CITY OF LAKE WORTH BEACH

# Downtown Lake Worth Beach Parking Study

## 2024 Update

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# I.EXECUTIVE SUMMARY

In 2018 WGI provided a parking study to the City of Lake Worth Beach (City), which was later updated in early 2020. Recently WGI was hired by the City to update the Parking Study specifically reviewing the viability of the recommendations previously made. This update is intended to review, confirm, and/or revise the recommendations included in those reports and updates, and provide financial modeling and updated structured parking concepts for the downtown area based on the 2018 recommendations. This update will provide an updated perspective of the City's downtown parking conditions.

The 2018 Lake Worth Beach Parking Study highlighted the importance of an efficient parking system for maintaining a vibrant downtown. The downtown area, centered around Lake and Lucerne Avenues, had experienced significant growth and increased parking demand, which strained available public parking. Free parking, while initially beneficial, had led to overcapacity issues, with vehicles double parked, blocking drive lanes, and causing overflow into surrounding neighborhoods. The study identified an immediate need for additional public parking spaces to meet estimated demand, with additional spaces necessary to accommodate future development and/or increased building occupancies. Parking occupancies were updated again in 2020 (pre-pandemic) and reflected even higher occupancies than those observed in 2018.

In the 2018 study and the update done in 2020, WGI staff collected all data. This was not the case with this 2024 update which reviewed the Downtown area parking inventory and occupancy using data provided by the City via their License Plate Recognition (LPR) cameras used by parking enforcement and field observations from staff. Parking Services provided five (5) months of plate scans (~20,000 scans) which were analyzed and sorted to generate occupancy perspectives by block. It is important to note that parking enforcement only scans license plates in areas where parking restrictions are in place, which excludes surface parking locations and 197 unregulated on-street spaces in the study area (Downtown). To include occupancies from these spaces in our analysis, City staff provided their occupancy observations of the unregulated spaces.

This 2024 update validates the preceding study recommendations, confirming that Downtown parking continues to maintain high parking occupancies and the City still has a definitive need for more public parking to ensure equitable access and to support the continued economic development and vitality of the Downtown area. Downtown Lake Worth Beach has continued its growth in demand and popularity, the parking system has not evolved to meet the continuing growth in demand, with only a limited supply of spaces. This study update continues to encourage the City to take proactive steps to manage parking demand through the introduction of parking fees and a needed new parking structure.

**2018 Study Recommendations and Updates**

I. Implementing a paid parking system in Downtown to manage/reduce parking demand, generate revenue for capital improvements, and ensure the professional management of parking resources. Leverage the beach parking program to expand paid parking to downtown Lake Worth Beach.
*2024 Update: To date the City has not implemented paid parking in Downtown.*

II. Establishing a comprehensive Parking and Transportation Program managed by a dedicated Parking and Transportation Office serving both the beach area and downtown.
*2024 Update: To date, the City has not implemented paid parking in downtown. Parking services is using existing staff to service both the beach, downtown, and any other areas where parking services is being deployed.*

III. Encouraging the CRA's continued investment in parking through the purchase/acquisition of land or participation in public-private partnerships to create additional parking spaces and potential future parking structures.
*2024 Update: It is our understanding that the CRA has continued the process of seeking to acquire land and/or participate in public-private partnerships for parking. An example of this is the planned WMODA development.*

IV. Anticipating and planning for future demands in emerging districts adjacent to downtown, such as the Artisanal Mixed Use–East (MUE) and Downtown East, was also a crucial aspect of the recommendations for managing parking demand and maintaining effective parking management.

*2024 Update: It is our understanding that no further planning has occurred relative to the Artisanal District or Downtown East. The implementation of paid parking in downtown will necessitate Residential/Employee permit programs in the areas surrounding downtown to prevent abuse.*

**2024 Study Updates**

- **WMODA Development –** The Wiener Museum of Decorative Arts (WMODA) is planning a significant development in Lake Worth Beach, aiming to create a cultural hub that highlights its extensive collection of ceramics, glass, and other decorative arts. The new facility will serve as a community and tourist attraction, offering educational programs, exhibits, and events to promote the appreciation of fine and applied arts. This development will be located at the site of current surface parking locations and is expected to boost the local economy and contribute to the cultural revitalization of the area. The included graphic depicts the WMODA cultural center, adjacent residential structure, parking, and lots that fall within the WMODA planning area (source: Lake Worth Beach CRA, September 10, 2024 update).


- **1st Avenue South & K-Street Residential Development** – A residential development is planned for the corner of S. K St. and 1st Ave. S. which is intended to provide workforce housing.
- **Gulfstream Hotel Renovation –** The historic Gulfstream Hotel in Lake Worth Beach is undergoing a major renovation and restoration as part of efforts to reopen the iconic landmark. Closed since 2005, the hotel is being revitalized to preserve its classic architecture while adding modern amenities. The project aims to bring new life to the downtown area, with plans for a boutique hotel, dining options, parking garage, and event spaces. The reopening is expected to significantly boost tourism and economic activity in the city.
- **Additional Downtown Restaurants –** From information provided by the City, several additional restaurants have plans for opening in the Downtown area in the near future.

**Conclusions**

- **Parking occupancies remain high in Downtown –** On-street occupancies in the downtown area show continued full occupancies during peak hours. Unregulated spaces (on-street and off-street) are the most utilized spaces when available and nearby.
- **The City has an inadequate supply of parking to meet future demand -** The parking adequacy analysis indicates that the City already has an inadequate amount of space to meet current parking demand, with all off-street locations full at peak parking demand hours, and on-street parking occupancies full during those same peak periods. The City is effectively out of parking. To provide sufficient space to meet parking demand, the City must both increase inventory by adding new spaces in downtown, as well as take proactive steps to reduce current parking demand.
- **Implement Parking Fees in Downtown** – Parking fees help manage urban mobility by encouraging efficient use of space, promoting sustainable alternatives, and reducing parking demand in dense areas like downtown. Moreover, free on-street parking concentrates demand closest to popular venues, which in turn causes congestion. With limited parking and high occupancy rates, paid parking is the most effective way to ensure equitable access, distribute parking demand, generate revenue for improvements, and cover management costs. By setting appropriate fees, the City can balance parking availability, shift long-term parking to off-street locations, and support sustainable urban transportation and infrastructure use.
- **Return on Investment from Parking –** The implementation of parking fees can generate considerable return for the City while using parking fees to distribute the cost of the parking resource to the individuals who use it. The financial forecasts generated with City staff indicate that a fee-based parking system in downtown could generate almost $ 1.7 million in return per year, without a new parking garage. That amount grows to more than $2.6 million/year with a new garage. We recommend these revenues be reinvested into further improving parking in the Downtown and surrounding areas.

# II.PARKING INVENTORY & OCCUPANCY

## PARKING INVENTORY

The city has a sizeable inventory of on-street parking spaces (1,577 spaces). The on-street parking spaces currently being patrolled using License Plate Recognition (LPR) cameras comprise approximately 1/3 (33%) of the total on-street parking spaces the City has in its inventory as shown in the inventory chart and map.

**On-Street Parking Inventory Map 1 – City of Lake Worth Beach**


**Parking Inventory – City of Lake Worth Beach**

| Space Type | Patrolled/Regulated Spaces (Time-Limited) | Total Inventory | % |
|---|---|---|---|
| Off-Street Spaces | - | 385 | 0% |
| On-Street Spaces | 513 | 1,577 | 33% |
| Total | 513 | 1,962 | 27% |

## DOWNTOWN ON-STREET INVENTORY

The downtown on-street parking areas were the focus of this Study update. The study considers the downtown area as bounded by Dixie Highway to the West, 2nd Avenue North to the north, Federal Highway to the East, and 1st Avenue South to the south, containing approximately 480 on-street spaces as shown in the included chart and maps.

**On-Street Parking Inventory Map 1 – Downtown Lake Worth Beach**

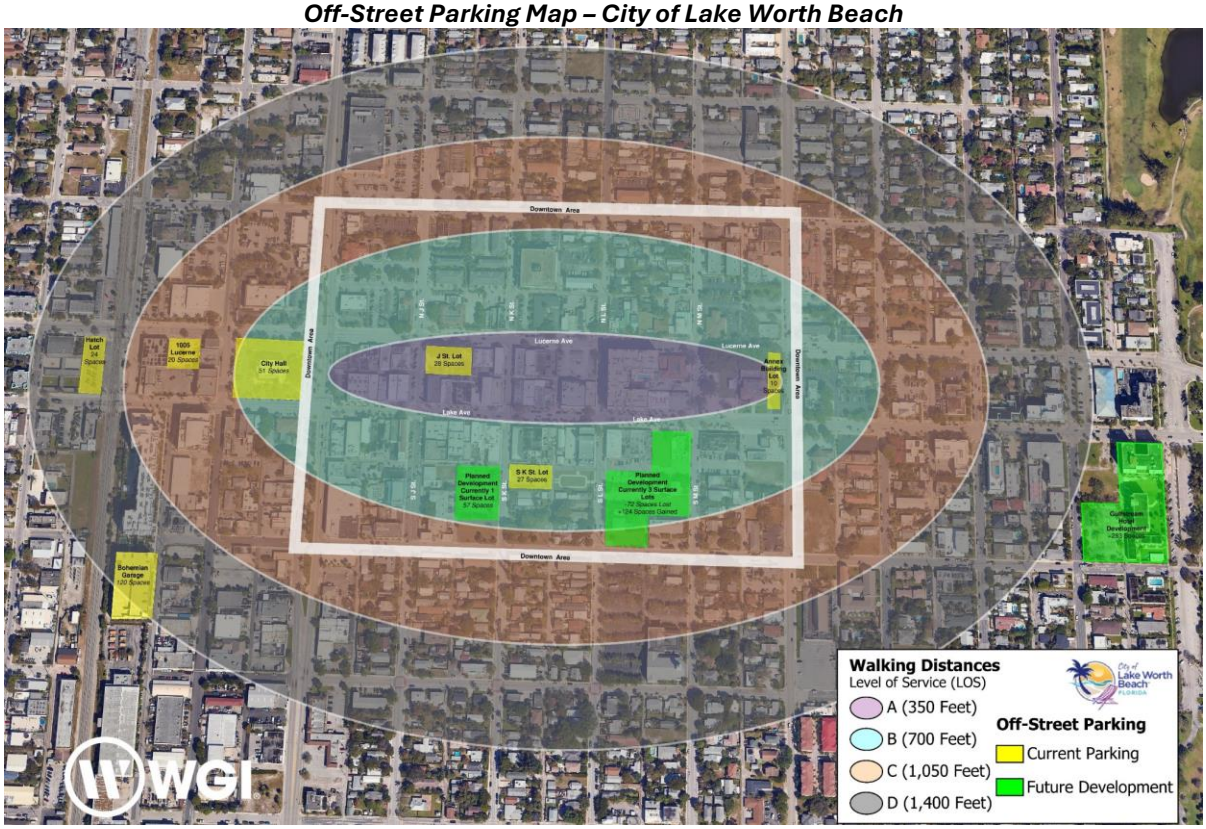

**On-Street Parking Inventory – Downtown Lake Worth Beach**

| Space Location | Regulated Spaces | Unregulated Spaces | Totals | *% Regulated* |
|---|---|---|---|---|
| Lake-Lucerne Corridor | 172 | *0* | **172** | *100%* |
| South of Lake | 63 | 105 | **168** | *38%* |
| North of Lucerne | 48 | 92 | **140** | *34%* |
| **Total Downtown On-Street Spaces** | 283 | 197 | **480** | 59% |

## OFF-STREET PARKING

The City currently has 385 spaces in ten (10) off-street parking locations that support the downtown area which were considered for this study update. The included map examines the various parking locations' walking distance to the Lake and Lucerne corridor (from Dixie to Federal highway) as shown in the included chart and map.

***Off-Street Parking Map – City of Lake Worth Beach***




| Off-Street Parking Inventory (Current) | # Spaces | Walking Distance Level of Service to Downtown Lake/Lucerne |
|---|---|---|
| J Street Lot | 28 | A |
| Annex Building | 10 | A |
| S K Street Lot (East) | 27 | B |
| City Hall Lot (PM & Weekends Only) | 51 | B |
| 1005 Lucerne | 20 | C |
| Hatch Lot | *24* | D |
| Bohemian Garage | 120 | D |
| S K Street Lot (West)** | 57 | B |
| S L Street Lot* | 28 | B |
| S M Street Lot* | 20 | B |
| **Current Total Off-Street Spaces** | **385** | **% of Total** |
| Walking Distance Level of Service (LOS) A | 38 | *10%* |
| Walking Distance Level of Service (LOS) B | 183 | *48%* |
| Walking Distance Level of Service (LOS) C | 20 | *5%* |
| Walking Distance Level of Service (LOS) D | 144 | *37%* |

**Note – Currently planned for removal for future mixed-use development*

***Note – Currently planned for removal for future structured parking development*

Planned developments will remove the lots running between S. L and S. M Streets, as well as the west-side S. K Street lot (57 spaces) comprising a total of approximately 105 parking spaces possibly removed from inventory within the Downtown area. Development plans include a mixed-use development at the L and M Street sites, and structured parking at the K Street site. The Bohemian Garage, City Hall Lot, 1005 Lucerne Lot, and the Hatch Lot, which includes 215 spaces, support downtown parking, although the lots are located west of Federal Highway and provide lower levels of service in walking distance to the Lake-Lucerne downtown corridor.

Since each of these locations outside the downtown study area provides public parking that serves the downtown parking demand, they were included in our review of the possible implementation of paid parking. The City Hall lot would only provide paid parking during evenings and weekends.

# PARKING OCCUPANCY

To better understand parking behavior, it is important to understand that a parking location or system will begin to feel full to users well before the location or system achieves 100% capacity. This is referred to as the "effective full" status of a parking location or system, which is the point at which users perceive the location to be full, become frustrated, and begin to seek parking in an alternate location or abandon the trip altogether. Depending on the total capacity of spaces included, the location or system will begin to feel full once it exceeds 85-90% occupancy. For our analysis, we considered an effective full percentage of 85% of capacity based on the nature of municipal parking systems including the prevalence of loading zones and small pools of parking spaces.

## PARKING OCCUPANCY HISTORY

The 2018 and 2020 parking occupancy reviews showed very high weekend occupancy, very near to or exceeding 90% occupancy for both on-street and off-street public parking. These observations exceeded effective full, creating an environment in which the public perceives the system to be full and would begin to seek parking in outlying areas, seek alternative modes of transportation, or select a different ultimate destination. A summary of the occupancies observed during the previous studies and updates is included.

**Summary of Historical Parking Occupancy – City of Lake Worth Beach**

| Date | Weekday | Times | On-Street Inventory | On-Street Occupancy | *On-Street Occupancy %* | Off-Street Inventory | Off-Street Occupancy | *Off-Street Occupancy %* |
|---|---|---|---|---|---|---|---|---|
| 1/20/2018 | Saturday | 4-6PM | 462 | 429 | ***92.8%*** | 205 | 195 | ***95.1%*** |
| 1/20/2018 | Saturday | 6-8PM | 462 | 461 | ***99.8%*** | 205 | 209 | ***102%*** |
| 1/25/2018 | Thursday | 10A-12P | 462 | 333 | ***72.1%*** | 205 | 101 | ***49.3%*** |
| 1/25/2018 | Thursday | 12-2PM | 462 | 292 | ***63.2%*** | 205 | 111 | ***54.2%*** |
| 2/28/2020 | Friday | 7-9PM | 499 | 446 | ***89%*** | 269 | 241 | ***90%*** |

**Note – Preceding study data collection included capturing all regulated and unregulated parking occupancies.*

## CURRENT ON-STREET PARKING OCCUPANCIES

To consider the current parking occupancies, WGI relied on data from the City as well as the experiences, observations, and input from City staff.

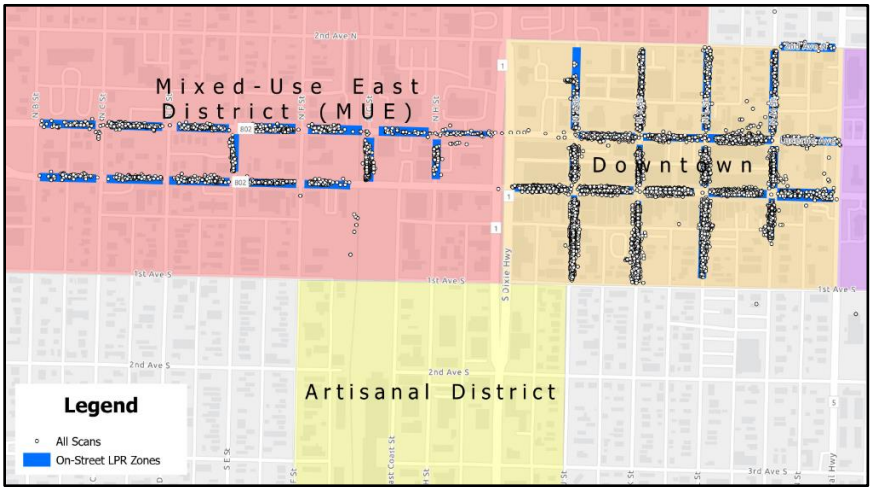
### License Plate Scan Analysis

The City provided WGI with a detailed inventory of parking as well as a history of all parking enforcement license plate (LPR) scans from January 6 through May 12 of 2024, which included more than 20,000 observed license plates. Each plate scan was charted using the geo-locator coordinates provided to identify the observed vehicles' locations. This data was then compiled by time periods and compared to inventory block by block to estimate the possible parking occupancies for each observed downtown area. This approach allowed for a granular assessment of parking utilization on a block-by-block basis.

The data comprised a total of 20,010 LPR scans collected between January and May of 2024. These scans were divided into 3,400 rounds, each capturing a snapshot of parking occupancy within the time period. By breaking

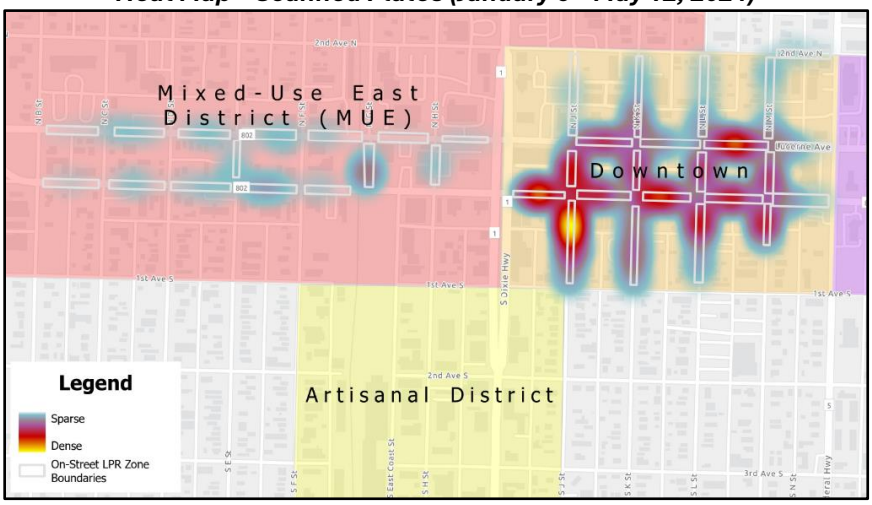
down the data in this manner, the analysis provides an accurate and time-sensitive analysis of parking patterns and space utilization across different zones over the course of several months.

***LPR Plate Scan Map (January 6 – May 12, 2024)***




The map provided shows a heatmap of scan locations. The map shows all scans collected with an outline of the approximate boundary of the LPR zones established by the City. The heatmap provides an indication of the most commonly patrolled areas as well as the highest occupancy areas.

***Heat Map – Scanned Plates (January 6 – May 12, 2024)***




For analytical purposes, the 85th percentile occupancy was used to determine a reasonable peak occupancy for each location. This approach aimed to simulate a peak day, providing a realistic estimate of the highest typical demand for parking spaces. By focusing on the 85th percentile, the study was able to capture peak usage levels while excluding outliers that might represent atypical or anomalous conditions. This method ensured that the occupancy data reflected a high yet reasonable level of demand, which is important for planning and decision-making.

### *All On-Street Parking (Regulated)*

To summarize the data, occupancies for the zones were totaled to show a projected peak occupancy for the observed parking. The 85$^{th}$ percentile occupancy for each of the locations was identified to generate a total occupancy for the area at several times of day for both weekdays and weekends. Based on the times scans were completed, both weekdays and weekends were split into four time periods:

- Morning (6 AM -12 PM)
- Early Afternoon (12 PM – 3 PM)
- Evening (3 PM – 6 PM)
- Night (6 PM – 10 PM)

Due to operational practices in the collection of the license plate scans (hours of operation, patrol routes, etc.), some zones did not have patrols/scans at all times. Due to this, the parking supply/inventory was changed to reflect the total of all zones with data for each time of the week. The data reveals notable patterns in parking demand, highlighting peak occupancy times as noted below:

- On weekdays, the highest occupancy of 87% occurs during the 6-10 PM slot, indicating a significant demand for parking spaces in the evening. Throughout the day, occupancy rates remain relatively steady, ranging from 67% to 72%, reflecting consistent use of parking spaces.
- During weekends, the peak occupancy reaches 94% in the 3-6 PM slot, showing a pronounced demand for parking nearing capacity in the afternoon. The occupancy remains high at 87% during the 12-3 PM slot and drops to 77% in the evening (6-10 PM).

***All Observed Parking Occupancy (408 Regulated On-Street Spaces)***

| | Weekday | | | | Weekend | | |
|---|---|---|---|---|---|---|---|
| | **6-12 A** | **12-3 P** | **3-6 P** | **6-10 P** | **12-3 P** | **3-6 P** | **6-10 P** |
| Occupied Regulated Spaces | 271 | 292 | 288 | **261** | 355 | **379** | 253 |
| Spaces Patrolled | 403 | 403 | 408 | **301** | 406 | **403** | 327 |
| Regulated Space Occupancy % | 67% | 72% | 71% | **87%** | 87% | **94%** | 77% |

*Downtown Parking*

To understand and compare parking occupancy to the previous study, the downtown area was analyzed. This area contains 283 regulated and 197 unregulated on-street spaces. Data was only collected for the regulated spaces, however, unregulated spaces were assumed to be full during peak on-street occupancy periods based on city staff observations. This would indicate that demand for on-street parking is higher than regulated space occupancies may reflect. The data reveals notable patterns in parking demand, highlighting peak occupancy times as noted below:

- On weekdays, the highest occupancy rate of 81% was observed during the 12-3 PM slot, indicating a strong midday demand for parking spaces. At other times, the occupancy rates vary, with 76% during the 3-6 PM slot, 74% from 6-10 PM, and 68% in the early morning hours (6-12 AM), showing relatively consistent use of parking spaces.
- On weekends, the peak occupancy reaches 106% in the 3-6 PM slot, reflecting demand exceeding the supply of parking in the afternoon. The occupancy remains near capacity at 99% during the 12-3 PM slot and slightly decreases to 85% in the evening (6-10 PM).

In downtown areas, unregulated parking spaces, including both on-street and off-street options, tend to experience equal or higher occupancy rates compared to regulated spaces. While the relationship between these rates is less consistent in less dense regions, the higher demand for unregulated parking in urban centers highlights its attractiveness.

***Downtown Parking Occupancy Measurements (283 Spaces)***

| | Weekday | | | | Weekend | | |
|---|---|---|---|---|---|---|---|
| | **6-12 A** | **12-3 P** | **3-6 P** | **6-10 P** | **12-3 P** | **3-6 P** | **6-10 P** |
| Occupied Regulated Spaces | 193 | **230** | 215 | 210 | 281 | **300** | 221 |
| Spaces Patrolled | 283 | **283** | 283 | 283 | 283 | **283** | 261 |
| Regulated Space Occupancy % | 68% | **81%** | 76% | 74% | 99% | **106%** | 85% |

# III. FUTURE PARKING DEMAND

This section explores possible future changes to downtown parking demand.

## POSSIBLE CHANGES TO PARKING DEMAND

The City provided a summary of currently planned developments in/near the downtown area which could impact future parking demand for the area. The included chart summarizes the anticipated building programming elements for the planned developments in/near downtown that may impact downtown parking.

**Lake Worth Beach Development Summary**

| Development Summary | WMODA | Gulfstream | Misc. Downtown Developments | 1st/K St. Development |
|---|---|---|---|---|
| Commercial Office (SF) | | | 5,000 | |
| Restaurant/Family (SF) | | | 14,000 | |
| Hotel - Restaurant (SF) | | 7,000 | | |
| Hotel-Event Space (SF) | | 15,000 | | |
| Museum (SF) | 33,000 | | | |
| Residential 1-bd (Unit) | 55 | 42 | | 9 |
| Residential 2-bd (Unit) | 55 | 43 | | 12 |
| Hotel Guest Rooms (Unit) | | 140 | | |
| **Combined Peak Demand (Weekend Afternoon) – 757*** | | | | |

**Note – Peak demand for each building use does not simultaneously occur. Total peak demand represents the maximum combined demand for space considering all building uses.*

**New Parking Demand (+757 Additional Spaces at Weekend Peak)**

A shared parking demand analysis of the above development summary indicates these developments will generate a combined peak weekday parking demand of **751 spaces** with the peak occurring during the midday period and a weekend peak parking demand of **757 spaces** with the peak occurring during the midday period.

This new parking demand will not uniformly impact downtown parking. Certain developments such as WMODA, 1st/K St., as well as the restaurant/office space, will impact and rely upon downtown parking. Other developments such as Gulfstream are further from downtown and are providing additional parking with their development plans, but are anticipated to generate increased traffic and bring new exposure to downtown that may further increase demand for downtown parking.

Two (2) of the planned developments provide parking in their development plans. The Gulfstream development includes a 283-space parking garage, and the WMODA development includes 117 spaces for residents under the development, as well as seven (7) surface spaces. None of these planned parking additions are intended for use as downtown public parking.

**Off-Street Parking Inventory – Planned Reductions**

| Off-Street Parking Inventory | Spaces | Walking Distance Level of Service |
|---|---|---|
| J Street Lot | 28 | A |
| Annex Building | 10 | A |
| S K Street Lot (East) | 27 | B |
| City Hall Lot (PM & Weekends Only) | 51 | B |
| 1005 Lucerne | 20 | C |
| Hatch Lot | *24* | D |
| Bohemian Garage | 120 | D |
| S K Street Lot (West) – *Planned Development* | *57* | B |
| S L Street Lot – *Planned Development* | *28* | B |
| S M Street Lot – *Planned Development* | *20* | B |
| **Current Total Off-Street Spaces** | **385** | |
| *Spaces Lost – Planned Development* | *-105* | |
| **Future Remaining Off-Street Spaces** | **280** | |

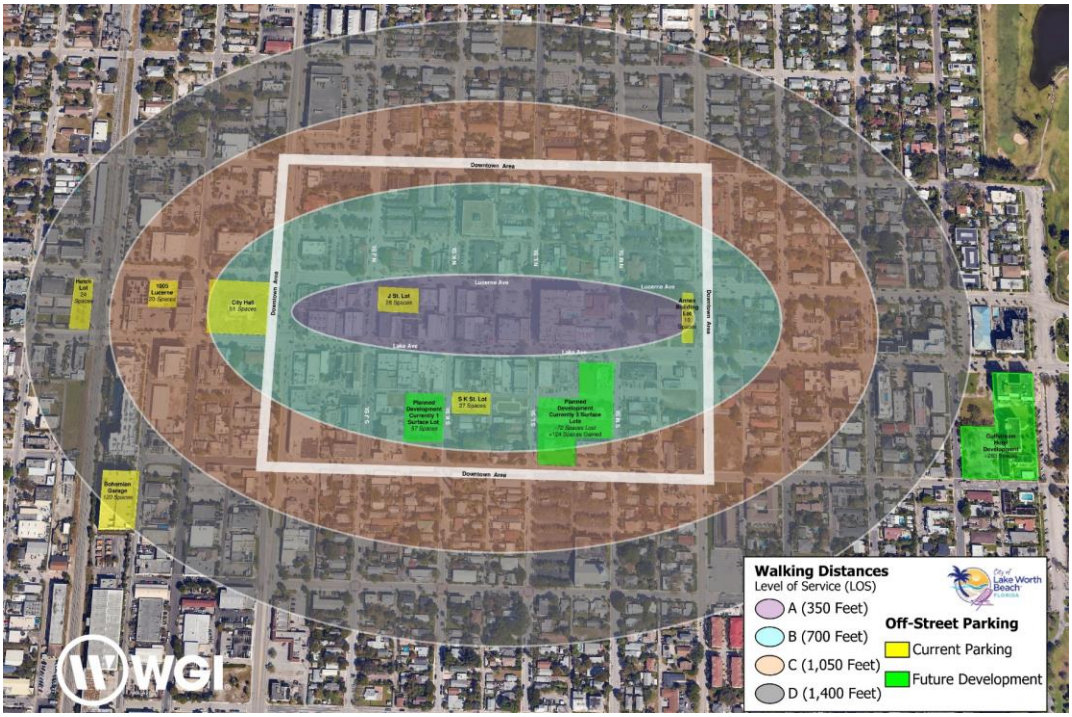
# PARKING ADEQUACY

Currently parking for downtown is supported through a combination of on-street parking and off-street parking provided both within and in areas directly surrounding downtown. Based on our analysis and city staff observations both parking resources within downtown are already full at peak times.

**Downtown Parking Adequacy**

On-street parking within a central business district is often the first and last impression many users have of their experience. The 283 regulated spaces within downtown are exceeding capacity during peak hours, by 17 spaces (6%). Based on staff observations and comments, the 197 unregulated on-street spaces, as well as the 221 off-street parking spaces (within the LOS A-B walking distance) downtown are also at capacity during these peak periods. When totaled there are approximately 718 occupied spaces during weekend evenings, and downtown is at capacity.

As shown in the included map that examines walking distances from the Lake-Lucerne corridor, parking resources are available at off-street locations further away from downtown; however, these locations and on-street locations in adjacent neighborhoods provide an extended walking distance from downtown, and low level of service to users. There is very limited off-street parking provided within downtown. Off-street locations provide an important overflow mechanism for on-street parking demand, especially when on-street parking nearby reaches/nears capacity.




**Peak Parking Occupancy/Demand (current)**

| Day of Week | Time of Day | Space Type | Observation Type | Occupied Spaces | Occupancy % |
|---|---|---|---|---|---|
| Weekend | Afternoon 3-6 PM | On-Street Regulated | LPR | 300 | 106% |
| Weekend | Afternoon 3-6 PM | On-Street Unregulated | City Observed | 197 | 100% |
| Weekend | Afternoon 3-6 PM | A-B Off-Street Unregulated | City Observed | 221 | 100% |
| | | | Total Capacity/Demand (Peak) | 718 | |
| | | | New Development Parking Demand (Peak) | 757 | |
| | | | **Combined Future Parking Demand** | **1,475** | |

The included chart details the changes intended for off-street parking resulting from the planned developments. The chart also includes a structured parking concept, in coordination with City staff, this study considers a concept for a downtown parking garage on the west side of S K St. at the site of the current 57-space surface parking location in the next section.

**Future Parking Supply & Adequacy**

| Parking Supply | Spaces | Walking Distance Level of Service |
|---|---|---|
| On-Street Parking (Current) | 480 | A-B |
| Off-Street Parking (Current) | 385 | A-D |
| Spaces Lost – Development | -105 | B |
| Spaces Gained (Gulfstream) | 283 | D |
| Spaces Gained (WMODA) Below-grade *Note-Residents Only | 117 | B |
| Spaces Gained (WMODA) At-grade | 7 | B |
| Added Parking (Proposed K-Street Garage) | 268 | B |
| **Future Parking Supply** | **1,435** | |
| **Future Parking Demand** | **1,475** | |
| **Future Adequacy** | **(40)** | |

From these measurements and observations, downtown already has an inadequate supply of parking to meet demand. Factoring in changes to off-street supply through the possible loss of 105 spaces, places downtown parking into an even more inadequate state. Our analysis also identified 757 spaces in possible new parking demand for the downtown and surrounding area that will further increase this state of inadequacy. A strategy combining increasing off-street parking supply inside downtown, along with parking management demand-reduction initiatives (e.g., parking fees) can resolve this inadequacy over time.

Lake Worth Beach downtown parking is effectively full during peak periods. In the parking industry, "effective full" refers to the occupancy level at which parking is considered to be fully utilized, even though it may not be technically at 100% capacity. Effective full typically occurs when the occupancy rates reach between 85-95%, depending on the size of the parking system/location and demand patterns. This level is lower than 100% because at higher occupancy levels, it becomes challenging for drivers to find available spaces quickly. Once parking reaches its effective full level, finding spaces can take significantly more time, leading to user frustration, congestion, and inefficient operations. The frequency of effective full conditions in parking directly impacts congestion, perceptions of access, and ultimately whether a user chooses to return to a destination.

## ON-STREET PARKING (MANAGING FUTURE DEMAND)

There is an immediate need for the City to manage on-street parking demand with consistently high parking occupancies observed in the downtown on-street spaces. More active management of on-street spaces through shorter time-limits strictly enforced, implementing parking fees, and/or a combination of the two have proven to be effective strategies in reducing parking demand in many cities. Without changes to how on-street spaces are managed, no change in high occupancies should be anticipated.

Paid parking can effectively reduce parking demand by compelling drivers to consider the cost of parking as part of their decision-making process. When public parking is free, the City essentially incentivizes people to drive and drivers have little incentive to seek alternative modes of transportation, such as public transit, biking, or walking. Introducing a fee for parking makes drivers evaluate whether the convenience of parking justifies the expense. This cost-benefit analysis often leads some individuals to carpool or forego driving altogether, thereby decreasing the overall demand for parking spaces. Additionally, paid parking can encourage turnover, ensuring that parking spaces turn over regularly, and ensuring availability for those who are willing to pay, thus optimizing the use of limited curbside spaces. The higher the fee charged for parking, the more likely users are to seek alternatives. Note the city has options to calibrate time limits and parking rates to balance parking

supply and demand. For example, Lake Worth Beach can introduce lower time limits and higher rates for those spaces with a LOS of A or B. The goal of a paid parking program is to increase parking vacancy percentages in areas of peak demand, to ensure any newly arriving users find readily available parking. Finally, the introduction of paid parking will provide information on paid parking sessions that is automatically collected. This information is critical going forward, allowing the city to assess the performance of the parking system and make adjustments based on data.

## CONCLUSION

The parking adequacy analysis indicates that the City already has an inadequate amount of space to meet current parking demand, with all off-street locations full at peak, and on-street parking occupancies at capacity during those same peak periods, the City is effectively out of parking. To provide sufficient space to meet parking demand, the City must both increase inventory by adding new spaces, as well as take proactive steps to reduce current parking demand.

As was recommended in the preceding studies, the data and analysis continue to support our recommendation to implement paid parking in the downtown area in an effort to reduce/manage parking demand. Parking fees help reduce parking demand through several key mechanisms:

1. Reducing Overuse of Parking Spaces
    a. Discouraging Excessive Parking: When parking is free or very cheap, it is essentially subsidized by the municipality, and people may be inclined to drive even for short trips, contributing to congestion. Fees discourage unnecessary car use, thereby reducing the overall demand for parking spaces.
    b. Promoting Turnover: Higher parking fees and/or time-limits, particularly in high-demand areas, encourage faster turnover of parking spaces. Drivers are less likely to park for extended periods, freeing up spaces for others.
2. Incentivizing Alternative Transportation
    a. Cost Awareness: When parking fees are charged, drivers become more conscious of the financial cost of driving. This can motivate people to consider alternative transportation methods such as public transit, biking, walking, or carpooling.
    b. Encouraging Car-Free Travel: In areas where parking fees are high, people may opt to live closer to their workplace or use non-car transportation options to avoid the costs associated with parking.
    c. Microtransit: On-demand shuttle services like Circuit are proving to be an integral part of downtown mobility in South Florida and beyond. This service assists in parking management in two ways: (1) providing rides to nearby residents who would otherwise drive and (2) providing rides to and from periphery parking spaces.
3. Promoting Efficient Land Use
    a. Freeing Up Valuable Land: By controlling parking demand through fees, cities can reduce the need for large parking lots. This allows the land to be used for more productive purposes, such as housing, parks, or businesses, which contributes to urban development and reduced dependence on cars.
4. Supporting a Sustainable Transportation System
    a. Revenue for Infrastructure: Parking fees can fund investments in public transit, pedestrian infrastructure, and bike lanes, helping to make alternative modes of transportation more accessible and attractive.
    b. Environmental Impact: By reducing the number of cars on the road, parking fees can decrease emissions and pollution, contributing to a more sustainable urban environment.

Parking fees serve as a tool for managing urban mobility by making drivers internalize the true cost of parking, encouraging more efficient use of space, and promoting sustainable alternatives. With limited parking resources in a dense urban setting such as downtown, accompanied by consistently high parking occupancies, paid parking is the most effective solution for the City to manage and reduce parking demand, ensure equitable access for all users, generate revenue for improvements, and offset the cost of parking management. Implementing paid parking is expected to stabilize occupancy rates. By setting appropriate fees,

the City can maintain some available on-street and off-street parking while shifting long-term parking to off-street or more remote locations, as recommended in the 2018 study. This balanced approach not only makes parking more efficient but also supports sustainable urban transportation and better use of city infrastructure.

# IV. INCREASING PARKING SUPPLY

## NEW K ST. GARAGE CONCEPT

WGI was asked to consider a potential parking structure located on S. K Street between Lake Avenue and 1st Avenue S on the parcels associated with street addresses 13, 19, and 25 S K Street as shown in the RED box in the included image. WGI was tasked with providing a design concept, the amount of new parking spaces, and an estimate of construction costs for the possible garage.


The City provided direct guidance on design limitations to use for the site as indicated below:

**Parking Garage Design Limitations**

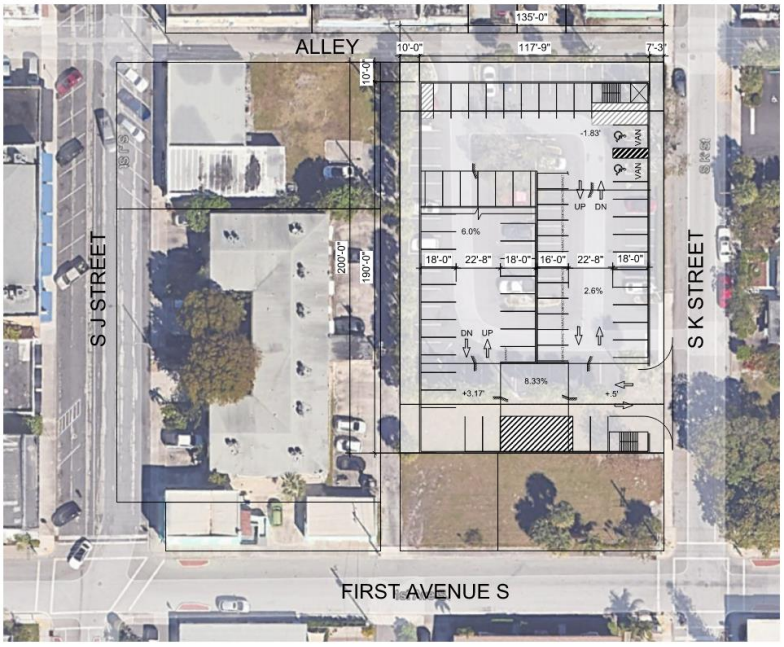
- Building Height (Historic District): 45-feet with a 10-foot allowance for an elevator lobby.
- Set Backs: 10-feet from north and west alleyway, 7-feet from K St. no setback for the adjoining parcel to the south.
- Parking Stall Size: 9-feet wide by 18-feet in length (90-degree stall)
- Compact Parking Spaces: 8-feet wide by 16-feet in length (90-degree stall), allocation of up to 25% of parking facility capacity allowed
- Accessible/ADA Spaces: 12-feet wide by 18-feet in length (90-degree stall),
- Drive Aisle Width: 20-feet for two-way drive aisle

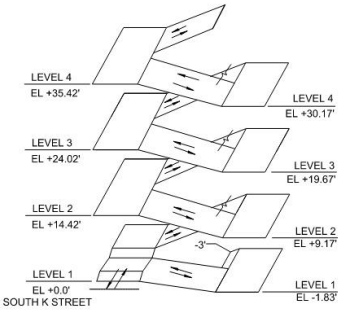
**Structured Parking Concept Key Points**

- 4-level parking structure on S K St measures 117'-9" from east to west, and 190' from North to South, with approximately 22,373 square feet per level, providing a total of 268 parking spaces.
- Vehicular access is provided via the existing curb cut on S K Street.
- Includes eight (8) Accessible/ADA spaces, 55 compact spaces (21% of capacity), and 205 standard stalls
- Pedestrian access to K Street via two (2) separate stairwells and a single (1) elevator, with one (1) stairwell in the SE corner and a combined stairwell and elevator tower in the NE corner of the garage adjacent to S K Street.

**Concept**

Several concepts and construction estimates were provided to the City. After a thorough review of each concept with City staff, it was decided that the included 268-space above-ground concept was the best fit to the City's budget, almost doubling the City's remaining off-street parking supply. The central location of this parking asset, will provide a much needed parking resource to the downtown area that will be a vital resource to support the City's future plans for the downtown area.




ISOMETRIC VIEW

ISOMETRIC NORTH

| PARKING SUMMARY | | | | | |
|---|---|---|---|---|---|
| LEVEL | STANDARD | VAN ADA | ADA | COMPACT | TOTALS |
| LVL 1 | 48 | 2 | 0 | 13 | 63 |
| LVL 2 | 53 | 0 | 2 | 14 | 69 |
| LVL 3 | 53 | 0 | 2 | 14 | 69 |
| LVL 4 | 51 | 0 | 2 | 14 | 67 |
| TOTAL | 205 | 2 | 6 | 55 (21%) | 268 |

STANDARD SIZE = 9' X 18'
COMPACT SIZE = 8' X 16'
ADA VAN & ADA SPACE SIZE = 12' X 18' W/ 5' ACCESS AISLE

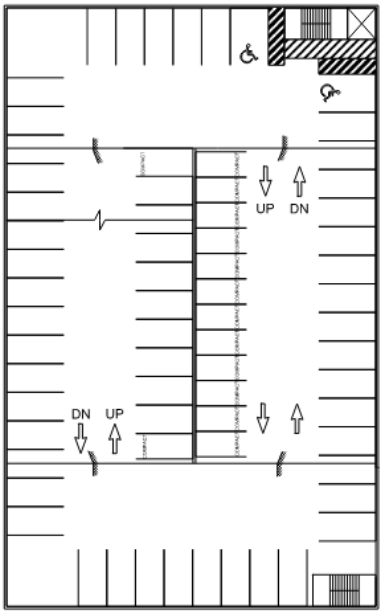
August 13, 2024 | First Avenue & K Street Concept A4 | Sheet 1 of 2

0' 20' 40' 60' 80'
SCALE: 1" = 40'-0"

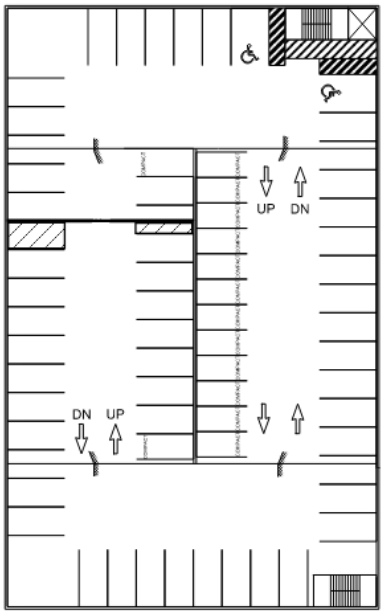
NORTH

Downtown Lake Worth
Proposed Parking Garage Opt. A
Lake Worth, FL

Project No. 009225.02




**Garage Concept A4 – Levels 2-3**




**Garage Concept A4 – Level 4**

**Estimated Garage Construction Costs:**

| Description | 268-Space Concept (A4) |
|---|---|
| **Total Estimated Construction Base Cost** | $8,175,000 |
| **Total Cost with Design Contingency (5%)** | $8,584,000 |
| **Total Square Feet (SF)** | 89,490 SF |
| **Parking Efficiency (SF/Space)** | 334 SF |

# V.DOWNTOWN PARKING FEES

## PARKING FEE COLLECTION CONSIDERATIONS

As cities work to optimize urban spaces and address increasing vehicle congestion, a well-structured approach to curbside parking management is becoming a crucial component of how the City functions. This section reaffirms and examines the previous recommendation of the introduction of parking fees, the creation of fee zones, the adjustment of enforcement of time limits, and continued adjustments to parking management in downtown to improve the availability and turnover of curbside parking. By adopting these measures, the City seeks to alleviate congestion and ensure fair access to desirable parking. Effective enforcement will be necessary to ensure compliance and achieve the desired results, leading to a more organized and efficient urban environment.

**Parking Fees**

Curb space is some of the most valuable real estate the City has, and should be managed as such. Effective pricing of curbside parking is crucial for managing demand and optimizing the use of limited urban space, especially in bustling downtown corridors. Additionally, fees charged for on-street parking directly impact the fees off-street locations are able to charge. By implementing a well-considered pricing strategy, the City can balance supply and demand, encouraging turnover and ensuring that prime parking spots are available for visitors and residents alike, and long-term storage vehicles are moved to off-street or periphery spaces. Understanding how to set appropriate prices based on factors such as location, time of day, and usage patterns is essential for maximizing revenue and enhancing the overall efficiency of the parking system. This approach not only helps alleviate congestion but also supports economic vitality by improving accessibility and convenience in the downtown area.

**Update:** WGI reaffirms the recommendation made in preceding studies, to implement a paid parking system in the downtown area, both on and off-street. We recommend implementing higher hourly fees in the Lake and Lucerne corridor coupled with time limits to encourage turnover, with lower fees and longer time limits in off-street locations, on the side streets, and along 1st Ave. S and 2nd Ave. N.

**Mobile payment/Meters:** While mobile payments are becoming more common and convenient, most cities continue to maintain parking meters to ensure accessibility, reliability, and inclusivity for all users while offering a redundant system that can accommodate various scenarios and technologies. The City currently uses physical parking meters coupled with a mobile payment service (Parkmobile) for beach parking. The City should transition the existing beach parking program to only accept credit cards and mobile payment.

**Cash/Credit Card Only:** The City currently accepts coins, credit cards, and mobile payment for beach parking and should transition this to credit card and mobile payment only before introducing paid parking downtown. Cash payment acceptance is an expensive payment process to manage and maintain, requiring manual emptying of meters, depositing of revenues, and maintenance of the internal components necessary to accept cash.

**Implement a Smart Card System to facilitate Cash Acceptance**

Cities often accept cash for parking to ensure inclusivity, fairness, and legal compliance, while also providing a reliable and accessible option for everyone, regardless of financial situation or technological comfort. Cash payments can ensure that parking remains equitable and functional for all citizens, regardless of income, technological access, or payment preferences. To compensate for any necessity to continue to accept cash payments, we recommend the City implement a “Smart Card” system whereby cash users must purchase a “Smart Card” that functions exactly as a credit card would.

Cities can use smart card systems to facilitate cash acceptance by integrating them with public services and payment platforms, allowing users to load cash onto cards for easy, cashless transactions. Here’s how it works:

- Cash Loading Locations: Cities can set up kiosks, transit stations, or partner with retail outlets where users can load cash onto their smart cards. These cards can then be used for various services, such as public transit, parking, and other municipal fees.
- Multifunctionality: Smart cards can be used across multiple city services (e.g., transportation, library, parking), reducing the need for handling physical cash. This also simplifies payment for users who do not have access to bank accounts or credit cards.
- Improved Access for Unbanked Populations: By allowing cash to be loaded onto smart cards, cities ensure that people who rely on cash, such as unbanked or underbanked individuals, can still participate in digital payment systems and access essential services.
- Security and Efficiency: Smart card systems reduce the risks associated with cash handling, improve transaction security, and streamline payment processes, making it easier for cities to manage and track payments.
- Incentivized Use: Cities can offer discounts or rewards for using smart cards, encouraging adoption and reducing reliance on cash-based payments.

This approach helps cities modernize their payment infrastructure while remaining inclusive to those who primarily use cash.

**Creating Parking Zones**

Creating parking fee zones is the first step in managing urban parking effectively. By establishing distinct fee zones, the city can tailor pricing strategies to reflect varying demand levels across different areas, optimizing both revenue and parking availability. This approach is crucial for addressing the unique needs of each curb-face block, as individualized zones allow for precise data collection and analysis. Understanding usage patterns and turnover rates at a granular level enables more informed decision-making and targeted adjustments, ensuring that parking policies are responsive to actual conditions and enhancing overall efficiency in urban planning.

***Parking Zones - Example***

**Update:** The city would benefit from mapping the parking zones into their existing GIS system, and then populating the GIS maps with the LPR plate scan data generated from the patrol vehicles. This would provide a current and historical dataset of parking occupancy and utilization, which could be used as Key Performance Indicators (KPI) of the parking system, providing data to inform future strategic decisions regarding parking in the City. Additionally, using the LPR data to populate GIS Maps will inform parking management of any coverage or route issues with enforcement patrols.

**Time Limits**

Establishing appropriate time limits for curbside parking is another tool in managing urban parking effectively, particularly in a busy downtown corridor. By setting precise time restrictions, the city can ensure that parking spaces are frequently available for different users throughout the day, promoting a higher turnover and reducing the likelihood of long-term occupancy by a single vehicle. Understanding how to determine optimal time limits is essential for balancing convenience and accessibility while preventing the abuse of parking resources. Additionally, enforcing these time limits is as critical as implementing parking fees; without robust enforcement, time restrictions may become ineffective, undermining the entire parking management strategy and failing to achieve the desired improvements in traffic flow and availability.

***Time Limits Example***

**Update:** The City currently has 4-hour time limits throughout the downtown area. 4-hour time-limit spaces are one of the longer time limits used in parking, time limits should be adjusted to reflect the varying demand for different areas, even with fees. We recommend reducing the current 4-hour time limits in the Lake and Lucerne

corridor (from J to M Streets) to 2 or 3-hour time limits with fees to ensure appropriate turnover of spaces for the area with the highest parking demand.

## PARKING FEE COLLECTION START-UP COSTS

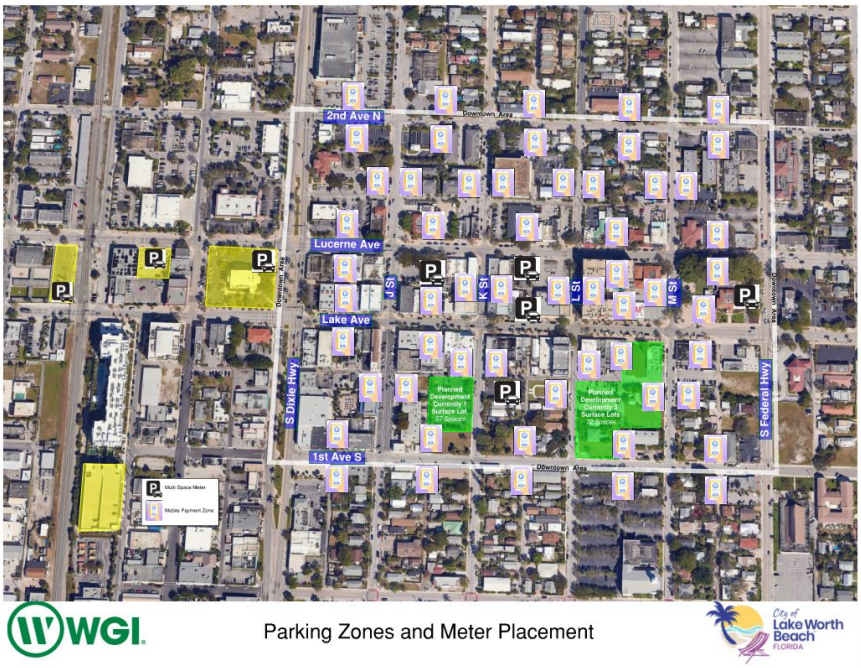
The City currently operates paid parking at the beach accepting coin, credit card, and mobile payment for parking. Coin and credit card payments are collected at multiple multi-space parking meters placed conspicuously throughout parking locations. Meters accept coins for cash payment in addition to credit cards, and issue receipts. Before implementing parking fees in downtown, we recommend the City adjust the beach parking operations to only accept credit cards and mobile payment, and implement a smart card system if cash acceptance is required or essential.

The City currently uses the IPS group parking meters and enforcement system. This manufacturer has recently released a low-cost multi-space meter that cost only $3,500 (MSU – Multi-Space Universal Kiosk), compared with the almost $10,000/meter these devices have historically cost. The one constraint these devices have, is that they cannot accept cash, they can only accept credit cards and other digital forms of payment such as validations.

**Centralized Parking Meters**

Based on converting the beach parking locations to credit card only, as coordinated with City staff we recommend the City install eight (8) parking meters in the downtown area, coupled with a pervasive implementation of mobile payment zones throughout the downtown area. The meters would be installed in off-street locations and two (2) would be installed for on-street parking. We recommend one meter be located on the North side of Lake Ave. (between K and L Streets), and the other be located on the south side of Lucerne Ave (between K and L Streets). We recommend implementing zonal parking whereby anyone paying the meters must identify the zone they are parked in, which will allow parkers parking on side streets or areas without meters to pay the meters inputting the zone in which they are parked. The included map provides a summary of anticipated meter placements, as well as where the parking zones should be located throughout the downtown area.

**Recommended Parking Zone & Meter Placement Map**



The included charts provide an estimate of possible costs for the installation of the recommended meters.

**Multi-Space Meter – Per Meter Estimated Costs**

| Product | Estimated Costs | Comments |
|---|---|---|
| Multi-Space Meter (Credit Card Only) | $3,500/meter | IPS Parking Meters - +$150 for hardwired; includes shipping & installation; 8-10 weeks lead time |
| Monthly Software Fees | $55/Meter/Month | |

**Meter Installation Cost Summary – Total Estimated Costs**

| Cost Summary | # of Meters | Estimated Costs |
|---|---|---|
| Multi-Space Meters | 8 | $28,000 |
| Monthly Software Fees | 15 | $440 |

## RESIDENTIAL & EMPLOYEE PERMIT PROGRAMS

The preceding studies considered the implementation of residential and employee parking permit programs in the blocks surrounding the downtown. Residential and employee parking permit programs (RPPs) are usually created by local governments or municipal authorities to address parking issues in residential areas, especially where demand for parking exceeds supply due to nearby commercial zones, schools, or transit hubs. The goal is to prioritize parking for residents, provide available space for employees of downtown businesses, and protect the parking resources from parkers seeking unregulated free parking.

Residential and employee parking permit programs are important parking management tools, helping urban cities manage limited parking resources, reduce congestion, and improve the quality of life for residents and workers. By allocating permits and/or spaces to local residents and/or employees, these programs prioritize parking for those who live or work in the area, preventing overcrowding by commuters, visitors, or those seeking free parking. Additionally, these programs encourage the use of alternative transportation options by controlling parking supply, making urban mobility more efficient and sustainable. With the rising demand for parking in the downtown area, it is essential to prioritize residents' and employees' access to parking near their homes/places of work. A well-structured residential/employee parking program ensures that residents/employees are not disproportionately affected by any new regulations or fees. By establishing clear guidelines and protections, the programs help maintain the availability and fairness of parking spaces, ultimately supporting the overall quality of life in the neighborhoods.

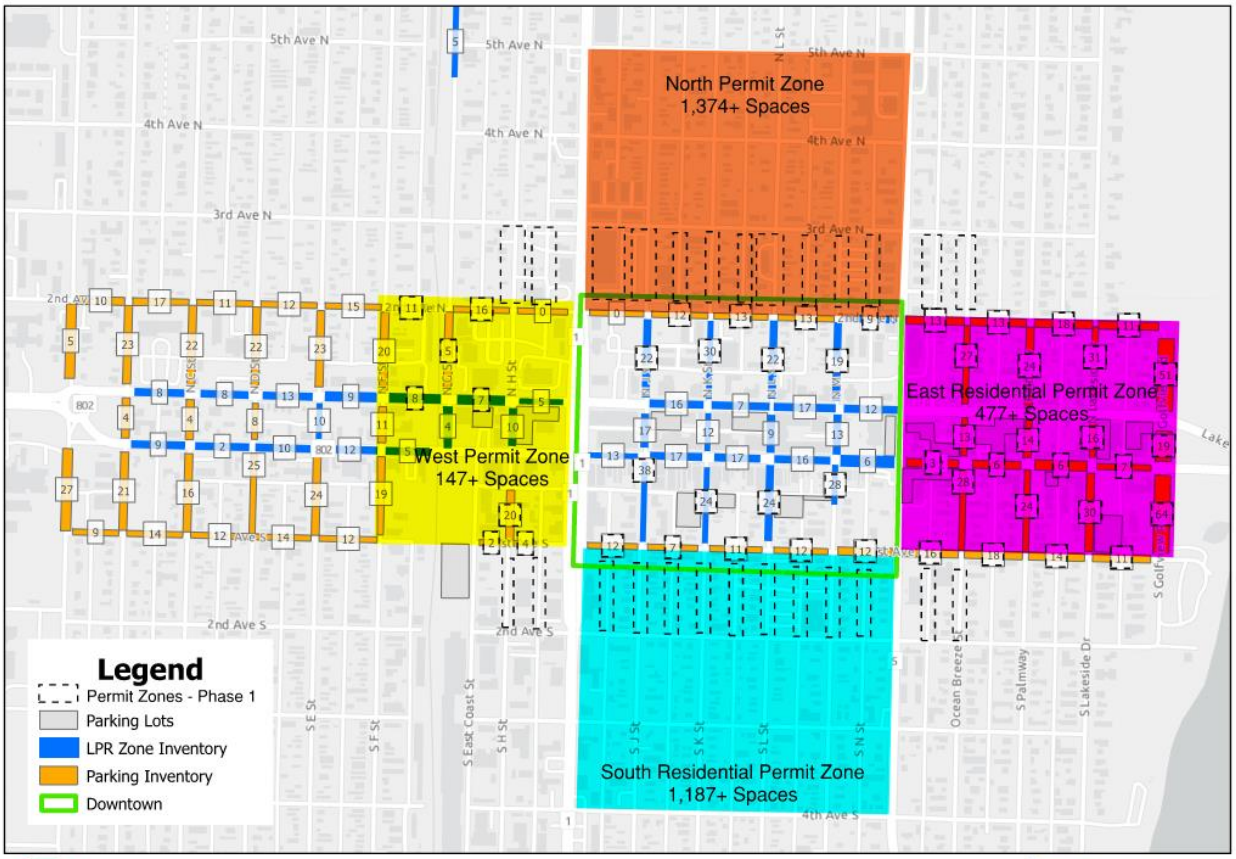

**Employee Parking Programs:** Employee parking programs help manage parking demand by ensuring that spaces near businesses or city centers are available for workers, reducing competition for spots with residents or visitors. They help cities balance the competing demands for limited urban resources, like parking while promoting sustainable transportation and supporting local businesses.


**Residential Parking Programs:** Residential parking programs are an essential tool for cities to balance the needs of residents with the broader demands of urban life, while also promoting sustainability, safety, and livability. Cities implement residential parking programs for a variety of reasons, often centered on managing parking resources, maintaining livability in neighborhoods, and balancing the needs of residents, businesses, and visitors.

**Update:** With the implementation of parking fees in downtown, it should be anticipated that some portion of parkers will seek out free or uncontrolled parking in neighborhoods near downtown. We reaffirm the preceding study recommendations for implementing residential and/or employee permit programs in the neighborhoods surrounding downtown to protect spaces from abuse as and/or make use of underutilized parking as fees and shorter time limits are implemented. We recommend the City prepare to pass ordinances allowing for the

implementation of residential and employee parking permit programs and continue to closely monitor business/resident comments about employee/residential parking in the area. The City should continue to monitor parking occupancies in downtown adjacent neighborhoods and be prepared to implement additional residential and/or employee permit programs as the community behaviors change with the implementation of fees. A typical implementation process would require the user group wanting the parking permit program (employees or residents) to submit a petition requesting a permit program. The petition typically needs to show support from a majority of the residents in the proposed area. Some cities require signatures from a certain percentage (e.g., 50% or 75%) of households in the affected area. This consensus-based approach ensures the programs will be adopted and appreciated by users. Parking enforcement staffing must be scaled to anticipate and meet the expanded enforcement demands these permit programs generate.

The included map lays out the areas identified by City staff where Residential Permit Programs may be needed. The small boxes in the map overlaying individual blocks or supply of on-street parking identify areas where the first permit programs may be needed.




Residential/Employee Permit Zones

# VI. PEER CITIES REVIEW

**Peer City Review – Demographic Data and Transportation Choices**

| City | Population* | Mean Household Income** | Drive Alone** | Carpool** | Public Transit** | Bike** | Walk** |
|---|---|---|---|---|---|---|---|
| Deerfield Beach, FL | 86,859 | $59,148 | 69.9% | 14.1% | 2.8% | 0 | 0.8% |
| Coral Gables, FL | 49,248 | $118,203 | 65.2% | 6.1% | 1.5% | 1.1% | 5.9% |
| Pompano Beach, FL | 112,046 | $64,419 | 69.2% | 11.0% | 4.6% | 0.3% | 1.6% |
| Hollywood, FL | 153,067 | $60,630 | 67.6% | 11.4% | 2.4% | 0.4% | 2.4% |
| St. Augustine, FL | 14,329 | $72,806 | 64.0% | 10.0% | 0.1% | 2.0% | 4.7% |
| Delray Beach, FL | 66,846 | $76,803 | *** | *** | *** | *** | *** |
| Lauderdale by the Sea, FL | 6,198 | $76,855 | 54.1% | 3.7% | 1.7% | 0% | 6.2% |
| **Lake Worth Beach, FL** | **42,219** | **$57,489** | **63.4%** | **20.0%** | **3.6%** | **0.7%** | **2.2%** |

**2020 Decennial Census, **2023 American Community Survey, ***Data not provided*

**Peer City Review – Parking Rates**

| City | On-Street | Lots | Garages |
|---|---|---|---|
| Deerfield Beach, FL | $2 per Hour Mon-Fri 4p<br>$4 per Hour Mid | $3 per Hour 6a-4p<br>$4 per Hour 4p-12a | $3 per Hour Mon-Fri<br>$4 per Hour Sat & Sun |
| Coral Gables, FL | $3.50 per Hour | $4.00 per Hour | $1 per 24 Minutes/$18 Max |
| Pompano Beach, FL | Weekday/$2.50<br>Weekend/$3.25 | Weekday/$2.50<br>Weekend/$3.25 | Weekday/$2.50<br>Weekend/$3.25 |
| Hollywood, FL | Resident $1.50 Mon-Thu $2.00 Fri-Sat<br>Non-Residents $3.00 Mon-Thu $4.00 Fri-Sat | Resident $1.50 Mon-Thu $2.00 Fri-Sat<br>Non-Residents $3.00 Mon-Thu $4.00 Fri-Sat | Resident $1.50 Mon-Thu $2.00 Fri-Sat<br>Non-Residents $3.00 Mon-Thu $4.00 Fri-Sat |
| St. Augustine, FL | Resident $0.50/Hour<br>Non-Resident $2.50/Hour | Resident $0.50/Hour<br>Non-Resident $2.50/Hour | $20 per Entry 7a-5p<br>$5 per Entry 5p-9p<br>Resident $3 per Entry |
| Delray Beach, FL | $4.00/Hour | $1.50/Hour | $4.00 Flat Fee |
| Lauderdale by the Sea, FL | $4.00/Hour | $4.00/Hour | N/A |
| **Lake Worth Beach, FL** | **No Fee** | **No Fee** | **$2.50 per Hour** |

**Deerfield Beach, FL**

- Residents can obtain parking permits for $100 per year.
- The city offers free community shuttle services, the Deerfield Beach Express Shuttles, operating Monday through Saturday from 8 AM to 4 PM, with designated stops throughout the area.

**Coral Gables, FL**

- On-street parking rates went up from $2.50 per hour in 2018 to $3.50 per hour in 2024.
- Resident parking permits cost $20 per vehicle per year, with additional monthly parking options available for municipal garages and lots.
- Coral Gables operates four municipal garages and over a dozen surface lots.

- The Coral Gables Trolley provides free service on two routes from Monday to Saturday, running from 6:30 AM to 10 PM.

**Pompano Beach, FL**

- Residents can purchase parking permits for $135 annually or $75 for six months.
- The beachfront area is served by The Circuit, an electric shuttle offering on-demand rides. The shuttle operates from 11 AM to 9 PM Monday through Thursday, 10 AM to 11 PM on Friday and Saturday, and 11 AM to 9 PM on Sunday.

**Hollywood, FL**

- Parking permits for residents cost $175 per year, while registration for the resident meter rate is free.
- The city offers various parking permit options for business owners and non-residents.
- Sun Shuttle, an electric on-demand shuttle, operates in the downtown and beach areas with varying hours of service.

**St. Augustine, FL**

- On-street parking rates have not changed since 2018, but garage access has been raised from $15 to $20 per vehicle.
- Residents can register for free meter rates.
- The Circulator, a free downtown shuttle, operates daily from 10 AM to 10 PM, offering convenient transportation throughout the city.

**Delray Beach, FL**

- On-street parking rates have been reduced from $2.00 per hour to $1.50 per hour.
- Garage and lot rates have stayed the same since 2018.
- Residents can purchase parking permits for designated garages and lots for $90 per year.
- Delray Beach offers Freebee, which is an on-demand electric shuttle circulator that services the downtown area.

**Lauderdale by the Sea, FL**

- On-street parking rates have increased from $1.75 per hour to $4 per hour (varied by location) since 2018.
- Residents can purchase parking permits for $60 annually and employees can purchase parking permits for $27 per month.
- Lauderdale by the Sea offers the Circuit-By-The-Sea which is an electric circulator that services the town limits area.

# VII. PARKING FINANCIALS

## PAID PARKING ESTIMATES

Using the projected occupancies established in Future Parking Demand section, and based on rate and expense data provided by the City, WGI has prepared an estimate of possible expense and revenue for Downtown. The estimate provides two (2) scenarios, the first without a new downtown parking garage (K St. Garage), and the second which includes the K Street garage concept from the preceding section. This estimate of revenue and expense was developed in coordination with City staff.

**Paid Parking Estimate of Revenue and Expense**

**City of Lake Worth Beach**
Downtown Parking System Financial Proforma Projection

| | Year 1 - 2026 | Year 2 - 2027 | Year 3 - 2028 | Year 4 - 2029 | Year 5 - 2030 | Year 6 - 2031 | Year 7 - 2032 | Year 8 - 2033 | Year 9 - 2034 | Year 10 - 2035 | Total | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Annual Inflation - Expenses** | | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | 2.5% | | |
| **Parking Rate Adjustment** | | | 15% | | | 10% | | | 10% | | | |
| *Updated 11/12/2024 | | | | | | | | | | | | |
| **Potential Annual Parking Revenue** | | | | | | | | | | | | |
| **Existing On / Off Street Parking** | | | | | | | | | | | | |
| On-Street Revenue | $1,360,600 | $1,360,600 | $1,564,690 | $1,564,690 | $1,564,690 | $1,721,159 | $1,721,159 | $1,721,159 | $1,893,275 | $1,893,275 | **$16,365,297** | *$1,636,530* |
| Off-Street Revenue | $803,187 | $803,187 | $923,665 | $923,665 | $923,665 | $1,016,032 | $1,016,032 | $1,016,032 | $1,117,635 | $1,117,635 | **$9,660,734** | *$966,073* |
| Citation Revenue | $188,990 | $188,990 | $190,880 | $190,880 | $192,789 | $192,789 | $192,789 | $192,789 | $194,717 | $194,717 | **$1,920,330** | *$192,033* |
| Permits - Employee & RPP | $115,358 | $115,358 | $132,662 | $132,662 | $132,662 | $145,928 | $145,928 | $145,928 | $160,521 | $160,521 | **$1,387,531** | *$138,753* |
| **Projected Parking Revenue** | **$2,468,136** | **$2,468,136** | **$2,811,897** | **$2,811,897** | **$2,813,806** | **$3,075,908** | **$3,075,908** | **$3,075,908** | **$3,366,148** | **$3,366,148** | **$29,333,892** | *$2,933,389* |
| **Potential Annual Operating Expense** | | | | | | | | | | | | |
| Parking System Operating Expenses | $ 625,110 | $ 640,738 | $ 656,757 | $ 673,176 | $ 690,005 | $ 707,255 | $ 724,937 | $ 743,060 | $ 761,636 | $ 780,677 | **$7,003,352** | *$700,335* |
| **Sub-Total Operating Exp** | $ 625,110 | $ 640,738 | $ 656,757 | $ 673,176 | $ 690,005 | $ 707,255 | $ 724,937 | $ 743,060 | $ 761,636 | $ 780,677 | **$7,003,352** | *$700,335* |
| **Downtown Parking Garage (K-Street)** | | | | | | | | | | | | |
| Projected Garage Revenue | $1,010,457 | $1,010,457 | $1,162,025 | $1,162,025 | $1,162,025 | $1,278,228 | $1,278,228 | $1,278,228 | $1,406,051 | $1,406,051 | **$12,153,775** | *$1,215,378* |
| **Downtown Parking Garage (K-Street)** | | | | | | | | | | | | |
| Projected Parking Garage Maintenance | $ 107,200 | $ 109,880 | $ 112,627 | $ 115,443 | $ 118,329 | $ 121,287 | $ 124,319 | $ 127,427 | $ 130,613 | $ 133,878 | $1,201,003 | *$120,100* |
| **Parking Structure Maintenance** | $ 107,200 | $ 109,880 | $ 112,627 | $ 115,443 | $ 118,329 | $ 121,287 | $ 124,319 | $ 127,427 | $ 130,613 | $ 133,878 | **$1,201,003** | *$120,100* |
| **Bohemian Parking Garage (non-Core)** | | | | | | | | | | | | |
| Annual Rent | $ 72,000 | $ 72,000 | $ 72,000 | $ 72,000 | $ 144,000 | $ 144,000 | $ 144,000 | $ 144,000 | $ 144,000 | $ 144,000 | $1,152,000 | *$115,200* |
| Common Area Maintenance (CAM) | $ 21,000 | $ 22,050 | $ 23,153 | $ 24,310 | $ 25,526 | $ 26,802 | $ 28,142 | $ 29,549 | $ 31,027 | $ 32,578 | $264,136 | *$26,414* |
| Annual Revenue (120 Spaces) | $ 30,617 | $ 30,617 | $ 35,209 | $ 35,209 | $ 35,209 | $ 38,730 | $ 38,730 | $ 38,730 | $ 42,603 | $ 42,603 | $368,257 | *$36,826* |
| **Net Revenue** | $ (62,383) | $ (63,433) | $ (59,943) | $ (61,101) | $ (134,316) | $ (132,072) | $ (133,412) | $ (134,819) | $ (132,423) | $ (133,975) | **-$1,047,878** | *-$104,788* |
| **SUMMARY NET REVENUE** | **Year 1 - 2026** | **Year 2 - 2027** | **Year 3 - 2028** | **Year 4 - 2029** | **Year 5 - 2030** | **Year 6 - 2031** | **Year 7 - 2032** | **Year 8 - 2033** | **Year 9 - 2034** | **Year 10 - 2035** | **Total** | |
| **Scenario #1 Total Net Revenue** (w/o Downtown Garage) | $ 1,780,642 | $ 1,763,964 | $ 2,095,197 | $ 2,077,621 | $ 1,989,485 | $ 2,236,581 | $ 2,217,560 | $ 2,198,029 | $ 2,472,088 | $ 2,451,496 | **$21,282,662** | *$2,128,266* |
| **Scenario #2 Total Net Revenue** (w/ Downtown Garage) | $ 2,683,899 | $ 2,664,541 | $ 3,144,596 | $ 3,124,204 | $ 3,033,181 | $ 3,393,522 | $ 3,371,468 | $ 3,348,830 | $ 3,747,526 | $ 3,723,668 | **$32,235,435** | *$3,223,544* |

### Financial Model Assumptions

The included financial model was directly coordinated with City staff and informed by data provided by the City in preceding studies as well as this update. This conservative model provides an estimate of possible revenue and expense that implementation of fees in the downtown area could generate. Below we have provided details of the assumptions included in each section of the financial model.

- **10-Year Forecast –** The starting year was assumed to be 2026, to calculate the increase in rent for the Bohemian that occurs in 2030. The model provides a 10-year forecast.
- **Annual Inflation –** Annual inflation was calculated at 2.5% year over year.
- **Parking Rate Adjustments –** The model assumes significant parking rate increases in Year 3/2028 (15% increase), Year 6/2031 (10% increase), and Year 9/2034 (10% increase).
- **Parking Fees & Enforcement Hours & Days:** The model assumes parking fees will be charged, and parking enforcement will enforce parking rules 7 days/week from 9:00 AM – 9:00 PM.
- **Parking Occupancy & Revenues**
  - **On-Street Parking Revenue –** On-street parking rates for the Lake/Lucerne corridor (172 spaces) were calculated at $3.$^{00}$/hour, and $2.$^{50}$/hour for the side streets (308 Spaces). Revenue forecasts assume fees and enforcement are in place 7 days/week from 9AM-9PM.
  - **On-Street Occupancies –** Estimates assume the loss of 105 off-street spaces downtown. As a conservative approach to estimating paid on-street occupancies, WGI used an occupancy

range of 40-65% occupied spaces with the highest total occupancy (65%) included during peak periods.

- **Off-Street Parking Revenue –** Off-street parking revenues were calculated using a $2.50/hour rate for parking. Occupancies were calculated based on existing occupancies combined with the reduction in parking occupancy the implementation of parking fees will generate.
- **Off-Street Occupancies –** As a conservative approach to estimating off-street occupancies, WGI used an occupancy range of 40-75% occupied spaces with the highest total occupancy (75%) included during peak periods at the K Street garage. A lower range of parking occupancies 40-65% was used for locations further from downtown.
- **Bohemian Garage Revenue, Occupancy, & Expense –** Off-street rates of $2.50/hour were used in revenues for this location. Parking occupancies were modeled from 1-15% spaces occupied to emulate current garage financial performance. Annual rent was calculated at $72,000 through Year 4/2029, changing to $144,000/year in Year 5/2030. CAM expense was calculated at $21,000/year increasing by 5% each year.
- **Citation Revenue –** Citation revenues are based on the issuance of more than $15,000 citations annually. An average citation fee of $40 was used. Citation revenue assumes 71% of citation issued are paid voluntarily, and 40% of outstanding citations are collected.
- **Permit Revenue –** Monthly permit rates were assumed at $55/month, Employee permit rates were assumed at $40/month, these permits are assumed to used in off-street locations. Annual permit rates for residential permit programs were calculated at $50/year, with 100 permits/year assumed sold in the Downtown area, and almost 800 permits/year sold in the surrounding areas to downtown.

- **Parking System Operating Expenses –** This data was provided by City staff. It includes $223,000 in salaries with $86,000 in benefits, along with $315,000 in itemized expenses that include things such as: uniforms, office supplies, vehicle maintenance, and operating supplies, among others.
- **Downtown Garage Construction Costs –** As requested by the City all construction costs for the proposed "K" St. parking garage were removed from the financial model. The City plans on constructing the proposed garage with as many spaces as possible (assumed to be 268) for a Guaranteed Maximum Price (GMP) of $8.5 million with the financing arrangements subject to further discussions.
- **Downtown Garage Revenues –** These revenues were based on the presumed 268-space parking garage concept provided in this study. Rates of $2.50/hour and occupancy patterns from other off-street locations were used in calculating revenues.
- **Downtown Garage Projected Maintenance –** A rate of $400/space was used in calculating possible annual maintenance expenses for the new 268-space downtown parking garage. This rate was based on our experience of the expenses included in operating a garage asset similar to the one proposed.
- **Summary –** The summary details the anticipated Net Revenue/Return the introduction of fees and a garage downtown may generate. Total returns were provided considering parking fee implementation in Downtown both with and without the proposed new garage.