies with the new Scheidt & Bachmann management system and equipment, including dynamic space availability signage
- Significant recent investments in the long-term viability of parking structures through concrete and structural repairs
- Utilization of T2 System's Flex Permit and Enforcement management software, as well as their mobile handheld enforcement suite
- A well designed website that conveys very detailed and thorough information on a wide range of parking related topics
- ParkMe app integration for dynamic space availability on mobile devices
- Various "Green" initiatives, including:
    - Recycled paper for letters and forms
    - Electric and hybrid enforcement vehicles
    - New energy efficient lighting in off-street facilities
    - Non-paper ticket (chip based) PARCS equipment
    - Solar powered meters
    - And many more…
- An informative and interactive Facebook page
- Programs that help engage the community to use parking to solve larger problems in unique and interesting ways, setting examples for other municipalities
    - For example, recent canned food drives for parking ticket amnesty to help the homeless that received national attention.

The following sections focus on ways that LFCPA can continue to improve parking operations. These solutions generally focus on the effective use of the existing parking supply, where improvements to the system can be accomplished via pricing changes to appropriately value high demand spaces. The analysis also covers the relationship between on-street vs. off-street rates, as well as possible increased hours of meter and enforcement operations in order to better distribute evening parking demand.

GRADUATED FINES

The goal of fining violators is not to increase revenues or fill city coffers; it is to keep parking spaces available for short-term demand. Current parking fines, if too low, will encourage abuse by members of the resident and business communities. The idea behind graduated fines is to deter repeat violators and change their behavior, thus freeing parking space in the study area for the intended users.

Walker recommends a graduated fine schedule based on the number of violations within a specific time frame. The following fines are one way of transforming behavior of the current repeat violators.

- 1st Violation $15.00
- 2nd Violation (within 60 days) $40.00
- 3rd Violation " " $80.00
- 4th Violation " " $120.00 plus vehicle booting or towing

Consideration should be given to an incentive system where the initial fine is set at a higher fee. If the violator pays the fine within a certain period of time a discount is then applied. For example, under the current system, someone might receive a $15 fine, and if not paid within 10 days the citation would escalate to $30. Under the incentive system, the initial fine would be set higher, $30, already incorporating the late fee. However, if the fine is paid within a given period of time, 10 days, a discount of $15 is applied bringing the actual fine collected to $15.

CURRENT CITATION RATES

In Lexington, citation fines are currently set at $15 for Overtime Limit, Expired Meter, and Zone citations. Although the fine amount does double if not paid within the first 10 days, the initial amount was found to be lower than a number of comparative cities. Seven cities, chosen based on a number of factors, including but not limited to population size, regional location, and similar university proximities were, used to compare rates.

These seven cities averaged base rates for Overtime Limits / Zone violations at $25.00 and Expired Meter violations were just over $24.00. Increasing citation fine rates to be more in-line with comparative markets could increase compliance, ultimately reducing the number of violations written while at the same time increase valuable space availability.

Table 13: Citation Rate Comparison

City	Population	Expired Meter	Overtime / Zone
Madison, WI	240,323	$ 25.00	$ 25.00
Bloomington, IN	82,575	$ 20.00	$ 20.00
Louisville, KY	253,128	$ 15.00	$ 15.00
Cincinnati, OH	297,517	$ 45.00	$ 45.00
Boulder, CO	103,166	$ 15.00	$ 15.00
Ann Arbor, MI	117,025	$ 20.00	$ 25.00
Pittsburgh, PA	305,841	$ 30.00	$ 30.00
Average		**$ 24.29**	**$ 25.00**
Lexington, KY	*308,428*	*$ 15.00*	*$ 15.00*
Difference		($9.29)	($10.00)

Source: Walker Parking Consultants

PARKING RATES

In municipal parking systems there is a direct relationship between pricing and occupancy. This is one of the best tools the parking authority has to distribute demand across existing resources in order to effectively manage supply. Over time, this pricing relationship should be managed and balanced in order to achieve optimum occupancy across the different parking supply options. Optimization is generally considered to be between 80-90% peak occupancy evenly distributed across the available supply.

As described in the supply and demand analysis, the LFCPA parking garages were observed to have an effective occupancy of just over 81%, while the non-LFCPA locations experienced 59% effective occupancy. Some of this discrepancy can be attributed to the price differences between the parking options.

The hourly parking rate analysis includes ten cities, all exhibiting one or many similarities to Lexington. The comparison found that the current hourly and permit parking rates are currently low. The rates are low by comparison to the local market, the ten chosen municipalities, and the low-end of national averages.

Table 14: Hourly Rate Comparison (Comparative Reference Set)

		Parking Structures		Parking Lots		On-Street		
City	Population	Hourly	Permits	Hourly	Permits	Hourly 1	Hourly 2	Hourly 3
Madison, WI	240,323	$ 1.50	$ 250.00	$ 1.50	$ 150.00	$ 1.00	$ 1.20	$ 1.75
Bloomington, IN	82,575	$ 0.50	$ 67.00	$ 1.00	$ 67.00	$ 1.00		
Louisville, KY	253,128	$ 2.00	$ 90.00	$5 / day	$ 70.00	$ 1.25	$ 1.50	
Cincinnati, OH	297,517	$ 3.85	$ 146.16	$ 7.59	$ 112.76	$ 1.50	$ 2.00	
Boulder, CO	103,166	$ 1.25	$ 69.40	$ 1.25	$ 69.40	$ 1.25		
Ann Arbor, MI	117,025	$ 1.20	$ 147.50	$ 1.50	$ 128.33	$ 1.50		
Pittsburgh, PA	305,841	$ 3.94	$ 225.83	$ 4.35	$ 215.95	$ 1.00	$ 2.00	$ 3.00
Nashville, TN	601,222	$ 4.77	$ 123.55	$ 6.69	$ 138.53	$ 1.50		
Indianapolis, IN	852,866	$ 5.50	$ 127.00	$ 5.53	$ 73.19	$ 1.50		
Kansas City, MO	467,007	$ 2.60	$ 70.00	$ 3.33	$ 52.50	$ 1.50	$ 3.00	
Average		**$ 2.71**	**$ 131.64**	**$ 3.64**	**$ 107.77**	**$ 1.30**	**$ 1.94**	**$ 2.38**
Lexington, KY	*308,428*	*$ 2.00*	*$ 63.75*	*$ 2.60*	*$ 82.33*	*$ 0.50*	*$ 1.00*	*$ 1.00*
Difference		($0.71)	($67.89)	($1.04)	($25.44)	($0.80)	($0.94)	($1.38)

Source: Walker Parking Consultants

ON-STREET RATES

As outlined, on-street hourly rates are currently lower than garage and surface lot hourly rates. The majority of on-street meters are priced at $1.00 per hour and located within 1 hour, 2 hour, or 4 hour maximum time zones. Walker often recommends that the on-street supply, for high demand areas, be priced $.50 to $1.00 more per hour than the comparative off-street per hour pricing.

Currently, daytime on-street peak occupancy was observed to be 413 vehicles parked for an effective occupancy of 59%, much less than the 80-90% optimization. Based on this data alone, increasing the on-street pricing to be higher than off-street pricing is likely not warranted in the near term.

However, comparing on-street rates to both the local market, reference market set, and the national average increases to on-street hourly price points are warranted. Going forward, Walker recommends scheduling incremental increases at regular annual or bi-annual intervals, starting with a $.25-$.50 increase immediately. To help distribute on-street demand across the entire supply, an associated decrease in, or simply not increasing the price for the lowest utilized areas should also be considered.

OFF-STREET TRANSIENT RATES

According to Colliers International's *North America Central Business District 2012 Parking Rate Survey* the low-end average for hourly parking is $2.71, which is equal to the average structured parking rate for the ten municipalities evaluated for this study. By comparison,

LFCPA managed public garages currently charge $1.00 per half hour, or $2.00 per hour. Non-LFCPA managed off-street public parking options averaged $3.00 per hour. The LFCPA managed garages are ($.71) below this study's comparative reference set and the national average. They are also ($1.00) below the privately managed local market.

The Colliers study also provides a low-end average for all day parking at $9.64. The LFCPA managed garage maximum per day rate is currently $8.00. This puts the current max daily rate ($1.64) below the low-end national average and ($1.33) below local non-LFCPA garages.

Off-street parking rates range from $2.00 to $5.00 for the first hour, with LFCPA managed garages priced at $2.00 for the first hour. It is recommended that LFCPA garage rates by raised to at least $2.50 per hour, with an associated increase to maximum daily cost between $9-10.

Table 15: Local Market Rate Comparison

Location Type	1st HR	All Day	Evening	Monthly
On-Street Avg	$1.00		$0.00	
Primary Surface Lot Avg	$3.17	$6.11	$4.00	$82.33
Non-LFCPA Garage Avg	$3.00	$9.33	$3.33	$72.88
LFCPA Garage Avg	$2.00	$8.00	$3.00	$63.75
National Low-end Avg	$2.71	$9.64		$108.06

Source: Walker Parking Consultants

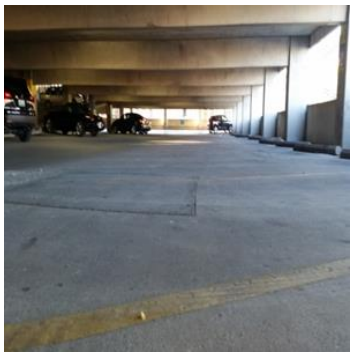
OFF-STREET PERMIT RATES

For garage permit pricing, LFCPA managed garages are also below the local private market, reference group set, and national average. As illustrated in the table below the non-reserved rate for LFCPA garages averaged $63.75. The actual rates for LFCPA garages ranged from $55.00 to $75.00, while the local non-LFCPA garage permits ranged from $65.00 to $85.00. It is recommended that LFCPA managed locations implement a $10 increase to monthly permits, starting with the Victorian Square garage immediately.

Table 16: Permit Rate Comparison

Location Type	LFCPA	Non-LFCPA Garages	Local Surface Lots	Reference Set	National Average
Permits Avg	$63.75	$72.88	$82.33	$119.71	$108.60
Difference		($9.13)	($18.58)	($55.96)	($44.85)

Source: Walker Parking Consultants



To attract additional monthly parkers, it is recommended that LFCPA introduce new permit options for LFCPA garages to increase off-street parking supply utilization, and better manage demand by time of day:

- If a parking garage has low evening demand, consider:
    - 'Evening Only Permits' – For example these permits would be programmed for use during 6:00 PM to 6:00 AM only and price points should be set very low to capture a large audience. This permit is ideal for evening employees and should be heavily marketed to local restaurants and bars.
- If a parking garage has low daytime demand, consider:
    - 'Parking Debit Cards' – this type of permit would offer a parker a decrementing value card (by dollar or by use) that is cheaper than the full daily rate. This permit type is ideal for regular downtown visitors or daytime employees that only drive downtown a few times each week.
    - Less expensive, standard business hour only permits, or 'Day Permits' – this type of permit would be ideal for office employees working standard day shifts. These permits would be less expensive as compared to a 24/7 access permit, but could be configured to charge a fee to the permit holder if they use the permit outside of standard business hours, for example 6:00 AM to 6:00 PM.
- A 'Frequent Parker Program':
    - Similar to Parking Debit Cards, this permit option can track usage and provide incentives for LFCPA garage use. For example, every ten parking purchases the frequent parker receives 1 free.

GARAGE OPERATING EXPENSES

An Operating expense analysis, for the current garages, was completed comparing the existing expense structure to the Walker database with over 300 Profit & Loss statements. This analysis compares expense categories, as a percent of total operating expenses, for the LFCPA managed garages against national averages.

Overall the garages are operating at $474 of operating expense per space. Including administrative overhead, the average total expense per space for LFCPA garages is $546 which is slightly lower than the Walker's Calculated Average (WCA) of $720 per space. However, there are specific categories that have been found to be outside of expected expense per space. The following figures are expressed as a per space dollar amount, by expense category, before any dollar amounts are moved to Capital Expenses. LFCPA expense per space dollar amounts are a combined averaged percentages from 2013 and 2014.

Table 17: Expense per Space Matrix

Expense Category	Expense Per Space WCA	Above Grade	Midwest	LFCPA
Payroll & Benefits	$ 352	$ 324	$ 352	$ 252
Security	$ 120	$ 111	$ 141	$ 31
Management Fees	$ 52	$ 45	$ 45	$ 30
Accounting/ Banking	$ 6	$ 5	$ 6	$ 14
Supplies	$ 23	$ 21	$ 36	$ 18
Insurance	$ 30	$ 28	$ 19	$ 22
Snow Removal	$ 3	$ 5	$ 2	$ 15
Utilities - All	$ 72	$ 72	$ 95	$ 83
Maintenance	$ 48	$ 51	$ 103	$ 75
Misc/ Other Exp	$ 14	$ 15	$ 16	$ 6
Total Cost Per Space	$ 720	$ 677	$ 816	$ 546

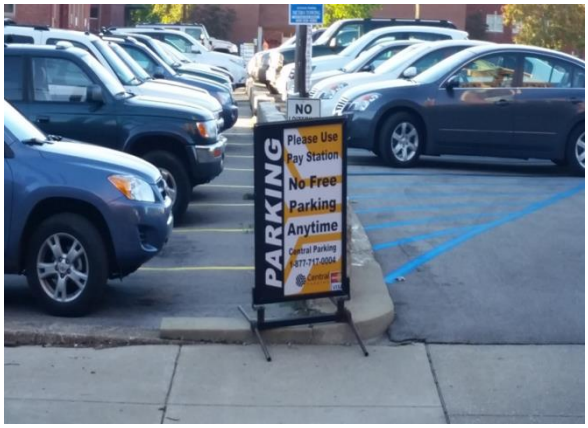
Source: Walker Parking Consultants

- Payroll is currently at $252, 39% below the WCA of 45%. This is due to a significant drop in 2014 (34%) over 2013 (44%).
    - Compensation Insurance at 4.8% was at the low-end of industry standards which range from 4.75% to 11%.
    - Payroll Taxes in 2014 were 11%, slightly higher than the industry standard of 10%.
- Security was significantly below the WCA. LFCPA Security expense category was at $31, nearly 25% of the WCA of $120.
- Management Fees of $30 were in line with the WCA of $52. Both categories come to an average of 6% of Operating Expenses.
- Banking averaged $14, slightly higher than the WCA of $6. This expense category is out of line due to an unidentified increase in 2014 ($23) over 2013 ($5) which was more in-line with the WCA.
- The Supplies category was at $18 slightly lower than the WCA of $23.
- Liability insurance was at 4%, slightly higher than the WCA of 3%.
- Snow Removal averaged $15, which is higher than the WCA $3. The majority of this overage is due to significant snow fall in 2014 ($25) over 2013 ($4) which was more in-line with the WCA.
- Utilities expense was slightly higher than average cost per space, currently at $83 for LFCPA, as compared to the WCA of $72. However, this figure was much lower than a regional comparison, which has a WCA of $95.

- Electricity costs accounted for 98% of this expense category. The kw / hr in LFCPA was determined to be $0.070958, which is on the low-end of the industry range of $0.0626 - $0.2154.

- Maintenance was also higher than the average cost per space, currently at $75 for LFCPA. However, this figure is much lower than the regional comparison, which has a WCA of $103.
- Misc. / Other expenses were lower LFCPA averaged $6, while the WCA was $14.

ON-STREET HOURS OF OPERATION



On-street spaces are usually the highest demand areas within a downtown municipal setting, regardless of the time of day. Combine this high demand with free evening on-street parking in a thriving and active community and the result is a stressed parking supply. A stressed on-street evening parking supply is a significant challenge facing the Lexington parking system.

As discussed in the previous section, there is a direct relationship between price and occupancy, which is clearly evident in this situation. This relationship between price, demand, and occupancy is very clear after 5:00 PM. The highest on-street occupancies were observed to be between 4:00 PM and 8:00 PM. As mentioned, one factor contributing to this demand is due to a concentration of bars, restaurants, and entertainment activities. This concentration is generally bound by Broadway, W. 2nd St., Limestone St., and Main St. A few areas further east on Main St. also experience some increased demand.

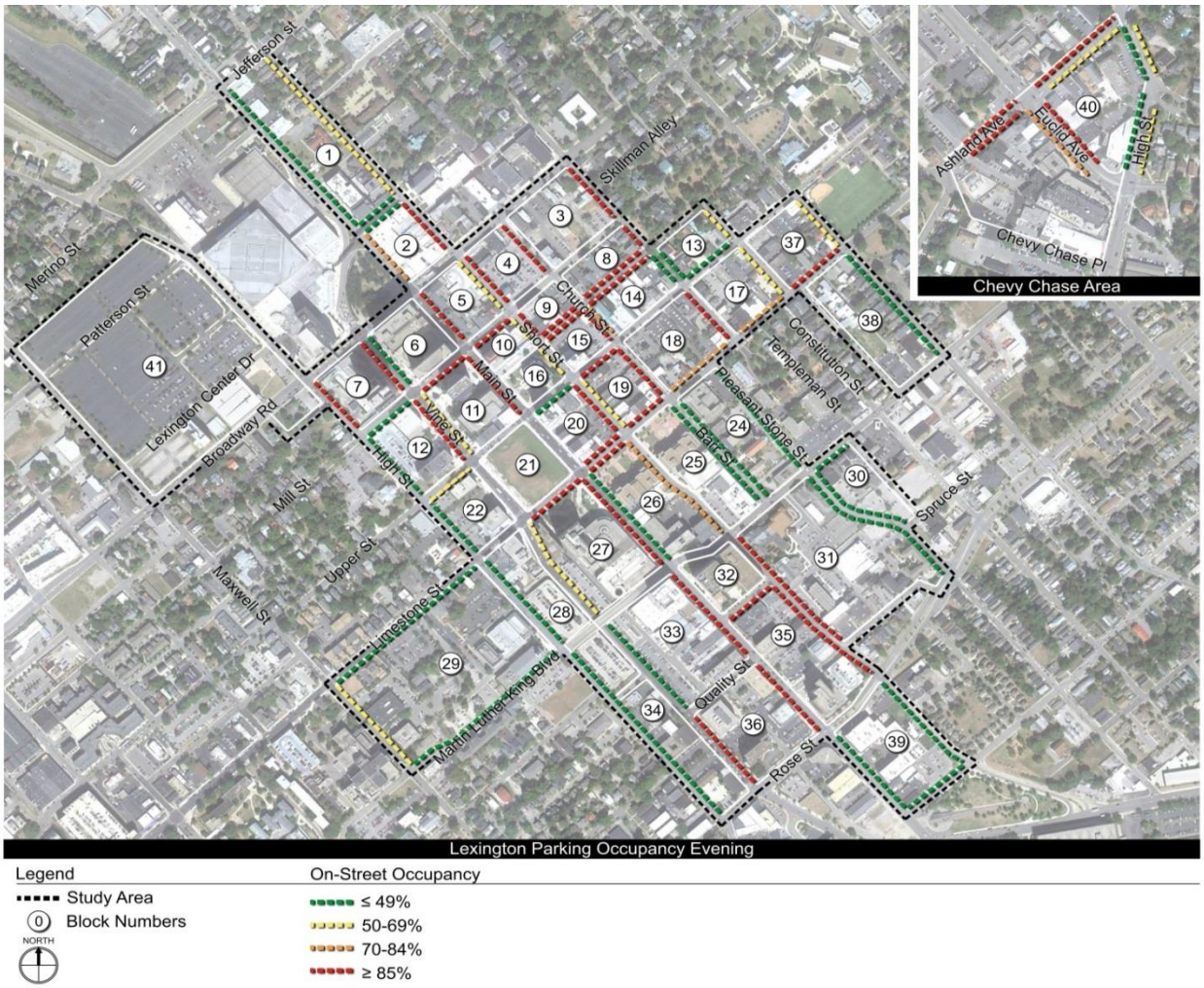
Another driver is the disparity in pricing. On-street parking after 5:00 PM is currently free, while the vast majority of all other off-street options still charge a reduced evening rate of $2 to $4. As the evening heat map and picture will attest, the off-street options during this time experience very low utilization, while on-street spaces are often full.

The added on-street hours of operation could receive significant push back from local business owners, especially from restaurants, bars, and evening events. Evening free on-street parking is also a marketing tool used by LFCPA to entice downtown visitors to the core of Lexington and experience the great evening attractions. As an example, the LFCPA Facebook page has evening free parking advertised on the home page. Another challenge with increasing the hours of

operations is the perception that LFCPA is simply looking for more ways to increase revenue, and not that the effort is an attempt to increase the availability of on-street, high value spaces.

One option to help continue promote free parking downtown after 5:00 PM, while also better managing on-street availability during this time, would be to offer 2 hours free in the LFCPA garages after 5:00 PM. This would allow LFCPA to continue marketing free evening parking, but also promote off-street public garage options. At the same time, on-street hours of operations could increase to the recommended 8:00 PM in order to promote turnover, reduce downtown employee's parking on-street, and increase overall space availability.

Figure 9: Evening On-Street Parking Block Face Heat Map (10/10/2014)



Source: Walker Parking Consultants

Walker recommends that LFCPA extend hours of paid on-street meters and enforcement from 9 hours (8:00 AM to 5:00 PM) to, at a minimum 12 hours (8:00 AM to 8:00 PM). This change, along without any associated rate change, is expected to provide a 27% revenue increase. At the same time, an evening rate change to free parking for the first 2 hours should be considered. As mentioned, the anticipated revenue impact to the LFCPA garages would be very low, while still allowing the operation to provide some free evening parking.

Enforcement has the potential to increase as a result of the expanded times as well, gaining 32% in total revenue. It is not recommended that the enforcement citation increase be used for planning purposes as it is based on assuming people will break the rules, however, it has been included based on historical performance.

There would be an associated total expense increase as well, however it is not considered to be significant based on the existing infrastructure, equipment, and systems already in place. On-street operating expenses been calculated at an overall 18% increase. Table 22 outlines the improvements in detail.

Table 18: Estimated Year 1 Meter / Enforcement Revenue (12 HR)

	2014	2015
On-Street Meters		
Parking Spaces	1,098	1,098
Average Utilization	*30.5%*	*30.5%*
Hours/Day Charged for Parking	9	12
Total Meter Receipts	782,794	1,043,725
Permit Sales	62,099	62,099
Bag Rental Fees	95,958	95,958
Total On-Street Parking Revenue	**940,851**	**1,201,782**
Enforcement Revenue Calculation		
All Citations Collected		
Paid Enforcement Tickets	34,944	46,592
Total Utilized Hours	782,794	1,043,725
Ticket Fee (Includes All Fines and Fees)	20.2	20.2
Booting Fees	27,390	27,390
Enforcement Revenue	**732,712**	**967,819**
OPERATING REVENUES		
Total Operating Revenues		
Parking Meters	940,851	1,201,782
Parking Violations	732,712	967,819
Total Operating Revenues	**1,673,563**	**2,169,601**
OPERATING EXPENSES		
On-Street and Enforcement		
Payroll & Benefits	243,665	249,757
Operating Expenses	150,017	153,767
On-Street	822,114	970,095
Other & Misc. Expenses	0	0
Total Operating Expenses	**1,215,796**	**1,373,619**
Net Operating Income	**457,767**	**795,982**
% Growth	*-0.9%*	*73.9%*
% Margin	*27.4%*	*36.7%*

Source: Walker Parking Consultants

FINANCIAL ANALYSIS

PROJECTED OPERATING REVENUE

Transient parking revenue is determined by two variables: projected transient demand and the average transient parking rate (fee). The parking demand model applies the distribution of short-term and long-term transient patrons to determine the number of patrons in each category. Once the demand for each type of transient patron is determined, Walker multiplied the projected parking demand by an average hourly parking fee. By analyzing the historical length of stay at similar facilities, then applying the projected rate schedule to the length of stay distribution, the weighted average hourly parking fee is computed. With the two key variables identified, the transient parking revenue is calculated accordingly.

Similar to transient parking revenue, lease revenue is determined by two variables: projected leases (monthly permits) sold and the lease parking rate. Typically, it is in the best interest for a parking facility owner to maximize the available parking spaces and not reserve or dedicate spaces that cannot be sold more than once. None of the spaces will be dedicated or reserved.

Other revenue categories are considered when evaluating an entire parking system. For example, large revenue categories like pre-pay events and validations have also been included in the revenue projections.

PROJECTED OPERATING EXPENSES

The calculation of annual operating expenses for the LFCPA parking system is based upon local market research, prior annual expenses, an estimation of annual inflation, and Walker's database of parking facilities. Operating expenses include salaries and benefits, professional and contract costs, security, utilities, insurance, auto, operating supplies, routine repairs, snow removal, equipment maintenance, phone and internet, professional dues/subscriptions, bank fees, and miscellaneous expenses.

The operating expenses are based on the assumption that all parking facilities are outfitted with parking access and revenue control equipment (PARCS). The PARCS equipment is assumed to have a useful life of approximately ten years.

Expenses for the LFCPA system have historically been separated into on-street and garage categories.

Table 19: Five-Year Historical Financial Summary

	2010	2011	2012	2013	2014
Monthly (On-Street)	$31,606	$26,735	$35,383	$49,737	$62,099
Meter	$690,450	$705,274	$769,744	$857,539	$878,752
Fines (Citations)	$777,658	$703,856	$775,881	$703,875	$731,985
Monthly (Garages)				$850,021	$805,074
Transient				$451,048	$726,454
Event				$202,975	$186,386
Jurors				$8,027	$13,834
Validations				$31,889	$56,494
Refunds				-$1,014	$7,706
Retail rental				$63,098	$81,269
Rebate					$7,714
Interest	$3,879	$1,443	$1,697		
Misc	$550	$7,676	$5,017	$2,070	$4,587
Total Revenues	**$1,504,143**	**$1,444,985**	**$1,587,722**	**$3,219,265**	**$3,562,354**
Salary & Benefits	$157,972	$153,812	$173,823	$225,251	$243,665
Prof & Contract Svcs	$629,106	$712,746	$936,992	$868,680	$908,945
General Operating	$25,651	$23,892	$28,122	$44,199	$47,233
On-Street Operating	$54,629	$25,727	$16,023	$11,007	$15,953
Garage Operating				$947,355	$972,654
Depreciation				$194,379	$514,120
On-Street Total				$1,138,130	$1,199,843
Garage Total				$947,355	$972,654
Total Operating Expenses	**$867,358**	**$916,177**	**$1,154,960**	**$2,290,871**	**$2,702,570**
NOI	**$636,785**	**$528,808**	**$432,762**	**$928,394**	**$859,784**
Capital Expenditures					
Office Equipment	$0				
Other Equipment (meters)	$0	$43,132	$65,154		
Loss on Asset disposal	$9,383	-$43,489	-$65,154		
Depreciation	$74,257	$77,936	$88,138		
On-street				$114,267	$103,452
Capital - Victorian Square				$2,412,670	$185,490
Capital - Transit Center				$9,703,342	$917,369
Capital - Courthouse				$232,268	$122,178
Capital - Annex				$4,791,271	$856,945
Asset expense eliminated				-$17,236,165	-$2,080,371
Total	**$83,640**	**$77,579**	**$88,138**	**$17,653**	**$105,063**

Source: Lexington-Fayette Parking Authority and Walker Parking Consultants

ASSUMPTIONS

Two scenarios were created for this financial analysis, Case 1 is a base case and a Case 2 represents system optimization. Case 2 includes an analysis on the impact of a new parking garage. There are two garage types modeled based on existing garages and location options.

Case 1 is a base case with relatively small, straightforward changes to the parking system. The purpose of this scenario is to represent a system with no significant changes (increased hours of operations, new parking garage construction, or significant rate changes) and conservative volume, rate, and expense increases. This scenario was created with the following assumptions:

CASE 1: GARAGE ASSUMPTIONS

- Monthly Contract Volume Growth – 1% increase in 2015 to 2019 for additional monthly contract parkers from the identified new development; 0.5% per year for the rest of the term
- Transient Volume Growth – 1% growth in 2015 to 2019; 0.5% per year for the rest of the term
- Monthly Contract Rate Growth – Rates remain constant through 2016; bi-annual increases of 1.5% from 2017 to 2034
- Transient Rate Growth – Rates remain constant through 2016; bi-annual increases of 1.5% from 2017 to 2034
- Garage Operating Expenses – 2.5% increase per year for entire term
- $6,000,000 loan payments continue through completion in 2028. No new financing during the full 20 year term.
- CAPEX continues annually as identified by in the Desman facility condition reports
- PARCS equipment is replaced every 10 years (2023, and 2033) at a similar replacement cost to the current equipment.
- The annual debt service will remain $448,519 annually through May 2018. From June 2018 through May 2028, annual debt service assumes a 10 year remaining payback at a 4% annual interest rate, or $527,684 annually.

CASE 1: ON-STREET ASSUMPTIONS

- Utilization Growth – .5% growth per year for entire term
- Rate Growth – Rates remain constant through 2016; bi-annual increases of 1.5% from 2017 to 2034
- Price Elasticity – (0.05) per year for entire term

- Enforcement Citation Growth – 0% growth per year for entire term
- On-street Operating Expenses – 2.5% increase per year for entire term
- No increase to on-street operating and enforcement hours, remaining at 9 hours per day
- CAPEX assumes $50,000.00 in annual meter replacement costs with a 2.5% annual increase for the rest of the term
- Total number of On-street parking spaces remain constant

Table 20: Case 1 – 20-Year Financial Summary (No new facility)

Total Parking System	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Rev-Transient	$ 647,960	$ 654,439	$ 670,899	$ 677,583	$ 694,623	$ 698,241	$ 712,258	$ 715,794	$ 730,162	$ 733,786
Rev-Lease	$ 856,346	$ 862,678	$ 884,375	$ 892,622	$ 915,071	$ 923,604	$ 942,146	$ 946,221	$ 965,216	$ 969,391
Rev-Event	186,386	186,386	188,250	190,132	192,034	192,994	193,959	194,929	195,903	196,883
Rev-Jurors	13,972	14,112	14,253	14,396	14,540	14,612	14,685	14,759	14,833	14,907
Rev-Validations	57,059	57,630	58,206	58,788	59,376	59,673	59,971	60,271	60,572	60,875
Rev-Refunds/Over/Short	7,783	7,861	7,939	8,019	8,099	8,140	8,180	8,221	8,262	8,304
Rev-Rent	82,082	82,903	83,732	84,569	85,415	85,842	86,271	86,702	87,136	87,571
Rev-Misc	11,690	11,807	11,925	12,044	12,164	12,225	12,286	12,348	12,410	12,472
Rev-On Street Parking	1,695,794	1,699,728	1,923,476	1,928,443	1,955,085	1,960,101	1,987,311	1,992,377	2,020,167	2,025,285
Total Gross Revenue	3,559,072	3,577,543	3,843,054	3,866,595	3,936,407	3,955,432	4,017,068	4,031,622	4,094,662	4,109,473
OPEX	2,253,661	2,311,240	2,221,893	2,273,623	2,330,502	2,383,747	2,442,047	2,497,705	2,558,822	2,617,263
NOI	**1,305,410**	**1,266,303**	**1,621,161**	**1,592,972**	**1,605,905**	**1,571,685**	**1,575,021**	**1,533,917**	**1,535,840**	**1,492,209**
CAPEX	734,538	678,500	453,250	454,531	455,845	457,191	458,570	459,985	1,541,434	462,920
Annual Debt Service	448,519	448,519	448,519	494,699	527,685	527,685	527,685	527,685	527,685	527,685

Total Parking System	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	$ 748,516	$ 752,232	$ 767,334	$ 771,142	$ 786,622	$ 790,527	$ 806,397	$ 810,398	$ 826,666	$ 830,769
Rev-Lease	$ 988,852	$ 993,129	$ 1,013,066	$ 1,017,448	$ 1,037,874	$ 1,042,363	$ 1,063,289	$ 1,067,888	$ 1,089,326	$ 1,094,038
Rev-Event	197,867	198,857	199,851	200,850	201,854	202,864	203,878	204,897	205,922	206,951
Rev-Jurors	14,981	15,056	15,132	15,207	15,283	15,360	15,436	15,514	15,591	15,669
Rev-Validations	61,179	61,485	61,793	62,102	62,412	62,724	63,038	63,353	63,670	63,988
Rev-Refunds/Over/Short	8,345	8,387	8,429	8,471	8,513	8,556	8,599	8,642	8,685	8,728
Rev-Rent	88,009	88,449	88,892	89,336	89,783	90,232	90,683	91,136	91,592	92,050
Rev-Misc	12,534	12,597	12,660	12,723	12,786	12,850	12,915	12,979	13,044	13,109
Rev-On Street Parking	2,053,668	2,058,837	2,087,828	2,093,048	2,122,661	2,127,934	2,158,182	2,163,508	2,194,407	2,199,786
Total Gross Revenue	4,173,953	4,189,029	4,254,983	4,270,327	4,337,789	4,353,409	4,422,416	4,438,315	4,508,902	4,525,089
OPEX	2,681,336	2,742,702	2,809,877	2,874,315	2,944,746	3,012,410	3,086,257	3,157,310	3,234,742	3,309,355
NOI	**1,492,617**	**1,446,326**	**1,445,106**	**1,396,012**	**1,393,043**	**1,340,999**	**1,336,159**	**1,281,005**	**1,274,160**	**1,215,734**
CAPEX	464,443	466,004	467,604	469,244	470,926	472,649	474,415	476,225	1,558,081	479,983
Annual Debt Service	527,685	527,685	527,685	219,869	0	0	0	0	0	0

Source: Walker Parking Consultants

Case 2 is an optimization case. The purpose of this scenario is to represent a system with recommended improvements in pricing, hours of operation, and less conservative rate growth factors. This scenario was created with the following assumptions:

CASE 2: GARAGE ASSUMPTIONS

- Monthly Contract Volume Growth – 1.5% annual for the entire term
- Transient Volume Growth – 1% growth in 2015 to 2019; 0.5% per year for the rest of the term
- Monthly Contract Rate Growth – Rates remain constant through 2015, with the exception of Victorian Square which assumes a $10 increase for both non-reserved & reserved rates in 2015. In 2016 rates increase 10%; and starting in 2017 all rates begin a bi-annual increase of 8%.
- Transient Rate Growth – Weighted average rate of $2.66 for 2015; in 2016 rates increase 10%; starting in 2017 all rates begin a bi-annual increase of 8%.
- $6,000,000 loan payments continue through completion in 2028.
- CAPEX continues annually as identified by in the Desman facility condition reports
- PARCS equipment is replaced every 10 years (2023, and 2033) at a similar replacement cost to the current equipment.
- The annual debt service will remain $448,519 annually through May 2018. From June 2018 through May 2028, annual debt service assumes a 10 year remaining payback at a 4% annual interest rate, or $527,684 annually.

CASE 2: ON-STREET ASSUMPTIONS

- Utilization Growth – 1.5% per year for entire term
- Rate Growth – 25% for years 1 & 2; 10% for years 3 & 4; 2.5% per year for balance of term
- Price Elasticity – (0.05) per year for entire term
- Enforcement Citation Growth – 33% increase in year 1 for additional 3 hours per weekday of enforcement time; 0% per year thereafter
- On-street Operating Expenses – 18% On-Street OPEX increase (33% increase in payroll) to account for additional 3 hours of daily enforcement; 2.5% annual adjustment (inflation) thereafter
- Garage Operating Expenses – 2.5% increase per year for entire term
- Increase in on-street operating and enforcement hours to 12 hours per day
- CAPEX assumes $50,000.00 in annual meter replacement costs with a 2.5% annual increase for the rest of the term

Table 21: 1-20 Year Financial Summary (No new facility)

Total Parking System	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Rev-Transient	$ 664,482	$ 697,707	$ 769,221	$ 778,296	$ 825,381	$ 833,533	$ 883,963	$ 892,694	$ 946,701	$ 956,052
Rev-Lease	$ 856,346	$ 862,678	$ 919,399	$ 926,521	$ 982,576	$ 990,188	$ 1,050,094	$ 1,058,230	$ 1,122,252	$ 1,130,947
Rev-Event	186,386	186,386	195,705	197,662	199,639	201,635	203,652	205,688	207,745	209,823
Rev-Jurors	14,526	15,252	16,015	16,175	16,336	16,500	16,665	16,831	17,000	17,170
Rev-Validations	59,319	62,285	65,399	66,053	66,713	67,381	68,054	68,735	69,422	70,116
Rev-Refunds/Over/Short	8,091	8,496	8,921	9,010	9,100	9,191	9,283	9,376	9,469	9,564
Rev-Rent	85,332	89,599	94,079	95,020	95,970	96,930	97,899	98,878	99,867	100,865
Rev-Misc	12,153	12,760	13,398	13,532	13,668	13,804	13,942	14,082	14,223	14,365
Rev-On Street Parking	2,169,601	2,451,482	2,511,670	2,533,691	2,596,543	2,610,119	2,668,585	2,682,434	3,025,445	3,042,398
Total Gross Revenue	4,056,236	4,386,645	4,593,807	4,635,960	4,805,927	4,839,281	5,012,137	5,046,948	5,512,124	5,551,301
OPEX	2,381,089	2,441,854	2,381,912	2,437,165	2,508,069	2,566,172	2,641,006	2,702,108	2,781,095	2,845,352
NOI	**1,675,147**	**1,944,791**	**2,211,895**	**2,198,795**	**2,297,858**	**2,273,109**	**2,371,131**	**2,344,839**	**2,731,029**	**2,705,948**
CAPEX	734,538	678,500	453,250	454,531	455,845	457,191	458,570	459,985	1,541,434	462,920
Annual Debt Service	448,519	448,519	448,519	494,699	527,685	527,685	527,685	527,685	527,685	527,685

Total Parking System	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	$ 1,013,894	$ 1,023,907	$ 1,085,852	$ 1,096,576	$ 1,162,918	$ 1,174,404	$ 1,245,457	$ 1,257,757	$ 1,333,850	$ 1,347,024
Rev-Lease	$ 1,199,370	$ 1,208,662	$ 1,281,786	$ 1,291,718	$ 1,369,867	$ 1,380,482	$ 1,464,001	$ 1,475,346	$ 1,564,605	$ 1,576,730
Rev-Event	211,921	214,040	216,180	218,342	220,526	222,731	224,958	227,208	229,480	231,775
Rev-Jurors	17,341	17,515	17,690	17,867	18,046	18,226	18,408	18,592	18,778	18,966
Rev-Validations	70,818	71,526	72,241	72,963	73,693	74,430	75,174	75,926	76,685	77,452
Rev-Refunds/Over/Short	9,660	9,756	9,854	9,952	10,052	10,153	10,254	10,357	10,460	10,565
Rev-Rent	101,874	102,893	103,922	104,961	106,011	107,071	108,141	109,223	110,315	111,418
Rev-Misc	14,508	14,654	14,800	14,948	15,098	15,249	15,401	15,555	15,711	15,868
Rev-On Street Parking	3,107,778	3,125,071	3,192,652	3,210,293	3,280,153	3,298,149	3,370,373	3,388,731	3,463,405	3,482,131
Total Gross Revenue	5,747,164	5,788,024	5,994,977	6,037,621	6,256,364	6,300,894	6,532,169	6,578,695	6,823,289	6,871,929
OPEX	2,928,727	2,996,304	3,084,318	3,155,385	3,248,302	3,323,043	3,421,143	3,499,748	3,603,327	3,685,998
NOI	**2,818,436**	**2,791,720**	**2,910,660**	**2,882,236**	**3,008,062**	**2,977,851**	**3,111,026**	**3,078,947**	**3,219,962**	**3,185,930**
CAPEX	464,443	466,004	467,604	469,244	470,926	472,649	474,415	476,225	1,558,081	479,983
Annual Debt Service	527,685	527,685	527,685	219,869	0	0	0	0	0	0

Source: Walker Parking Consultants

NEW GARAGE OPTION A

OPERATING REVENUES:

- A new garage with 600 spaces. This option would operate at the high-end utilization, as historically experienced at the Victorian Square and Helix locations.
- Ramp-up factors of 75% and 95% are used for Years 1 and 2 to reflect a reasonable time for the parking facility to achieve stabilized occupancy. Year 1 occupancy is projected for July 1, 2017, with full utilization estimated at 2019.
- At full utilization, the project estimates 600 monthly patrons starting at an average of $86.00 per month. Monthly rates are increased 8% bi-annually. Sites 1 and 5 from the analysis above would bring in the highest monthly rates based existing market.
- Transient revenue, at full utilization, is estimated at approximately 123,000 transactions (206 per space) annually. This equates to $735 per space annual transient revenue, which is the high-end utilization and revenue per space across the existing LFCPA Garages. This project also assumes the same average ticket price of $3.57 (in 2019) which increases at the assumed rates outlined above.
- Event parking for Rupp arena is projected at $250 per space annually.
- A vacancy/collection loss factor equal to 5.00% of the 'Lease' revenues is deducted to derive Net Revenue.
- Figures are rounded to the nearest dollar.
- The annual debt service will remain $448,519 annually through May 2018. From June 2018 through May 2028, annual debt service assumes a 10 year remaining payback at a 4% annual interest rate, or $527,684 annually. Estimated garage construction costs assume a 20 year payback at a 4% interest rate.

EXPENSES:

- Operating Expenses are calculated at $475 per space annually. This is the current average per space operating expenditures for the combined LFCPA garages.
- Analysis assumes automated pay stations are used to collect transient revenues. The parking facility is assumed to add PARCS equipment in year 1 (2017). A CAPEX cost of approximately $500 per space was calculated, totaling $300,000. PARCS equipment is estimated to be replaced after 10 years in 2027.
- Additional CAPEX of $75 per space annually is included for the term.
- Construction costs at $14,500 per space, plus 15% for consulting, design, and other fees. Total construction costs come to $16,675 per space. This cost does not include land acquisition.
- Property taxes are excluded.

- Expenses have been inflated by 2.5% percent annually.
- Debt service on the new facility assumes the following: 20 year term; 4% financing; $0 upfront capital
- Figures have been rounded to the nearest dollar.

Table 22: Garage Option A

New Parking Facility	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rev-Transient	306,255	387,923	441,007	441,007	476,288	476,288	514,391	514,391	555,542
Rev-Lease	441,602	559,363	635,908	635,908	686,780	686,780	741,723	741,723	801,060
Rev-Event	112,500	106,875	115,425	115,425	124,659	124,659	134,632	134,632	145,402
Rev-Validations	31,500	29,925	32,319	32,319	34,905	34,905	37,697	37,697	40,713
Total Gross Revenue	891,857	1,084,086	1,224,659	1,224,659	1,322,631	1,322,631	1,428,442	1,428,442	1,542,717
OPEX	285,000	292,125	299,428	306,914	314,587	322,451	330,513	338,775	347,245
NOI	606,857	791,961	925,230	917,745	1,008,045	1,000,180	1,097,929	1,089,666	1,195,472
% Margin	*68%*	*73%*	*76%*	*75%*	*76%*	*76%*	*77%*	*76%*	*77%*
CAPEX	345,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Debt Service	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185

New Parking Facility	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	555,542	599,985	599,985	647,984	647,984	699,823	699,823	755,808	755,808
Rev-Lease	801,060	865,145	865,145	934,357	934,357	1,009,105	1,009,105	1,089,834	1,089,834
Rev-Event	145,402	157,034	157,034	169,597	169,597	183,165	183,165	197,818	197,818
Rev-Validations	40,713	43,970	43,970	47,487	47,487	51,286	51,286	42,000	42,000
Total Gross Revenue	1,542,717	1,666,134	1,666,134	1,799,425	1,799,425	1,943,379	1,943,379	2,085,460	2,085,460
OPEX	355,926	364,824	373,945	383,293	392,876	402,698	412,765	423,084	433,661
NOI	1,186,791	1,301,310	1,292,190	1,416,132	1,406,550	1,540,682	1,530,614	1,662,376	1,651,799
% Margin	*77%*	*78%*	*78%*	*79%*	*78%*	*79%*	*79%*	*80%*	*79%*
CAPEX	45,000	345,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Debt Service	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185

Source: Walker Parking Consultants

Table 23: Garage Option A System Financial Impact

Total Parking System	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Rev-Transient	$ 664,482	$ 697,707	$ 1,028,132	$ 1,106,250	$ 1,187,857	$ 1,196,009	$ 1,264,562	$ 1,273,293	$ 1,346,330	$ 1,355,682
Rev-Lease	$ 856,346	$ 862,678	$ 1,348,735	$ 1,470,347	$ 1,583,646	$ 1,591,258	$ 1,681,218	$ 1,689,353	$ 1,784,932	$ 1,793,627
Rev-Event	186,386	186,386	308,205	304,537	311,858	313,854	321,481	323,518	331,466	333,544
Rev-Jurors	14,526	15,252	16,015	16,175	16,336	16,500	16,665	16,831	17,000	17,170
Rev-Validations	59,319	62,285	65,399	66,053	66,713	67,381	68,054	68,735	69,422	70,116
Rev-Refunds/Over/Short	8,091	8,496	8,921	9,010	9,100	9,191	9,283	9,376	9,469	9,564
Rev-Rent	85,332	89,599	94,079	95,020	95,970	96,930	97,899	98,878	99,867	100,865
Rev-Misc	12,153	12,760	13,398	13,532	13,668	13,804	13,942	14,082	14,223	14,365
Rev-On Street Parking	2,169,601	2,451,482	2,511,670	2,533,691	2,596,543	2,610,119	2,668,585	2,682,434	3,025,445	3,042,398
Total Gross Revenue	4,056,236	4,386,645	5,394,554	5,614,615	5,881,691	5,915,045	6,141,689	6,176,500	6,698,154	6,737,331
OPEX	2,381,089	2,441,854	2,666,912	2,437,165	2,508,069	2,566,172	2,641,006	2,702,108	2,781,095	2,845,352
NOI	**1,675,147**	**1,944,791**	**2,727,642**	**3,177,450**	**3,373,623**	**3,348,873**	**3,500,684**	**3,474,392**	**3,917,059**	**3,891,979**
CAPEX	734,538	678,500	798,250	499,531	500,845	502,191	503,570	504,985	1,586,434	507,920
Annual Debt Service	448,519	448,519	1,184,704	1,230,884	1,263,870	1,263,870	1,263,870	1,263,870	1,263,870	1,263,870

Total Parking System	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	$ 1,433,505	$ 1,443,518	$ 1,526,443	$ 1,537,167	$ 1,625,539	$ 1,637,025	$ 1,731,209	$ 1,743,509	$ 1,843,890	$ 1,857,064
Rev-Lease	$ 1,895,183	$ 1,904,476	$ 2,012,391	$ 2,022,323	$ 2,137,002	$ 2,147,617	$ 2,269,493	$ 2,280,837	$ 2,410,370	$ 2,422,496
Rev-Event	341,828	343,947	352,583	354,745	363,748	365,954	375,342	377,592	387,383	389,678
Rev-Jurors	17,341	17,515	17,690	17,867	18,046	18,226	18,408	18,592	18,778	18,966
Rev-Validations	70,818	71,526	72,241	72,963	73,693	74,430	75,174	75,926	76,685	77,452
Rev-Refunds/Over/Short	9,660	9,756	9,854	9,952	10,052	10,153	10,254	10,357	10,460	10,565
Rev-Rent	101,874	102,893	103,922	104,961	106,011	107,071	108,141	109,223	110,315	111,418
Rev-Misc	14,508	14,654	14,800	14,948	15,098	15,249	15,401	15,555	15,711	15,868
Rev-On Street Parking	3,107,778	3,125,071	3,192,652	3,210,293	3,280,153	3,298,149	3,370,373	3,388,731	3,463,405	3,482,131
Total Gross Revenue	6,992,495	7,033,356	7,302,575	7,345,219	7,629,342	7,673,872	7,973,796	8,020,322	8,336,997	8,385,637
OPEX	2,928,727	2,996,304	3,084,318	3,155,385	3,248,302	3,323,043	3,421,143	3,499,748	3,603,327	3,685,998
NOI	**4,063,768**	**4,037,052**	**4,218,258**	**4,189,834**	**4,381,040**	**4,350,829**	**4,552,653**	**4,520,574**	**4,733,670**	**4,699,639**
CAPEX	509,443	511,004	812,604	514,244	515,926	517,649	519,415	521,225	1,603,081	524,983
Annual Debt Service	1,263,870	1,263,870	1,263,870	956,054	736,185	736,185	736,185	736,185	736,185	736,185

Source: Walker Parking Consultants

NEW GARAGE OPTION B

OPERATING REVENUES:

- A new garage with 600 spaces. This option would operate at the low-end utilization, as historically experienced at the Transit Center and Courthouse Garages.
- Ramp-up factors of 75% and 95% are used for Years 1 and 2 to reflect a reasonable time for the parking facility to achieve stabilized occupancy. Year 1 occupancy is projected for July 1, 2017, with full utilization estimated at 2019.
- At full utilization, the project estimates 600 monthly patrons starting at $31.00 per month. Monthly rates are increased 8% bi-annually. Sites 2, 3, and 4 from the analysis above would bring in the lower-end monthly rates based on that areas existing market.
- Transient revenue, at full utilization, is estimated at approximately 54,000 transactions (90 per space) annually. This equates to $321 per space annual transient revenue, which is the low-end utilization and revenue per space across the existing LFCPA Garages. This project also assumes the same average ticket price of $3.57 (in 2019) which increases at the assumed rates outlined above.
- No Event parking revenue is estimated for this option.
- A vacancy/collection loss factor, to account for uncollectable, outstanding, or shrinkage, equal to 5.00% of the 'Lease' revenues is deducted to derive Net Revenue.
- Figures are rounded to the nearest dollar.
- The annual debt service will remain $448,519 annually through May 2018. From June 2018 through May 2028, annual debt service assumes a 10 year remaining payback at a 4% annual interest rate, or $527,684 annually. Estimated garage construction costs assume a 20 year payback at a 4% interest rate.

EXPENSES:

- Operating Expenses are calculated at $475 per space annually. This is the current average per space operating expenditures for the combined LFCPA garages.
- Analysis assumes automated pay stations are used to collect transient revenues. The parking facility is assumed to add PARCS equipment in year 1 (2017). A CAPEX cost of approximately $500 per space was calculated, totaling $300,000. PARCS equipment is estimated to be replaced after 10 years in 2027.
- Additional CAPEX of $75 per space annually is included for the term.
- Construction costs at $14,500 per space, plus 15% for consulting, design, and other fees. Total construction costs come to $16,675 per space. This cost does not include land acquisition.
- Property taxes are excluded.

- Expenses have been inflated by 2.5% percent annually.
- Debt service on the new facility assumes the following: 20 year term; 4% financing; $0 upfront capital
- Figures have been rounded to the nearest dollar.

Table 24: Garage Option B

New Parking Facility	2017	2018	2019	2020	2021	2022	2023	2024	2025
Rev-Transient	133,801	169,481	192,673	192,673	208,087	208,087	224,734	224,734	242,712
Rev-Lease	146,287	185,297	210,654	210,654	227,506	227,506	245,707	245,707	265,363
Rev-Event	0	0	0	0	0	0	0	0	0
Rev-Validations	495	470	508	508	548	548	592	592	640
Total Gross Revenue	280,583	355,248	403,835	403,835	436,141	436,141	471,033	471,033	508,715
OPEX	285,000	292,125	299,428	306,914	314,587	322,451	330,513	338,775	347,245
NOI	(4,417)	63,123	104,407	96,921	121,555	113,690	140,520	132,257	161,471
% Margin	*-2%*	*18%*	*26%*	*24%*	*28%*	*26%*	*30%*	*28%*	*32%*
CAPEX	345,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Debt Service	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185

New Parking Facility	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	242,712	262,129	262,129	283,100	283,100	305,748	305,748	330,208	330,208
Rev-Lease	265,363	286,592	286,592	309,520	309,520	334,281	334,281	361,024	361,024
Rev-Event	0	0	0	0	0	0	0	0	0
Rev-Validations	640	691	691	746	746	806	806	660	660
Total Gross Revenue	508,715	549,413	549,413	593,366	593,366	640,835	640,835	691,891	691,891
OPEX	355,926	364,824	373,945	383,293	392,876	402,698	412,765	423,084	433,661
NOI	152,789	184,588	175,468	210,072	200,490	238,137	228,070	268,807	258,230
% Margin	*30%*	*34%*	*32%*	*35%*	*34%*	*37%*	*36%*	*39%*	*37%*
CAPEX	45,000	345,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000
Debt Service	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185	$736,185

Source: Walker Parking Consultants

Table 25: Garage Option B System Financial Impact

Total Parking System	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Rev-Transient	$ 664,482	$ 697,707	$ 882,338	$ 921,576	$ 983,744	$ 991,896	$ 1,050,244	$ 1,058,975	$ 1,121,296	$ 1,130,648
Rev-Lease	$ 856,346	$ 862,678	$ 1,061,623	$ 1,106,672	$ 1,181,689	$ 1,189,301	$ 1,259,163	$ 1,267,299	$ 1,341,775	$ 1,350,470
Rev-Event	186,386	186,386	195,705	197,662	199,639	201,635	203,652	205,688	207,745	209,823
Rev-Jurors	14,526	15,252	16,015	16,175	16,336	16,500	16,665	16,831	17,000	17,170
Rev-Validations	59,319	62,285	65,399	66,053	66,713	67,381	68,054	68,735	69,422	70,116
Rev-Refunds/Over/Short	8,091	8,496	8,921	9,010	9,100	9,191	9,283	9,376	9,469	9,564
Rev-Rent	85,332	89,599	94,079	95,020	95,970	96,930	97,899	98,878	99,867	100,865
Rev-Misc	12,153	12,760	13,398	13,532	13,668	13,804	13,942	14,082	14,223	14,365
Rev-On Street Parking	2,169,601	2,451,482	2,511,670	2,533,691	2,596,543	2,610,119	2,668,585	2,682,434	3,025,445	3,042,398
Total Gross Revenue	4,056,236	4,386,645	4,849,147	4,959,391	5,163,403	5,196,758	5,387,487	5,422,298	5,906,242	5,945,418
OPEX	2,381,089	2,441,854	2,666,912	2,437,165	2,508,069	2,566,172	2,641,006	2,702,108	2,781,095	2,845,352
NOI	**1,675,147**	**1,944,791**	**2,182,235**	**2,522,226**	**2,655,335**	**2,630,585**	**2,746,481**	**2,720,189**	**3,125,147**	**3,100,066**
CAPEX	734,538	678,500	798,250	499,531	500,845	502,191	503,570	504,985	1,586,434	507,920
Annual Debt Service	448,519	448,519	1,184,704	1,230,884	1,263,870	1,263,870	1,263,870	1,263,870	1,263,870	1,263,870

Total Parking System	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Rev-Transient	$ 1,197,219	$ 1,207,232	$ 1,278,343	$ 1,289,067	$ 1,365,034	$ 1,376,520	$ 1,457,678	$ 1,469,979	$ 1,556,683	$ 1,569,857
Rev-Lease	$ 1,429,868	$ 1,439,161	$ 1,523,810	$ 1,533,742	$ 1,623,992	$ 1,634,607	$ 1,730,832	$ 1,742,177	$ 1,844,777	$ 1,856,902
Rev-Event	211,921	214,040	216,180	218,342	220,526	222,731	224,958	227,208	229,480	231,775
Rev-Jurors	17,341	17,515	17,690	17,867	18,046	18,226	18,408	18,592	18,778	18,966
Rev-Validations	70,818	71,526	72,241	72,963	73,693	74,430	75,174	75,926	76,685	77,452
Rev-Refunds/Over/Short	9,660	9,756	9,854	9,952	10,052	10,153	10,254	10,357	10,460	10,565
Rev-Rent	101,874	102,893	103,922	104,961	106,011	107,071	108,141	109,223	110,315	111,418
Rev-Misc	14,508	14,654	14,800	14,948	15,098	15,249	15,401	15,555	15,711	15,868
Rev-On Street Parking	3,107,778	3,125,071	3,192,652	3,210,293	3,280,153	3,298,149	3,370,373	3,388,731	3,463,405	3,482,131
Total Gross Revenue	6,160,987	6,201,848	6,429,492	6,472,136	6,712,604	6,757,135	7,011,221	7,057,748	7,326,294	7,374,934
OPEX	2,928,727	2,996,304	3,084,318	3,155,385	3,248,302	3,323,043	3,421,143	3,499,748	3,603,327	3,685,998
NOI	**3,232,260**	**3,205,544**	**3,345,175**	**3,316,751**	**3,464,302**	**3,434,092**	**3,590,078**	**3,558,000**	**3,722,967**	**3,688,936**
CAPEX	509,443	511,004	812,604	514,244	515,926	517,649	519,415	521,225	1,603,081	524,983
Annual Debt Service	1,263,870	1,263,870	1,263,870	956,054	736,185	736,185	736,185	736,185	736,185	736,185

Source: Walker Parking Consultants

PROPOSED TEN-YEAR PLAN

The recommendations included in this report are generally organized into six (6) phases. Each phase improves elements of the parking system that work towards improving the public parking system in downtown Lexington.

PHASE 1 – 2015 & 2016

Task 1: INCREASE BICYCLE RACK PARKING, MAKING IT EASIER FOR LOCALS TO ENJOY DOWNTOWN WITHOUT PARKING A CAR

Purpose:

- Encourage active lifestyles and provide alternative transportation options for those that visit, live, or work in downtown Lexington
- Reduce the dependence on and overbuilding of expensive parking supply

Action Items:

- Lighting, security, bike paths, and signage all need to be considered
- Determine the best locations for new bicycle racks, secure storage, and parklets
- Work with the downtown business and residential community to help promote bicycle usage

Benefits:

- Reduced long-term investment in costly new parking supply
- Improved access to on-street supply for the intended users

Task 2: INCREASE ON-STREET AND OFF-STREET RATES

Sub-tasks:

- Increase on-street hourly rates by $.50 per hour
- Increase off-street (garage) maximum daily rates by $1.00
- Determine the average duration of stay at each facility and consider small increases to the corresponding facility rate band
- Increase Victorian Square permit pricing by $10.00 for each permit type

Purpose:

- Provide downtown visitors with more short-term parking options by moving long-term parkers out of prime short-term spaces
- Bring the LFCPA managed parking garages closer to local, regional, and national average off-street rates

- Generate additional revenue that can be reinvested into the downtown parking system

Action Items:

- Communicate pricing changes to the local businesses and stakeholders initially, promoting the price changes
- Provide the larger Lexington community with advanced notice of any rate changes through the lexpark.org website, social media, and applicable media outlets
- Configure applicable hardware and software parking systems with the new rates and effective dates

Benefits:

- Improved access to short-term parking supply through better distribution of short-term and long-term parking demand
- Increased revenues generated from existing parking assets to fund additional, new parking assets

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Task 3: INTRODUCE NEW GARAGE PERMIT TYPES

Purpose:

- Offer additional permit options for different potential user types
- Increase off-street garage utilization, both during peak and off-peak times
- Generate additional revenue that can be reinvested into the downtown parking system

Action Items:

- Implement and market the following permit types:
    - Evening Only Permits
    - Parking Debit Cards (either use- or dollar-base decrementing permits)
    - Day Permits (not 24/7; business hours only)
    - Frequent Parker Program
    - Free / Reduced parking for ride-sharing vehicles
- Configure applicable hardware and software parking systems with the new permit types, rates, and effective times and dates

Benefits:

- Improved off-street garage utilization
- Provide long-term, generally employee, parkers with off-street parking options that are inexpensive and reward them for not parking on-street
- Increased revenues generated from existing parking assets to fund additional, new parking assets

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Task 4: MIGRATION OF ALL CREDIT CARD ACCEPTING HARDWARE TO EMV COMPLIANT READERS

Purpose:

- Make sure the LFCPA parking system / hardware is compliant with upcoming (10/2015) EMV guidelines
- Reduce the cost and risk to LFCPA for processing credit cards
- Insure that LFCPA and its vendors implement a roadmap, timeline, and transition plan for EMV compliance

Action Items:

- Contact each hardware vendor that provides LFCPA parking equipment that processes credit cards to discuss the vendor's current options for bringing current customer's to EMV compliance
- Determine the budget impact for each vendor's solution
- Coordinate a plan with the vendor and in accordance with LFCPA's financial resources and obligations to develop an EMV migration plan and timeline

Benefits:

- Reduce the cost and risk to LFCPA for processing credit cards
- Prepare the parking system for accepting chip-based credit cards

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Task 4: IMPROVE WAYFINDING, EXPAND THE RESIDENTIAL PARKING PERMIT PROGRAM, AND CONSIDER A PILOT PROGRAM FOR SHARED PARKING IN THE CHEVY CHASE NEIGHBORHOOD

Purpose:

- Provide area visitors with more short-term parking options by increasing available public supply through partnerships with private owners
- Protect the on-street spaces in neighborhoods for residential use, where appropriate

Action Items:

- Evaluate the availability of Chevy Chase residential neighborhood on-street spaces and the impact of new developments
- Work with the private supply owners to create a database of private parking space inventory that is available for public consumption

Benefits:

- Prepare the area for increased development growth and the resulting parking demand
- Increase the efficiency and utilization of existing public and private parking supply

PHASE 2 – 2017 TO 2020

Task 1: INCREASE ON-STREET OPERATIONS AND ENFORCEMENT HOURS UNTIL 8:00 PM MONDAY – FRIDAY. CONSIDER SATURDAY OPERATIONS AS WELL.

Purpose:

- Provide downtown evening visitors with more short-term parking options by moving long-term parkers out of prime short-term on-street spaces
- Generate additional revenue that can be reinvested into the downtown parking system
- Reduce the dependence on and overbuilding of expensive parking supply by better utilizing, available evening parking supply

Action Items:

- Communicate operational and enforcement hour changes to the local businesses and stakeholders initially, promoting the benefits of increased on-street turnover and availability
- Provide the larger Lexington community with advanced notice of any time changes through the lexpark.org website, social media, and applicable media outlets
- Replace the free on-street parking option with free or reduced parking fees for off-street (garage) parking spaces
    - Consider a 2 hour free after 6:00 PM rate schedule for LFCPA managed parking garages

Benefits:

- Reduced long-term investment in costly new parking supply
- Improved access to short-term on-street parking supply through better distribution of short-term and long-term parking demand
- Increased revenues generated from existing parking assets to fund additional, new parking assets

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Task 2: WORK WITH THE DOWNTOWN DEVELOPMENT AUTHORITY TO DETERMINE THE APPROPRIATE METRICS FOR EVALUATING AND GRADING POTENTIAL PARKING SUPPLY ADDITIONS AND REQUIREMENTS RELATED TO NEW DEVELOPMENT OPPORTUNITIES

Purpose:

- Allow LFPCA and the parking system to be a catalyst for economic growth in Lexington, KY

- Provide flexibility to both LFCPA, the Downtown Development Authority, and potential developers / investors when evaluating the parking needs and requirements for upcoming economic development opportunities
- Reduce the dependence on and overbuilding of expensive parking supply

Action Items:

- Develop evaluation criteria that includes, but not limited to the following:
    - Walking Distance – Level of Service by patron type
    - Operating and Capital Costs
    - Structural Repair Budget Assumptions
    - Minimum Parking Structure Dimensions
    - Fee-In-Lieu (Payment In Lieu of Parking) options
    - Shared Parking opportunities:
        - Walker recommends the adoption of the base parking ratios developed by the Urban Land Institute, the Institute of Transportation Engineers (ITE), or the Parking Consultants Council of the National Parking Association.

Benefits:

- Reduced long-term investment in costly new parking supply
- Remove parking supply as an impediment to economic development
- Improve the efficiency of the entire LFCPA parking system

Task 3: RE-ASSESS OVERALL DOWNTOWN PARKING SUPPLY AND DEMAND

Purpose:

- Evaluate the construction of a new structured parking facility in Zones 1 or 2
- Increase public parking supply, as needed, based on changes demand characteristics

Action Items:

- Analyze the current parking system occupancy and utilization to determine timeline, space requirements, and location for a new parking garage
- Calculate the acquisition and construction costs for building additional supply
- Determine funding sources

Benefits:

- Increased parking supply for both current and future parking demand
- Remove parking supply as an impediment to economic development

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Task 4: RE-EVALUATE ON-STREET AND OFF-STREET RATES FOR CONTINUOUS MODEST INCREASES TO ADJUST FOR INFLATION AND ANY OTHER VARIABLES AFFECTING MARKET PRICING

Sub-tasks:

- Increase citation rates by $10.00
- Consider a graduated or incentive based fine schedule for repeat offenders

Purpose:

- Provide downtown visitors with more short-term parking options by moving long-term parkers out of prime short-term spaces
- Bring the LFCPA managed parking garages closer to local, regional, and national average off-street rates
- Generate additional revenue that can be reinvested into the downtown parking system

Action Items:

- Review local market, comparative regional, and national average price points
- Determine the impact of a rate change to the local community and stakeholders
- Evaluate current parking system occupancy and utilization in order to implement rate changes that promote improved system efficiency

Benefits:

- Improved access to short-term parking supply through better distribution of short-term and long-term parking demand
- Increased revenues generated from existing parking assets to fund additional, new parking assets

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Task 5: OUTLINE AND IMPLEMENT AN 'LFCPA DOWNTOWN SHARED PARKING PROGRAM'

Purpose:

- Improve the overall parking experience for all downtown Lexington visitors, residents, and employees
- Make all parking assets, public and private, more efficient through increased utilization
- Provide a monthly financial return to private parking supply owners
- Assist private parking supply owners market and sell unused spaces

Action Items:

- Discuss the possible revenues and benefits to local private parking supply owners, and create a database of private parking space inventory that is available for public consumption

- Create a map of location rates by area or zone that would provide the private supply owners a guideline for potential monthly rates
- Market the available spaces to the public through providing physical signage, marketing pamphlets, email campaigns, and opening the inventory database up to the lexpark.org website for potential patrons to search, find, and connect to available spaces
- Determine what services LFCPA is willing to provide in order to increase private supply owner participation

Benefits:

- Improved access to short-term parking supply through better distribution of short-term and long-term parking demand
- Revenue opportunities for private parking supply owners that have under-utilized spaces
- Reduced long-term investment in costly new parking supply

PHASE 3 – 2021 TO 2025

Task 1: AS ON-STREET HARDWARE IS REPLACED, CONSIDER HOW DEMAND BASED PRICING MECHANISMS WITH NEW TECHNOLOGY CAN HELP MANAGE AND DISTRIBUTE DEMAND

Purpose:

- Improve the overall parking experience for all downtown Lexington visitors, residents, and employees
- Make all parking assets, public and private, more efficient through increased utilization
- Bring the LFCPA managed parking garages closer to local, regional, and national average off-street rates
- Generate additional revenue that can be reinvested into the downtown parking system

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Task 2: RE-ASSESS OVERALL DOWNTOWN PARKING SUPPLY AND DEMAND ALONG WITH UNIQUE CHARACTERISTICS OF SPECIFIC DOWNTOWN AREAS TO DETERMINE POTENTIAL NEEDS AND LOCATIONS FOR NEW PARKING STRUCTURES

Purpose:

- Evaluate the construction of a new structured parking facility based on new or projected demand increases
- Increase public parking supply, as needed, based on changes demand characteristics

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Task 3: CONTINUE TO EVALUATE LOCAL AND NATIONAL TRENDS RELATED TO SINGLE-OCCUPANCY VEHICLE USAGE AND CHANGES MODAL TRENDS, WHICH CAN IMPACT CURRENT AND FUTURE PARKING DEMAND CHARACTERISTICS

Purpose:

- Reduced long-term investment in costly new parking supply
- Understand and react to changes in demand drivers that affect utilization and investment into current and future parking assets

APPENDIX

SCOPE OF SERVICES

- The objective of the LFCPA's parking plan includes sorting through the need for a parking structure and other issues relating to parking policies and practices, including the following:
- Elicit input from area stakeholders and their support for a parking plan;
- Provide an analysis and recommendations regarding parking regulations;
- Prevent parking issues from developing without overbuilding the parking supply;
- Evaluate existing and future parking supply/demand conditions and project future parking needs;
- Study and evaluate meters, parking citations rates, pay-by-rate analysis, signage, and recommend up-to-date technologies which will improve the parking experience;
- Provide guidance to the LFCPA in the formulation of policies to address the ongoing development of downtown while preventing parking issues from developing and help to ensure that existing off- and on-street parking supply is being efficiently and effectively utilized;
- Make targeted and specific recommendations regarding the adequacy of parking, transportation demand management measures, parking management, pricing, and financing of new parking facilities; and
- Develop a parking plan that supports economic development within the CBD.

TASK I – PARKING SUPPLY/DEMAND STUDY

OBJECTIVE: Before an effective parking plan can be formulated, a clear understanding of current and future parking conditions in the LFCPA study area is required. The Supply/Demand Analysis constitutes a needs assessment of current and anticipated parking conditions.

The parking information that will be independently documented, analyzed and presented by Walker in this analysis provides a quantitative and qualitative assessment of the parking characteristics within the defined study area. The foundation of a parking supply and demand analysis is an inventory of the parking supply creating a "snapshot" of current parking conditions. Walker staff will conduct field research to ensure accuracy of the existing parking supply and categorize the supply by type (on-street, off-street, structured, surface lot) and by ownership (private or public). Occupancy counts will be conducted over a period of time to capture user trends and enable Walker to clearly convey the trends of vehicle presence in the study area. The occupancy counts will then be compared to the effective parking supply (actual supply less 10% to 15%) to determine the estimated parking adequacy on a block-by-block basis. Some of the questions that need to be resolved include:

- What is the parking supply?

- What is the parking demand?
- Is there a surplus or deficit?
- What will parking conditions be like in the future?
- Is additional parking required? If so, how much?
- Who needs additional parking?

Community input is typically sought during the Supply/Demand Analysis. Walker's calculation of future parking demand is based on a thorough understanding of existing land uses, as well as the future land uses that may enter or leave the defined study area.

Parking is not an end in and of itself; rather it is a derivative of the demand for other activities and the travel characteristics of the market area. The quantity and type of activities within a market area most often determines the overall need for parking, as well as unique demand characteristics that relate to time-of-day, day-of-week and time-of-year variations. Therefore, Walker's approach to projecting future parking demand will apply the knowledge we will have gained from the supply analysis and will require input from stakeholders and city planners in order to fully understand future changes in the study area. Once the calculation of future parking demand is complete, it will be compared to the existing parking supply to determine the future parking adequacy. The parking adequacy in the study area is communicated in tabular and graphic form and identifies the parking conditions on a block-by-block basis. In addition to our own collections, Walker will utilize any relevant information provided by the LFCPA.

The benefit of this approach is a parking plan based on your community values and pro-actively designed to meet your future needs before they become issues. Our recommendations are tailored to match your constituency's wants, needs and desires for the parking system and the economic realities specific to the LFCPA.

TASK I – SCOPE OF SERVICES

1. Meet with LFCPA representatives to finalize project parameters, review project background and obtain previous reports, area maps, and other background information.
2. Obtain and review land use data within the study area, provided in terms of square footage by land-use type (i.e. retail, restaurant, hotel, office, etc.)
3. Conduct parking inventories of all on- and off-street parking within the study area. Inventories will include space counts, rates, and restrictions.
4. Conduct parking occupancy counts of all parking in the study area on a weekday.
5. Create a parking demand model using Walker Parking Consultant's shared parking model to project typical parking demand throughout a weekday.

6. Calibrate the demand model to reflect observed conditions, thus calculating parking demand ratios for the land uses present.
7. Determine the surplus or shortfall within the area under current conditions, and create tabular and graphic illustrations of the parking system adequacy.
8. Obtain build-out plans from the LFCPA representatives and adjust the demand model to show future parking demand generated by approved and/or proposed developments in the area.

TASK II: PARKING ALTERNATIVES ANALYSIS

OBJECTIVE: With the understanding gained from the completion of Task I above, Walker will develop solid, achievable recommendations for improving the current parking conditions and meeting future parking demand efficiently and cost-effectively. Some of the questions that will need to be resolved include:

- Can the parking system be made to function more efficiently, such that more cars can be accommodated without building additional parking?
- If necessary, how can the parking capacity be increased?
- What are the strengths and weaknesses of the alternatives for increasing parking capacity and how do they compare with each other?
- How much does each of the alternatives cost to implement?
- Where is the increased parking needed?
- Can the capacity of existing parking facilities be increased? If so, how?
- What phasing plan is recommended in order to provide adequate parking when it is needed?
- Can a parking structure be built on proposed sites?

The first part of the analysis will focus on management of existing resources. In addition to evaluating opportunities for lot reconfiguration and restriping of spaces, we will analyze location of resources, utilization imbalances (if any), time limits and/or rates, and enforcement practices, and determine whether changes to the way the parking system is managed can free up parking in the most congested locations.

The objective of the site planning analysis will be to determine the advantages and disadvantages of constructing parking on various sites within the defined study area and to recommend the most appropriate site(s). To that effect, Walker will use the results of our supply and demand analysis to focus on localized areas with high parking demand projected to occur.

Each site included as a possible development location will be evaluated according to how well it ranks with site selection criteria considerations. Initially, criteria value rankings are

somewhat subjectively established by Walker. Different values are exchanged and analyzed to establish a hierarchy that is agreed to by the LFCPA and the key stakeholders. By this means, a consensus site recommendation can be more easily found.
Walker will work with the LFCPA representatives to identify a subjective decision matrix that is used to measure the appropriateness of each site. The points awarded for each alternative are determined first by assigning a score to each criterion. Some of the criteria, such as project cost, can be scored objectively. For subjective criteria, such as land availability, a value of 5 = excellent, down to 1 = poor, can be awarded. Next, each criterion is weighed by assigning it points, the sum of which totals 100 points. The following are EXAMPLE criteria used to evaluate the alternatives:

- Proximity to Demand (Primary Use 7 AM to 6 PM, M-F) – The location of each potential development site in relation to buildings that are occupied and generate demand for parking during traditional business hours. An office building is the primary type of land use that generates weekday demand.
- Project Cost – The project cost associated with each potential development site includes, but is not limited to property acquisition, tenant relocation, demolition, and construction. Also, the cost per space added is considered when awarding a value to each site. The cost per space added considers the number of existing spaces displaced due to the construction of new parking supply.
- Land Availability – The land availability associated with each potential development site considers the existing use of the land, whether or not property acquisition is required, the need for tenant relocation, zoning compliance, and whether or not pre-established, redevelopment plans exist.
- Revenue Potential – The potential of each site to generate operating revenue if desired.
- Proximity to Demand (Primary Use Nights & Weekends) – The location of each potential development site in relation to commercial buildings that are occupied and generate demand for parking during weekday evenings and weekend periods. The type of land uses that typically generate evening and weekend demand include restaurant, residential, retail, hotel, library, performing arts theatre, and convention center.
- Traffic Impact – The traffic impact on the existing traffic patterns and what impact peak period loading and unloading may have on the surrounding street system.
- Mixed-Use Potential – The potential of each site to integrate at grade level retail, restaurant and/or office space. Whether or not potential for a mixed-use parking facility exists is dependent on the type of land uses that surround the site and the existing market conditions for each type.
- Future Development – The assessment of future development includes whether parking is the best use of the land and if future development is planned on or adjacent to the site that may benefit or hinder the parking operation.

1. Review inventory, utilization and turnover data collected in Task I.
2. If data suggests imbalances of usage, recommend management and policy changes that could reduce congestion in affected areas.
3. Review existing vehicular and pedestrian access and circulation patterns for their relationship to existing and proposed parking facilities/lots.
4. Determine whether the number of spaces could be increased through restriping and efficiency improvements in existing facilities/lots.
5. Determine whether any existing facilities/lots can be expanded to meet area parking needs.
6. Identify potential locations for new parking facilities (surface and/or structured). External variables that will be considered are desirable density, phasing of construction, and incorporation of other uses (such as retail) in any proposed facility.
7. Determine an order of magnitude project cost including estimated operational expenses to enable a comparison of the costs of each alternative on an "apples to apples" basis.
8. Evaluate the various alternatives on the basis of qualitative criteria to be mutually agreed upon with the LFCPA. A weighted matrix will be used to achieve more objectivity and to rank the alternatives.
9. Meet with the client via teleconference to discuss the conceptual designs and present the matrix analysis to agree upon weighting and other considerations.
10. Develop a recommended plan for improvements, including phasing of components corresponding to projected needs.

TASK III – REVIEW OF PARKING POLICIES AND PRACTICES

Objective: A review of parking policies and practices includes an objective look at the rules that govern parking and the activities that the LFCPA employs to enforce these rules. The overall objective of this task is to provide a professional outsider's perspective with the aim to help the LFCPA make its parking system the best it can be. To succeed at meeting this objective, we consider stakeholder input, historical policies and practices, the character of the city, and LFCPA's organizational structure with respect to its parking operation, and then develop a parking management plan that suggests opportunities for improvements. This task is intended to answer a myriad of questions regarding parking policies and practices, including the following:

- Are parking rates working effectively?
- What should the relationship be between on- and off-street parking rates?
- Is the city's zoning ordinance supporting economic development and protecting property owner rights? Is it minimizing waste and promoting sustainability?
- Is the LFCPA's parking enterprise staffed appropriately?

- Are parking citations rates achieving their intended purpose?
- Is the LFCPA writing an appropriate number of tickets in support of its overall objectives?
- Are parking enforcement days and hours supportive of the needs of the community?
- Are parking spaces turning over at desirable rates?
- Are there effective strategies in place to keep long-term parking patrons out of short-term spaces?
- Is technology being used effectively in support of customer service? Are there technologies that could be cost effectively employed to provide patrons with additional and more convenient options? If so, what are these?
- How can the LFCPA's parking operation be the best it can be?

TASK III – SCOPE OF SERVICES

1. Identify for LFCPA's consideration, other customer-service enhancements that do not exist in Lexington. Obtain and review city parking policies, practices, and ordinances relating to parking.
2. Identify and gather parking policies, practices, and the parking element of zoning ordinances of up to six other cities for purposes of benchmarking.
3. Review the LFCPA's organizational structure and the staffing associated with its parking assets. Recommend changes.
4. Review and comment on parking rates, time restrictions or lack thereof, and enforcement hours.
5. Review existing parking equipment and recommend upgrades where necessary.
6. Draft a policy statement regarding the relationship between on- and off-street parking.
7. Recommend modifications to the parking element of the zoning ordinance that align with its comprehensive plan and parking plan.
8. Review and comment on existing parking signage and identify opportunities for improvement.
9. Identify for the LFCPA's consideration, other customer-service enhancements that do not exist in Lexington.

TASK IV – FINANCIAL PLAN

OBJECTIVE: A financial plan anticipates the market demand, operating revenues, operating expenses, and debt service for the parking system. It is tailored to help guide the decisions that must be made to promote a financially sustainable parking system.

Our Financial Analyses are characterized by having a high degree of integrity. Our goal is to provide you with a useful tool for analyzing a project's feasibility. We promise to be realistic

about a project's anticipated performance, which means we may not always tell you what you want to hear. We believe it's better to find out now that the project is not financially viable than to find out after the project has been developed.

TASK IV – SCOPE OF SERVICES

1. Meet with LFCPA representatives to determine study's objectives, boundaries, procedures and project schedule.
2. Using Walker's database of operating expenses (collected periodically from more than 200 parking facilities), project annual operating expenses for a five-year period, including but not limited to:
    a. direct labor (cashiering, supervision, accounting, maintenance, and security) and fringe benefits;
    b. utilities;
    c. supplies;
    d. daily maintenance (contracts and equipment); and
    e. structural maintenance (a sinking fund for periodic major expenses).
3. Using Walker's past experience, project construction costs, contingency costs, consulting fees and financing costs. LFCPA will be asked to assist in providing interest rate and term of loan inputs.
4. Calculate the average annual debt service for the facility(s) and LFCPA system.
5. Research comparable market parking rates and recommend a rate structure for all LFCPA-owned parking.
6. Based on the findings of Task I and the recommended rate structure, project the annual net operating income of the system for a 10- and 20-year period.

REPORT PREPARATION

1. Prepare and email draft report documenting existing and future conditions, findings, and recommendations associated with each task.
2. Prepare and email final report. Final report will address LFCPA comments pertaining to the draft report.

Table A-1: Current Parking Supply

Block #	LFCPA Garages	Non-LFCPA Off-Street	On-Street
1	0	41	53
2	0	26	22
3	0	190	11
4	0	182	23
5	382	0	11
6	0	479	3
7	0	327	15
8	0	0	19
9	0	0	14
10	0	0	11
11	0	600	15
12	0	307	25
13	0	0	3
14	0	0	16
15	0	92	22
16	0	0	14
17	0	0	13
18	0	184	20
19	0	0	26
20	0	83	25
21	0	0	0
22	0	67	15
23	0	0	0
24	0	0	29
25	518	84	9
26	0	0	15
27	380	423	22
28	777	0	8
29	0	103	68
30	0	49	16
31	0	72	34
32	0	412	0
33	0	0	25
34	0	0	13
35	0	0	24
36	0	0	16
37	0	0	23
38	0	0	17
39	0	255	46
40	0	0	67
41	0	2,511	0
Totals	**2,057**	**6,487**	**808**

Source: Walker Parking Consultants

Table A-2: Effective Supply

Block #	LFCPA Garages	Effective Supply Factor	Effective Supply	Non-LFCPA Off-Street Supply	Effective Supply Factor	Effective Supply	On-Street Supply	Effective Supply Factor	Effective Supply	Total Effective Supply
1	0	0.90	0	41	0.95	39	53	0.85	45	84
2	0	0.90	0	26	0.95	25	22	0.85	19	43
3	0	0.90	0	190	0.95	181	11	0.85	9	190
4	0	0.90	0	182	0.95	173	23	0.85	20	192
5	382	0.90	344	0	0.95	0	11	0.85	9	353
6	0	0.90	0	479	0.95	455	3	0.85	3	458
7	0	0.90	0	327	0.95	311	15	0.85	13	323
8	0	0.90	0	0	0.95	0	19	0.85	16	16
9	0	0.90	0	0	0.95	0	14	0.85	12	12
10	0	0.90	0	0	0.95	0	11	0.85	9	9
11	0	0.90	0	600	0.95	570	15	0.85	13	583
12	0	0.90	0	307	0.95	292	25	0.85	21	313
13	0	0.90	0	0	0.95	0	3	0.85	3	3
14	0	0.90	0	0	0.95	0	16	0.85	14	14
15	0	0.90	0	92	0.95	87	22	0.85	19	106
16	0	0.90	0	0	0.95	0	14	0.85	12	12
17	0	0.90	0	0	0.95	0	13	0.85	11	11
18	0	0.90	0	184	0.95	175	20	0.85	17	192
19	0	0.90	0	0	0.95	0	26	0.85	22	22
20	0	0.90	0	83	0.95	79	25	0.85	21	100
21	0	0.90	0	0	0.95	0	0	0.85	0	0
22	0	0.90	0	67	0.95	64	15	0.85	13	76
23	0	0.90	0	0	0.95	0	0	0.85	0	0
24	0	0.90	0	0	0.95	0	29	0.85	25	25
25	518	0.90	466	84	0.95	80	9	0.85	8	553
26	0	0.90	0	0	0.95	0	15	0.85	13	13
27	380	0.90	342	423	0.95	402	22	0.85	19	763
28	777	0.90	699	0	0.95	0	8	0.85	7	706
29	0	0.90	0	103	0.95	98	68	0.85	58	156
30	0	0.90	0	49	0.95	47	16	0.85	14	60
31	0	0.90	0	72	0.95	68	34	0.85	29	97
32	0	0.90	0	412	0.95	391	0	0.85	0	391
33	0	0.90	0	0	0.95	0	25	0.85	21	21
34	0	0.90	0	0	0.95	0	13	0.85	11	11
35	0	0.90	0	0	0.95	0	24	0.85	20	20
36	0	0.90	0	0	0.95	0	16	0.85	14	14
37	0	0.90	0	0	0.95	0	23	0.85	20	20
38	0	0.90	0	0	0.95	0	17	0.85	14	14
39	0	0.90	0	255	0.95	242	46	0.85	39	281
40	0	0.90	0	0	0.95	0	67	0.85	57	57
41	0	0.90	0	2,511	0.95	2,385	0	0.85	0	2,385
Totals	**2,057**	**0.90**	**1,851**	**6,487**	**0.95**	**6,163**	**808**	**0.85**	**687**	**8,701**

Source: Walker Parking Consultants

Table A-3: Current Weekday Parking Occupancy (On-Street)

		Weekday Average On-street Occupancy							
Block	Supply	9:00	Percentage	11:00	Percentage	14:00	Percentage	16:00	Percentage
1	53	39	74%	33	62%	31	58%	33	62%
2	22	7	32%	13	59%	19	86%	18	82%
3	11	1	9%	4	36%	1	9%	12	109%
4	23	5	22%	12	52%	14	61%	20	87%
5	11	3	27%	6	55%	13	118%	9	82%
6	3	0	0%	0	0%	0	0%	0	0%
7	15	9	60%	11	73%	5	33%	16	107%
8	19	7	37%	7	37%	13	68%	16	84%
9	14	2	14%	10	71%	10	71%	10	71%
10	11	9	82%	8	73%	7	64%	16	145%
11	15	10	67%	12	80%	2	13%	8	53%
12	25	9	36%	5	20%	8	32%	8	32%
13	3	2	67%	3	100%	3	100%	4	133%
14	16	7	44%	10	63%	7	44%	15	94%
15	22	4	18%	8	36%	3	14%	13	59%
16	14	2	14%	2	14%	1	7%	6	43%
17	13	0	0%	1	8%	4	31%	7	54%
18	20	4	20%	6	30%	8	40%	4	20%
19	26	17	65%	14	54%	18	69%	19	73%
20	25	11	44%	12	48%	14	56%	15	60%
21	0	0	0%	0	0%	0	0%	0	0%
22	15	4	27%	5	33%	4	27%	5	33%
23	0	0	0%	0	0%	0	0%	0	0%
24	29	26	90%	18	62%	27	93%	24	83%
25	9	9	100%	1	11%	7	78%	9	100%
26	15	6	40%	5	33%	5	33%	7	47%
27	22	13	59%	11	50%	13	59%	16	73%
28	8	0	0%	0	0%	0	0%	0	0%
29	68	16	24%	15	22%	13	19%	11	16%
30	16	2	13%	0	0%	1	6%	0	0%
31	34	12	35%	8	24%	12	35%	12	35%
32	0	0	0%	0	0%	0	0%	0	0%
33	25	5	20%	18	72%	15	60%	6	24%
34	13	0	0%	0	0%	0	0%	0	0%
35	24	7	29%	5	21%	6	25%	10	42%
36	16	1	6%	10	63%	10	63%	6	38%
37	23	10	43%	17	74%	9	39%	13	57%
38	17	12	71%	14	82%	16	94%	3	18%
39	46	25	54%	19	41%	21	46%	14	30%
40	67	12	18%	33	49%	14	21%	28	42%
41	0	0	0%	0	0%	0	0%	0	0%
Totals	808	308	38%	356	44%	354	44%	413	51%

Source: Walker Parking Consultants

Table A-4: Evening On-Street Parking Occupancy (10/10/2014)

		Weeknight Average On-Street Occupancy							
Block	Supply	6:00:00 PM	Percentage	8:00:00 PM	Percentage	10:00:00 PM	Percentage	11:59:00 PM	Percentage
1	53	26	49%	28	53%	30	57%	37	70%
2	22	12	55%	14	64%	15	68%	18	82%
3	11	13	118%	13	118%	9	82%	6	55%
4	23	22	96%	23	100%	22	96%	19	83%
5	11	13	118%	8	73%	10	91%	14	127%
6	3	0	0%	0	0%	0	0%	0	0%
7	15	14	93%	14	93%	14	93%	11	73%
8	19	16	84%	20	105%	19	100%	14	74%
9	14	14	100%	15	107%	14	100%	16	114%
10	11	17	155%	12	109%	15	136%	13	118%
11	15	11	73%	13	87%	15	100%	10	67%
12	25	12	48%	13	52%	12	48%	19	76%
13	3	0	0%	2	67%	2	67%	2	67%
14	16	17	106%	18	113%	17	106%	14	88%
15	22	13	59%	15	68%	17	77%	13	59%
16	14	0	0%	3	21%	5	36%	6	43%
17	13	10	77%	9	69%	6	46%	7	54%
18	20	19	95%	19	95%	13	65%	10	50%
19	26	23	88%	22	85%	25	96%	18	69%
20	25	15	60%	18	72%	17	68%	15	60%
21	0	0	0%	0	0%	0	0%	0	0%
22	15	0	0%	6	40%	10	67%	9	60%
23	0	0	0%	0	0%	0	0%	0	0%
24	29	4	14%	9	31%	9	31%	12	41%
25	9	2	22%	2	22%	1	11%	2	22%
26	15	4	27%	9	60%	9	60%	8	53%
27	22	14	64%	19	86%	17	77%	17	77%
28	8	0	0%	0	0%	0	0%	0	0%
29	68	24	35%	25	37%	28	41%	30	44%
30	16	0	0%	0	0%	0	0%	0	0%
31	34	0	0%	23	68%	13	38%	7	21%
32	0	0	0%	0	0%	0	0%	0	0%
33	25	16	64%	17	68%	11	44%	12	48%
34	13	0	0%	0	0%	0	0%	0	0%
35	24	16	67%	25	104%	14	58%	12	50%
36	16	4	25%	16	100%	4	25%	9	56%
37	23	13	57%	16	70%	9	39%	9	39%
38	17	3	18%	8	47%	16	94%	5	29%
39	46	10	22%	9	20%	7	15%	6	13%
40	67	50	75%	49	73%	48	72%	18	27%
Totals	808	427	53%	512	63%	473	59%	418	52%

Source: Walker Parking Consultants

Table A-5: LFCPA Garages Peak Occupancy (9/9/2014)

		LFCPA Garages					
Block	Supply	10:00AM	Percentage	1:30PM	Percentage	Average	Percentage
1	0	0	0%	0	0%	0	0%
2	0	0	0%	0	0%	0	0%
3	0	0	0%	0	0%	0	0%
4	0	0	0%	0	0%	0	0%
5	382	271	71%	281	74%	270	71%
6	0	0	0%	0	0%	0	0%
7	0	0	0%	0	0%	0	0%
8	0	0	0%	0	0%	0	0%
9	0	0	0%	0	0%	0	0%
10	0	0	0%	0	0%	0	0%
11	0	0	0%	0	0%	0	0%
12	0	0	0%	0	0%	0	0%
13	0	0	0%	0	0%	0	0%
14	0	0	0%	0	0%	0	0%
15	0	0	0%	0	0%	0	0%
16	0	0	0%	0	0%	0	0%
17	0	0	0%	0	0%	0	0%
18	0	0	0%	0	0%	0	0%
19	0	0	0%	0	0%	0	0%
20	0	0	0%	0	0%	0	0%
21	0	0	0%	0	0%	0	0%
22	0	0	0%	0	0%	0	0%
23	0	0	0%	0	0%	0	0%
24	0	0	0%	0	0%	0	0%
25	518	304	59%	290	56%	284	55%
26	0	0	0%	0	0%	0	0%
27	380	252	66%	240	63%	232	61%
28	777	680	88%	650	84%	664	85%
29	0	0	0%	0	0%	0	0%
30	0	0	0%	0	0%	0	0%
31	0	0	0%	0	0%	0	0%
32	0	0	0%	0	0%	0	0%
33	0	0	0%	0	0%	0	0%
34	0	0	0%	0	0%	0	0%
35	0	0	0%	0	0%	0	0%
36	0	0	0%	0	0%	0	0%
37	0	0	0%	0	0%	0	0%
38	0	0	0%	0	0%	0	0%
39	0	0	0%	0	0%	0	0%
40	0	0	0%	0	0%	0	0%
41	0	0	0%	0	0%	0	0%
Totals	2,057	1,507	73%	1,461	71%	1,450	70%

Source: Walker Parking Consultants

Table A-6: Non-LFCPA Public Parking Occupancy (9/9/2014)

Non-LFCPA Public Parking Occupancy							
Block	Supply	10:00AM	Percentage	1:30PM	Percentage	Average	Percentage
1	41	10	24%	3	7%	9	22%
2	26	20	77%	16	62%	18	69%
3	190	154	81%	145	76%	147	77%
4	182	132	73%	117	64%	118	65%
5	0	0	0%	0	0%	0	0%
6	479	438	91%	421	88%	435	91%
7	327	220	67%	164	50%	200	61%
8	0	0	0%	0	0%	0	0%
9	0	0	0%	0	0%	0	0%
10	0	0	0%	0	0%	0	0%
11	600	526	88%	521	87%	537	90%
12	307	192	63%	160	52%	192	63%
13	0	0	0%	0	0%	0	0%
14	0	0	0%	0	0%	0	0%
15	92	58	63%	52	57%	59	64%
16	0	0	0%	0	0%	0	0%
17	0	0	0%	0	0%	0	0%
18	184	130	71%	105	57%	99	54%
19	0	0	0%	0	0%	0	0%
20	83	61	73%	54	65%	57	69%
21	0	0	0%	0	0%	0	0%
22	67	63	94%	65	97%	64	96%
23	0	0	0%	0	0%	0	0%
24	0	0	0%	0	0%	0	0%
25	84	72	86%	64	76%	66	79%
26	0	0	0%	0	0%	0	0%
27	423	249	59%	242	57%	238	56%
28	0	0	0%	0	0%	0	0%
29	103	76	74%	63	61%	65	63%
30	49	28	57%	28	57%	28	57%
31	72	30	42%	25	35%	28	38%
32	412	221	54%	211	51%	216	52%
33	0	0	0%	0	0%	0	0%
34	0	0	0%	0	0%	0	0%
35	0	0	0%	0	0%	0	0%
36	0	0	0%	0	0%	0	0%
37	0	0	0%	0	0%	0	0%
38	0	0	0%	0	0%	0	0%
39	255	129	51%	119	47%	127	50%
40	0	0	0%	0	0%	0	0%
41	2,511	794	32%	852	34%	775	31%
Totals	6,487	3,603	56%	3,427	53%	3,478	54%

Source: Walker Parking Consultants

Table A-7: Non-LFCPA Public Parking Adequacy (9/9/2014)

Parking Adequacy										
Block #	LFCPA Effective Supply	Peak Occupancy	Adequacy	non-LFCPA Effective Supply	Peak Occupancy	Adequacy	On-Street Effective Supply	Peak Occupancy	Adequacy	Total Adequacy
1	0	0	0	39	10	29	45	33	12	41
2	0	0	0	25	20	5	19	18	1	5
3	0	0	0	181	154	27	9	12	(3)	24
4	0	0	0	173	132	41	20	20	(0)	40
5	344	271	73	0	0	0	9	9	0	73
6	0	0	0	455	438	17	3	0	3	20
7	0	0	0	311	220	91	13	16	(3)	87
8	0	0	0	0	0	0	16	16	0	0
9	0	0	0	0	0	0	12	10	2	2
10	0	0	0	0	0	0	9	16	(7)	(7)
11	0	0	0	570	526	44	13	8	5	49
12	0	0	0	292	192	100	21	8	13	113
13	0	0	0	0	0	0	3	4	(1)	(1)
14	0	0	0	0	0	0	14	15	(1)	(1)
15	0	0	0	87	58	29	19	13	6	35
16	0	0	0	0	0	0	12	6	6	6
17	0	0	0	0	0	0	11	7	4	4
18	0	0	0	175	130	45	17	4	13	58
19	0	0	0	0	0	0	22	19	3	3
20	0	0	0	79	61	18	21	15	6	24
21	0	0	0	0	0	0	0	0	0	0
22	0	0	0	64	63	1	13	5	8	8
23	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	25	24	1	1
25	466	304	162	80	72	8	8	9	(1)	168
26	0	0	0	0	0	0	13	7	6	6
27	342	252	90	402	249	153	19	16	3	246
28	699	680	19	0	0	0	7	0	7	26
29	0	0	0	98	76	22	58	11	47	69
30	0	0	0	47	28	19	14	0	14	32
31	0	0	0	68	30	38	29	12	17	55
32	0	0	0	391	221	170	0	0	0	170
33	0	0	0	0	0	0	21	6	15	15
34	0	0	0	0	0	0	11	0	11	11
35	0	0	0	0	0	0	20	10	10	10
36	0	0	0	0	0	0	14	6	8	8
37	0	0	0	0	0	0	20	13	7	7
38	0	0	0	0	0	0	14	3	11	11
39	0	0	0	242	129	113	39	14	25	138
40	0	0	0	0	0	0	57	28	29	29
41	0	0	0	2,385	794	1,591	0	0	0	1,591
Totals	**1,851**	**1,507**	**344**	**6,163**	**3,603**	**2,560**	**687**	**413**	**274**	**3,177**

Observation Periods: Thursday October 9th, 2014
Sources: Walker Parking Consultants


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