



# River Market District Parking Study

Final Report - December 15, 2021

*Little Rock*  
CONVENTION &  
VISITORS BUREAU



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**Parking Study Project Team**

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- James “Doc” Doolittle, Little Rock Convention & Visitors Bureau
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**Consultant Team**



Many thanks to the numerous community stakeholders who participated in the project process and provided valuable input and feedback for the development of this parking study and its recommendations.



# Introduction & Executive Summary



The River Market District Parking Study was initiated to evaluate parking needs within the district and establish a Parking Improvement Plan that leverages existing assets, evaluates new investments, and provides a framework for parking management and operations in response to current and future changes within the district. The primary catalyst for this evaluation was the impending changes brought forth by the I-30 improvements through the community. The Arkansas Department of Transportation has recently begun a multi-year expansion of I-30 that runs adjacent to the district. As a result of the I-30 construction, approximately 200 free surface parking spaces have been eliminated from the overall public parking system.

The parking study was conducted over a five-month period in 2021 to evaluate these impacts and give the Little Rock Convention and Visitor's Bureau (LRCVB) and the City of Little Rock guidance on parking investment, management and operations, and customer service driven improvements. The project included:

- Robust stakeholder involvement within the Little Rock and River Market District community.
- An assessment of parking conditions in the study area now and into the future
- Development of specific strategies around public parking, street parking, operations, management and overall system performance
- Evaluation of parking investments and recommendations for new parking assets

## Project Process

The project was completed as a phased approach that included the following elements:

### 1 Community Orientation

The planning process was initiated with a series of meetings and workshops intended to immerse the project team in the key opportunities and challenges within the River Market District. This orientation included the first stakeholder interactions in the form of focus groups and targeted discussions, as well as an in-depth Strengths, Weaknesses, Opportunities, and Threats (SWOT) assessment with the core project team.

### 2 Defining the Issues

The second phase of the process included a more thorough evaluation of parking conditions in the district, including the review of current and historic parking data, market analysis of the parking system, and evaluation of parking demand conditions. The phase also included a review of existing municipal codes and ordinances that define parking management conditions. Stakeholder involvement in this phase included an online survey with responses from throughout the state of Arkansas and focus groups that included interactive exercises intended to define area issues and opportunities.

### 3 Defining the Future

The third phase of the process included a review of conditions that could influence the success of the River Market District parking system now and into the immediate future. The project team used this phase to define specific strategies and policies that would support the intended vision of the district. Stakeholder involvement in this phase included continued focus group discussions and the use of prioritization exercises to identify preferred strategies and areas for investment.

### 4 Parking Improvement Plan

The final phase of the project process included the development of a policy/strategy toolbox and a specific Parking Improvement Plan that identifies investments, operational improvements, and key partnerships that will influence the success of the River Market District parking system.

## Key Issues

Based on the review of current and future conditions and the feedback generated through the various stakeholder outlets, the following key issues were identified for the River Market District:

### Parking

- Available parking isn't in the places that people are looking for it
- Parking technologies could be improved to support a better experience
- More consistency is needed throughout the parking system



### Wayfinding

- The existing signage system is confusing and inconsistent
- Customers don't have the tools to find and pay for parking easier



### Mobility

- The non-automotive experience isn't fully utilized
- Balancing demand throughout the district will require attention to connectivity



## Primary Strategies

Based on the project team's review of needed parking improvements in the River Market District, the following strategies were identified to drive the modernization of parking management in the district. More information can be found in the Policy Toolbox section of this report.

### Parking Capacity & Investment

There isn't a specific need to add parking capacity today based on existing and pre-pandemic parking assessments. Rather, a more efficient use of existing parking combined with management, wayfinding, and customer experience strategies can improve the parking system. A realization of new parking in the area as the I-30 construction is completed, combined with other operational strategies, should be sufficient to support the district's parking needs. Further out, a consideration of a more focused investment strategy moving forward will help the district maintain sufficient parking while focusing growth around economic development opportunities.

The City and LRCVB should modernize parking payment technology (PARCS, mobile pay, meters, LPR) and integrate tools to create a more streamlined management and data-driven policy process.

### Parking Technologies

### Data-Driven Management

The City and LRCVB should introduce data analytics into parking management to ensure that the parking system maintains a sufficient level of operational performance and parking and mobility policies are driven by usage and community need.

### **Modernized Operations**

The City and LRCVB should improve the use of policy and practical management tools to meet the needs of the community, including transformations to enforcement practices and extension of parking management hours to meet the actual needs of the district.

The City and LRCVB should implement a demand-based pricing scheme that appropriately prices parking to balance demands and manage customer behavior, with prices set higher in more proximate locations to the market and park.

### **Parking Pricing**

### **Branding, Marketing, & Wayfinding**

The City and LRCVB should develop and implement a consistent parking brand that is used throughout the parking system to help improve visibility of and navigation to public parking assets.

The City and LRCVB should use the data-driven and pricing tools to create a prioritized parking area around the market and in the areas of highest demands.

### **Parking Space Prioritization**

### **Employee Parking Programs**

The LRCVB should create special programs and incentives to move employee parking into off-street facilities outside of the prioritized parking areas.

LRCVB and the City should use data-driven decision making to support a more balanced and equitable use of curb space for all modes of transportation, including considerations for closure and transformation of President Clinton Avenue.

### **Curbside Management**

### **Parking Management**

LRCVB and the City should establish a collaborative parking management model that includes the Little Rock Convention and Visitors Bureau (LRCVB), the City of Little Rock, public and private parking operators, and Rock Region Metro.

LRCVB, the City, and Rock Region Metro should make the best use of available non-automotive modes in the district to support balanced access, reduce congestion, and create a more sustainable transportation system in the River Market District and the greater Downtown Little Rock area.

### **Leveraging Mobility**





P

17107

ParkMobile  
Pay by App  
Parking

BOOK NOW

STOP

ALL WAY

Parking @  
Library  
Square  
\$2/hour

RIVER MARKET



THEATER

THE GREAT ESCAPE

Cache  
RESTAURANT  
VALET DROP  
Back Around the Corner  
River Market Avenue

Marriott

# Defining the Issues



Prior to the development of the specific Parking Improvement Plan for the River Market District, the project team conducted an evaluation of parking conditions in the district to establish the actual need for parking investments moving forward. This phase of the project included a combination of data analytics, stakeholder interactions, and research into the current parking management and operations within the district. This phase included the following elements:

### Community Orientation

An initial immersion into the characteristics of the district and the issues driving the need for enhanced parking management and investment. This effort included stakeholder outreach, a SWOT analysis of the parking and transportation system, and identification of key themes driving the success of the project and parking system.

### Municipal Code Review

A thorough review of the Little Rock Code of Ordinances and recommendations intended to modernize the code and enable the recommendations of this study to be implemented within the framework of the community code.

### Parking System Analytics

A review of the existing parking system using a combination of current and historic data, conversations with parking management entities in the community, and comparison with peer communities to help establish market-driven best management practices for considerations.

### Parking Demand Analysis

An evaluation of parking demand within the district, including pre-pandemic, current, and future based on information provided by the LRCVB, the City, and River Market District stakeholders.

### Stakeholder Outreach

A combination of outreach efforts, including an online survey, focus group discussions, interactive issues exercises, and prioritization exercises to define the preferred improvement strategy for the district.

## Community Orientation

The project team began the River Market District Parking Study by conducting a multi-day community orientation workshop. The workshop included focus group interactions, a walking evaluation of the parking system, and a strengths, weaknesses, opportunities, and threats (SWOT) analysis with the core project team. A summary of the key themes and takeaways and SWOT analysis results are provided on the next few pages.





## Key Themes and Takeaways



### Parking Capacity

Differing opinions amongst stakeholders hold that there is either ample parking or a lack of parking within the district. The reality is likely a combination of both perceptions, with parking locations, wayfinding, and walkability driving poor perceptions.

### Parking Technology

There are a mixture of technologies applied between LRCVB, the City, and private parking operators. This disparity creates confusion amongst patrons and does not provide a seamless data source for making decisions. New technologies need to interface and provide a simple and seamless user experience.

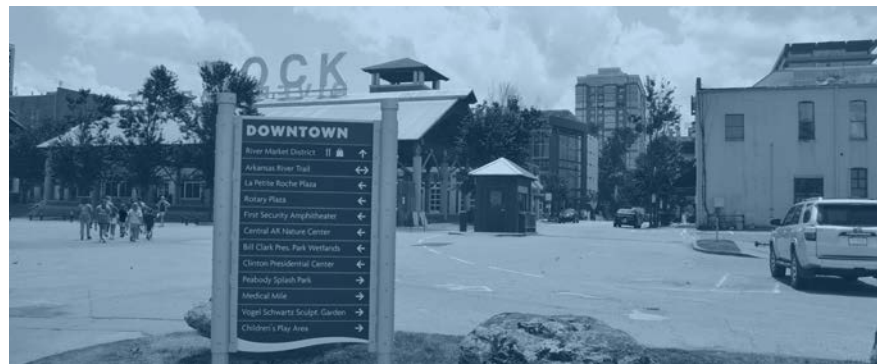


### Transit & Mobility

The study area is served by a combination of streetcar and micro-mobility options that should provide better connections for visitors and employees. However, most of these tools are viewed as attractions and not utilized to support alternate commute options. Solutions will need to integrate multiple modes to support a more balanced approach to accessing the district and balancing demand.

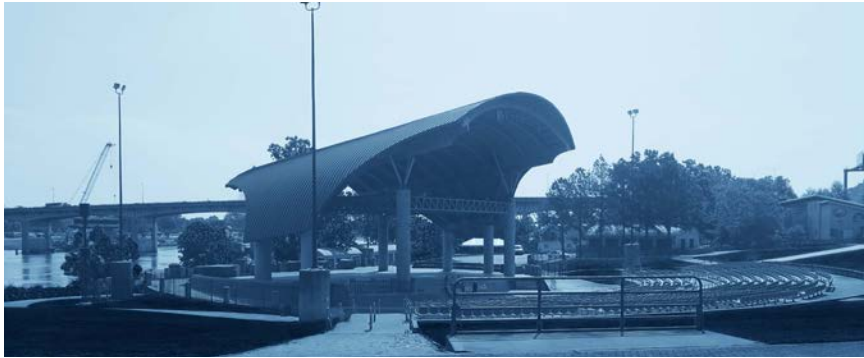
### Wayfinding & Signage

There are no singular parking wayfinding signs or messaging to help promote public parking options. As a result, available capacity is often overlooked. Focused efforts need to define branded and clear messaging, while minimizing sign clutter in the district.



## Customer Experience

All recommendations should be developed through the lens of maintaining and/or improving a strong customer experience that makes finding parking easy, paying for parking seamless, and moving throughout the district efficient in all modes.



## Special Events

While day-to-day operations are driven by commute and workday demands, there are a large number of events in the district that require strategic planning to help manage surges in parking demand. Using the tools available (wayfinding, transit, mobility, parking capacity, and technology) will be critical to the success of the parking system.

## I-30 Construction

The five-year phased construction project around the I-30 bridge system and interchange will drive the need for flexible short-term solutions that mitigate challenges to connectivity and parking supply. Long-term, the linear park space will provide ample public amenities, but requires careful consideration related to parking and access.



## Data Driven Practices

The implementation of new technology solutions will provide a more reliable stream of data to help inform the success of parking system changes. The primary entities in the area – LRCVB, the City, and private parking operators – will need to collaborate to make policy and practice decisions that support customer service and efficient use of the program.

# SWOT Analysis - On-Street Parking



**The on-street system is the first choice for patrons and the most leveraged**

## Strengths

- Convenient parking that is highly visible for new patrons
- Supports district investments through revenue stream
- New payment options (ParkMobile) have made the parking experience easier
- Supports dynamic curbside needs like loading, pickup/dropoff, and curbside transactions

## Weakness

- Competing curb uses reduce available parking
- Highest priority parking means there is never enough
- Parking meter technology is dated and worn
- Enforcement does not occur during peak conditions
- Disrupts the streetcar operations and creates congestion
- Not the highest and best use, especially along President Clinton Avenue

## Opportunities

- Opportunity to expand on-street parking with street network changes
- The ParkMobile technology can adapt and expand quickly (and at a low cost)
- Some areas (President Clinton Avenue) could be converted to differing curb uses to improve district aesthetics and activity
- Creative curb management strategies can support business and patron needs

## Threats

- Decisions about parking changes need to be coordinated with business needs to reduce impacts
- Lost revenue could reduce investments in off-street parking and within the district
- “Free” parking around the I-30 park will create the same problems the district faces today



# SWOT Analysis - LRCVB Off-Street Parking



**The LRCVB system comprises the majority of public off-street parking in the district**

## Strengths

- Generally available for day-to-day needs
- Very good supply of parking within the district
- Located conveniently close to attractions within the district
- Affordable parking options
- Improved lighting and cleanliness

## Weakness

- Can't expand existing capacity in current locations
- Not highly visible to new visitors
- Signage isn't consistent or prominent
- Perceptions about safety and security issues
- Surface parking near park is not in great shape (or highest and best use)
- Parking technology is older and needs replacement to serve customers

## Opportunities

- Consider different space layouts to create more capacity
- Use Riverfront Park lot to create a more inviting and defined park entrance
- Unified and improved technology can improve the customer experience
- Addition of branded signage and marketing could improve utilization

## Threats

- Costs to improve experience (technology, staffing) could exceed revenues
- Costs to build more parking might not provide sustainable return on investment
- Conditions of facilities could prove detrimental (especially Riverfront Park surface lot)
- Loss of customer base if perceptions of parking difficulty continue
- Expanding parking capacity might not be the most visually appealing outcome

# SWOT Analysis - Private Parking



**Private parking areas are scattered throughout the district and don't provide a consistent experience**

## Strengths

- Available for public parking spillover needs
- Surface lots are more attractive to some visitors than decks
- Multiple locations throughout district

## Weakness

- Doesn't have the most aesthetic appearance in the district
- Confusion about costs and overall enforcement in the private lots/decks
- Payment systems are antiquated in many locations and differ across the private system
- Signage is confusing and does not promote usage
- Some are monthly only and do not serve public need

## Opportunities

- Creating a collaborative parking system (public and private) could create more visible supply within the district
- Unified signage and technology could support better customer experience
- Public-private partnerships could prove more cost effective for the creation of new parking in the area

## Threats

- The conditions of some existing lots could deteriorate and make them less appealing
- Lack of collaboration would create a fractured system

# SWOT Analysis - Transit and Mobility



## Improving transit access and ridership could provide significant parking demand reduction benefits

### Strengths

- Multiple options (streetcar, micro-mobility, bike paths) to serve a dense downtown district
- The River Market District is very walkable and has great pedestrian amenities
- Rock Region Metro is a great partner to LRCVB and the City

### Weakness

- Streetcar route only provides limited access within the district
- Speed of the streetcar limits interest in using as an alternative mode of transportation
- Scooters provide conflicts with cars and pedestrians
- Not widely used for daily commutes or regular customers
- Lack of bike/scooter lanes within the district
- Conflicts with vehicles can cause excessive delays

### Opportunities

- Expanded partnerships with Rock Region Metro could provide more access and mobility options
- Reduced obstacles for streetcar could improve performance and ridership
- New dedicated bike/scooter lanes could promote alternative commute options
- Dedicated bike/scooter parking areas could reduce confusion and clutter within district
- Coordinated curb management strategies could make mobility options more accessible

### Threats

- The costs to expand the streetcar could exceed funding resources
- Limitations to the route, speed, and frequency could limit improved ridership
- There is no guarantee that investments will improve ridership
- The safety and perception of the scooters could limit their effectiveness to replace short trips by car

## Municipal Code Review

The project team performed a thorough evaluation of the Little Rock Code of Ordinances to determine specific changes that were needed to modernize the approach to parking operations and management and support the intended strategies and recommendations of the Parking Improvement Plan. The general intent of the proposed changes is to clean up redundant elements, remove language that defines specific limits, regulations, and prices, and provides a more flexible implementation framework.

By implementing these proposed changes, the City and LRCVB will modernize the code to reflect current and proposed operations, support the needs of the River Market District, and improve the use of technologies and management practices within the district. After acceptance of the recommended changes, the City and LRCVB should prepare staff reports related to code changes, present to the City Board of Directors for approval, and do the necessary public outreach in support of the changes. Specific recommendations are summarized in the table below and referenced throughout the Policy Toolbox.

Section	Description of Change
20-1(3)	Allow Board of Directors to set the penalty for parking in a residential yard
32-36 (b) and (c)	Remove PD delegation for parking enforcement (Sec. 2-114 gives City Manager or City Manager's delegate authority to issue citations)
32-73 (a)	Clarify who can write parking citations and remove provision for requiring registered owners of vehicles with parking citations to appear in court
32-73 (b)	Allow issuing a "drive-away" citation if the vehicle is moved while the officer is writing the parking citation
32-73 (c)	Allow the Department of Public Works to outsource parking citation issuance and/or processing
32-74	Update code regarding unpaid parking citations to reflect current operations
32-301	Allow Board of Directors to set or change penalties for parking violations and escalations for unpaid citations and eliminates requirement for penalty boxes attached to parking meters
32-302	Allow handicapped parking citations to be issued by parking enforcement officers and allows Board of Directors to set the penalty amount and escalations
32-303	Allow Board of Directors to determine the days when restrictions on parking in alleys will be suspended
32-307	Allow electronic permits to be assigned for curb loading/unloading
32-311	Clarify that a vehicle parked in an alley must actively be loading or unloading
32-322	Allow all vehicles (not just automobiles) with delinquent parking citations to be immobilized or removed
32-322 (a) (2)	Allow the Board of Directors to establish the outstanding fine amount for which a vehicle is eligible for immobilization or removal
32-322 (h)	Allow the Board of Directors to establish the cost for immobilization
32-322 (i) and (j)	On immobilization notices, delete specific text and set guidelines for content
32-342 (b) and (c)	Allows Board of Directors to establish the fee for creating a passenger loading zone

Section	Description of Change
32-344	Clarify language and allow loading zones to be used for other purposes outside loading zone hours
32-371 and 32-373	Allow Board of Directors to set the days and hours when parking restrictions are in effect
32-375	Allow Board of Directors to determine the days and hours when parking time limits are in effect and incorporates 32-378 to also allow Traffic Engineer to designate streets with time limits
32-402	Reorder subsections, clarify that parking spaces controlled by single-space meters shall have marked delineation on the street, and remove ability for vehicle to park in two spaces by paying two meters
32-403 (a)	Allow Board of Directors to set the hours of operation for parking meters
32-405 (2)	Allow Board of Directors to determine when time limits apply to parking meter zones and amount to pay
32-405 (3)	Allow City Manager to determine which meters allow time to be extended by additional payment



## Parking System Analytics

The project team evaluated parking conditions in the River Market District through an analysis of inventory, occupancy, and overall parking demands. The evaluation included conducting a market analysis for public and private parking in the study area, evaluating parking occupancy conditions from historic trends, and defining overall trends within the parking system that might influence the need for additional parking capacity and/or enhanced parking management strategies.

It should be noted that physical data was not collected as part of this study. Because of the ongoing impacts of the pandemic, the collection of parking occupancy data in existing public and private facilities would not represent design conditions and could unduly influence the outcomes of this study. In lieu of collecting occupancy data, the project team conducted the following analyses:

- Definition of parking system inventories and types of parking offerings
- Evaluation of market parking conditions, including comparisons of parking rates within public and private facilities in the River Market District. This analysis also included a review of comparable peer communities on-street parking rates and enforcement hours.
- Reviewing existing and historic data from the City of Little Rock and LRCVB, including citation data for the on-street system and activity data for the public parking system. The activity information was used to define the current reduced demands from the pandemic and identify a design day from 2019 to review historic parking occupancies in LRCVB facilities.
- A parking demand analysis that reviewed historic parking occupancy levels, impacts of the loss of parking associated with the I-30 construction project, and future demand considerations within the district.

The following sections describe the outcomes of these analyses.

### Parking System Analysis

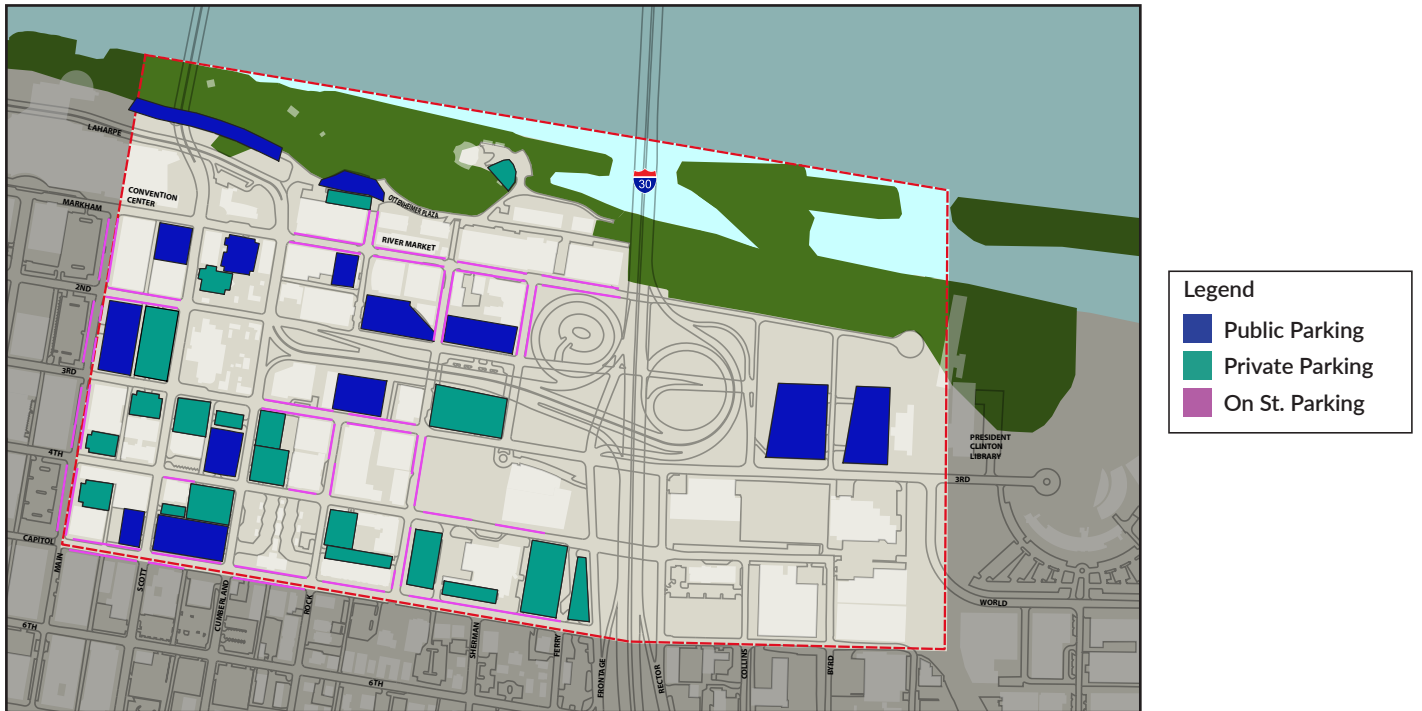
The initial review of the parking system included defining the quantity and types of parking available to the patrons, employees, businesses, and residents of the district. There are four distinct parking offerings within the district. These are defined below and these categories will be used throughout this report when referring to the parking system.

The review of existing spaces showed that the public portion of the parking system is extensive within the River Market District. More importantly, the LRCVB public parking is the largest component of the system and thus one of the major drivers of the success of the parking system. The map on the following page provides a depiction of the parking system and the locations of these various types of parking.



Parking Category	Description	Capacity
<b>On-Street Parking</b>	Inclusive of metered and non-metered street parking. There are multiple types of on-street parking conditions in the study area, including metered parking in the core of the district that is supported by multi-space kiosks; metered parking in fringe portions of the study area that are served by single space coin-operated meters, and unmetered spaces that are either time regulated or unregulated. All metered spaces also include a pay-by-phone overlay payment option. All of these spaces are managed by the City of Little Rock.	372 spaces
<b>LRCVB Off-Street Parking</b>	Includes a combination of parking decks (Convention Center and River Market) and surface lots (Ottenheimer). These facilities are promoted as the public parking system and are managed to support a combination of area visitors and commuter parking. The convention center, River Market, and Riverfront Park all rely on these spaces to meet the public parking needs. The parking lot at the President Clinton library was generally excluded from this evaluation and considered a spillover lot for the River Market District.	1,390 spaces
<b>Other Public Off-Street</b>	Includes other available off-street parking spaces like the CALS library surface lot and parking deck, as well as privately owned off-street spaces that are marketed for both monthly and hourly parking. Two of the larger providers in this category are Best Park and Success Parking Solutions. While these are primarily associated with a specific user group, they are also advertised as public parking through signage and pricing.	980 spaces
<b>Private Off-Street</b>	There are a number of private parking facilities that serve businesses, residential developments, hotels, and private properties. These spaces were not inventoried as part of this study and were not included in any demand calculations past, present, or future.	NA

### Existing Parking Supply



## Market Analysis

The project team also conducted a market analysis of both district-based parking rates and comparable community's on-street parking system characteristics. The primary takeaway within the district is that the LRCVB's control of the majority of public parking spaces also influences the price structure within the district. This influence allows for pricing to remain relatively affordable, supporting the needs of the area businesses and event venues. The table below provides a summary of pricing levels for hourly, daily, and monthly rates within the district, as well as the capacity of each facility.

Facility	Owner/ Operator	Capacity	Hourly Rate	Daily Rate	Monthly Rate
Convention Center	LRCVB	650	\$2.00	\$12.00	\$60.00
River Market District	LRCVB	596	\$2.00	\$12.00	\$60.00
Ottenheimer 1	LRCVB	45		\$5.00	
Ottenheimer 2	LRCVB	100		\$5.00	
Library Garage	CALS	132	\$2.00	\$15.00	\$75.00
Library Lot	CALS	82	\$2.00	\$16.00	
Capital Commerce	Success Parking	146	\$2.00	\$16.00	
Heritage West	Success Parking	200	\$3.00		
100-198 Scott St	Best Park	60	\$2.00	\$12.00	\$83.00
471 Scott St	Best Park	200	\$2.00	\$2.00	\$37.00
270 4th St		88			
Scott & Capitol		70			

In addition to reviewing market conditions within the district, the project team also looked at comparable cities throughout the southeastern United States to determine how the on-street parking rates in the River Market District compare to peer communities. This group of communities includes a variety of sizes, geographies, and levels of advancement in relation to parking management.

The primary takeaways from this regional market analysis are that the on-street parking system within Little Rock (and especially the River Market District) is slightly underpriced and needs to be enforced more to the context of the district, including night and weekend enforcement and pricing structures.



City	On-Street Parking Rate	Hours of Enforcement	Area Variability
Nashville	\$2.25	M-S 8 – 6pm	
Atlanta	\$2	M-S 7 – 10pm	varies by zone
Louisville	\$2	M-S 7 – 6pm	varies by zone
Oklahoma City	\$2	M-F 8 – 6pm	
Charleston	\$2	M-S 8 – 6pm	
Austin	\$2	M-S 8 – 3am	\$5 flat rate after 6pm
Memphis	\$1.50	M-S 8 – 5pm	varies by zone
Knoxville	\$1.50	M-S 8 – 10pm	varies by zone
Lexington	\$1.50	M-F 8 – 5pm	varies by zone
Asheville	\$1.50	M-S 8 – 6pm	
Little Rock	\$0.50 - \$1.50	M-F 8 - 6pm	
Chattanooga	\$1	M-S 8 – 6pm	
Charlotte	\$1	M-F 7 – 6pm	
Birmingham	\$1	M-F 8 – 5pm	



## Parking System Analytics

The project team also conducted a review of parking system data points including on-street citation types, on-street activity (revenue/transactions), public off-street activity (monthly/daily revenues), and historic utilization from the LRCVB system (review of 2019 transaction data from LRCVB PARCS equipment). The following takeaways came from this analysis:

1

### Parking Enforcement

Failure to pay and/or expired meters were the primary violation of the on-street parking system. Between 2019 and August 2021, these types of citations accounted for 60-70% of all citations written by City parking enforcement officers. The second largest violation was failure to properly display pay-and-display receipts, which would only occur within the core of the River Market District, on and around President Clinton Avenue.

2

### Pandemic Influenced Parking Activity (On-Street)

The pandemic reduced parking meter activity by three-quarters of the total activity experienced in previous years. Activity in 2021 is beginning to return, with estimates for end-of-year activity expected to return to 60% of pre-pandemic activity levels. The introduction of ParkMobile has been successful, with more than half of all transactions resulting from use of the app.

3

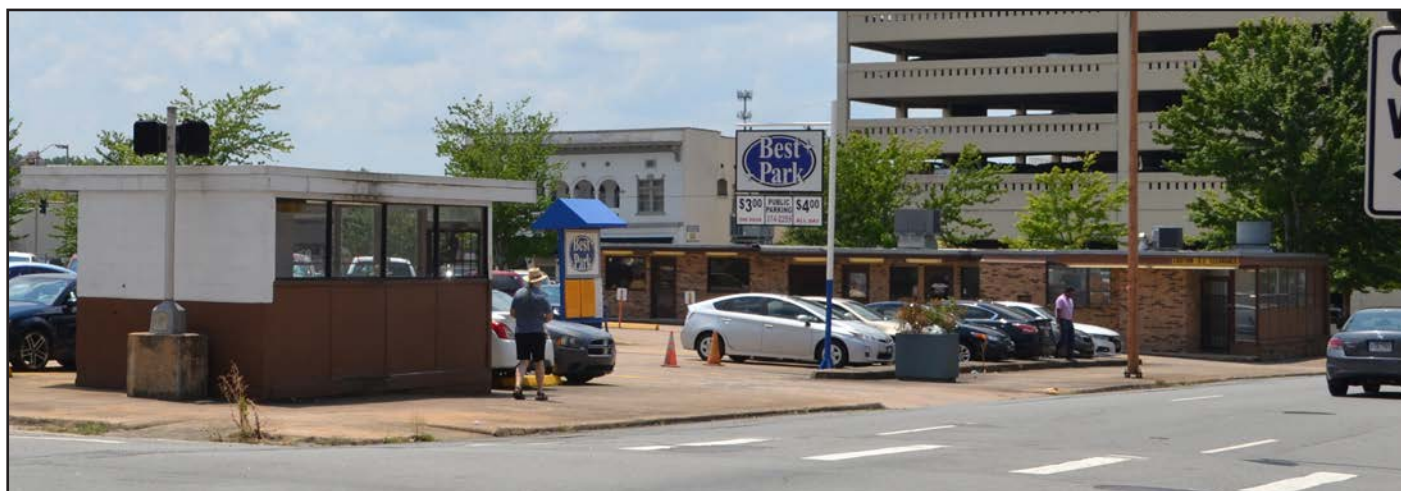
### Pandemic Influenced Parking Activity (Off-Street)

Overall activity levels in the two LRCVB garages within the River Market District were reduced by a considerable amount during the pandemic, and activity levels are still only 50% of pre-pandemic levels. Prior to the pandemic, the garages operated at high occupancy levels from a mixture of district and downtown employees and event conditions. Weekday conditions were near capacity in the Convention Center garage. The River Market garage had some available space, but was approaching capacity. And the Ottenheimer lots were always nearly at capacity – a function of their proximity to the Riverfront Park and lowered parking rates.

During the pandemic, daily parking levels (and revenues) dropped to nearly zero. By late summer 2021, daily parking activity levels had only returned to about one-third of pre-pandemic levels. While monthly parking revenues were not severely impacted immediately due to the pandemic, there have been recent account cancellations that could signal changes in activity profiles due to the introduction of hybrid working conditions (a mixture of remote work and in-office work).

## Parking Demand Analysis

For the final system evaluation, the project team conducted a parking demand analysis to understand how well the parking system was performing today and into the future. The overall analysis reviewed the system analytics related to pre-pandemic parking demands and made assessments of how that demand would be impacted by the loss of parking from the I-30 project. The results were used to define parking investment strategies and inform the development of parking management and operational strategies.



## Primer on Parking Demand

Parking demand analyses are conducted to define how well a parking system or individual parking system is operating. Parking demand is a function of the number of spaces used within the system and is communicated as a percentage of the total system. Parking systems are considered full before they reach 100% utilization. This is due to an industry-standard known as the “effective capacity” of the parking system. Effective capacity is a metric that is used to illustrate that a system needs to have a cushion of spaces to account for temporary losses due to events, weather, construction, or other impacts. It also reflects the overall difficulty for a parking patron to find a space once the system begins to reach this effective capacity.

For the purposes of this study, the project team used the following thresholds to evaluate the parking system:

	<p><b>&lt;50% Occupied - Under Performing</b></p> <p>Any observed utilization under this threshold indicates that there is an issue with the performance of that facility and something needs to be adjusted from a management or operational perspective to entice patrons to park.</p>
	<p><b>50-80% Occupied - Below Capacity</b></p> <p>This threshold indicates a parking facility that has available capacity to support increased demands.</p>
	<p><b>80-90% Occupied - Approaching Capacity</b></p> <p>This threshold is the target for a parking facility or system. Within this threshold there is enough of a cushion to support temporary losses. Additionally, within this threshold, its likely easier for patrons to find available parking within a facility or system.</p>
	<p><b>&gt;90% Occupied - At Capacity</b></p> <p>Once a facility or system exceeds 90% occupied, it becomes more difficult for patrons to find parking within a reasonable distance of their destination. This threshold indicates a need to evaluate and/or implement new investments in parking capacity.</p>

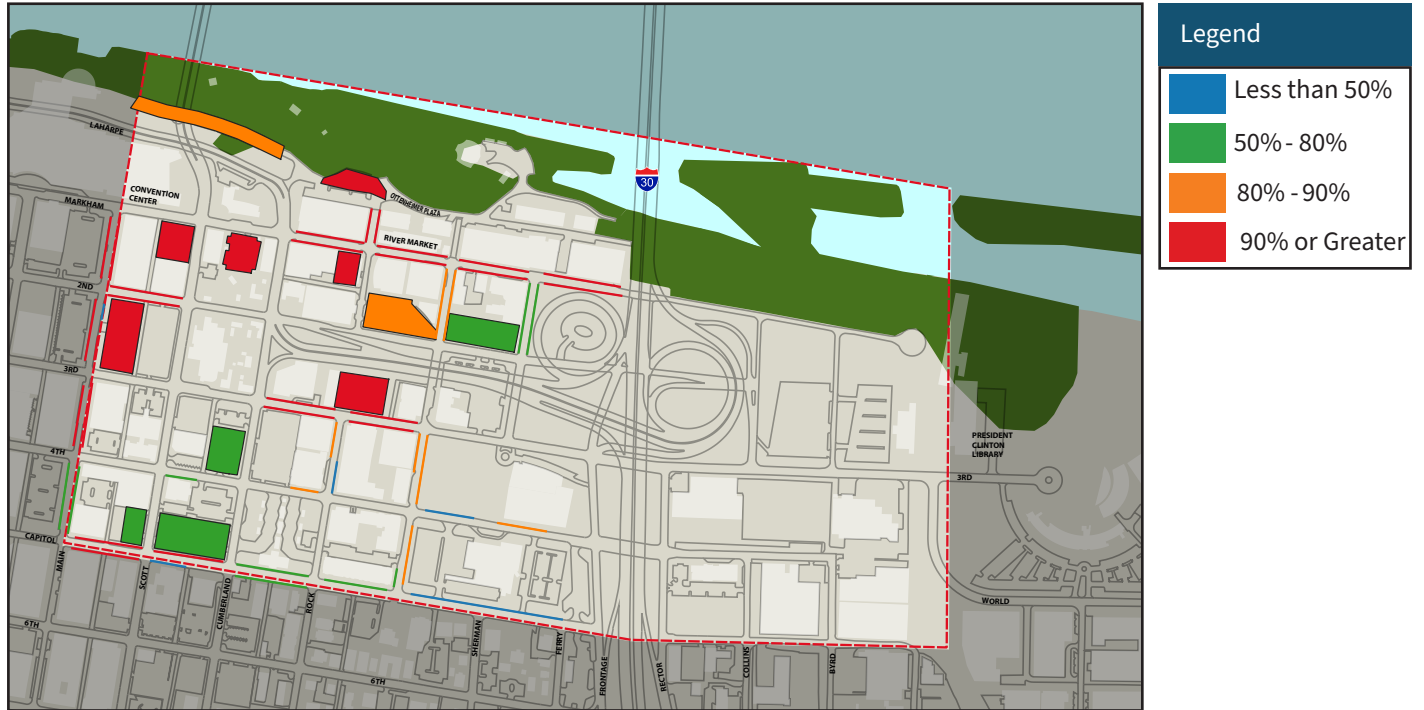
The following findings were obtained from the parking demand analysis.

### Pre-Pandemic

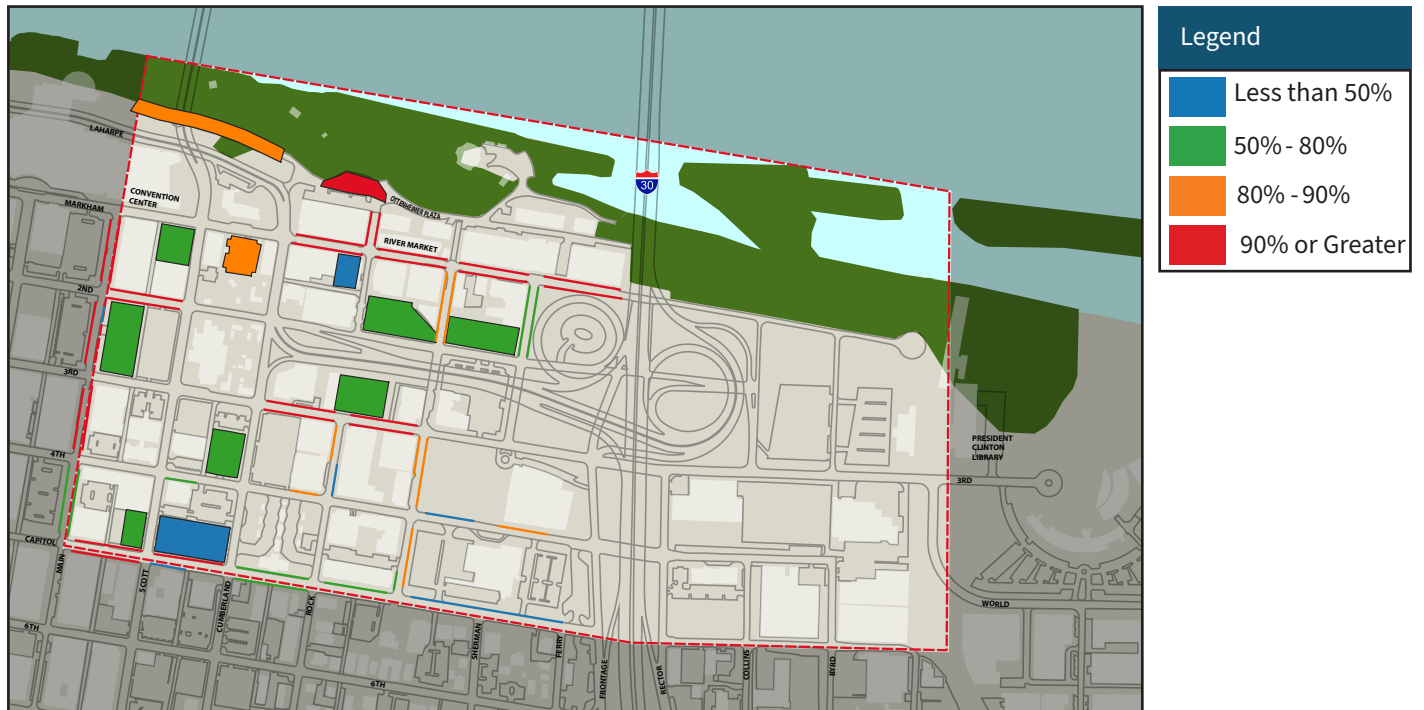
The pre-pandemic parking system was operating at 87% occupancy on normal weekdays. This includes the observed occupancy levels for each component of the system as show in the table to the right. Under these conditions, the system is operating in the ideal threshold. Individual facilities and specific areas (e.g. on-street parking on President Clinton Avenue) operate above the 90% threshold, but as a system there is enough capacity to support the needs of the area. Most of the weekday demand was driven by commercial office employees parking in off-street facilities with monthly permits, a demand component that has been drastically altered by the pandemic and shifts to work-from-home and hybrid models. As described in the previous section, the public parking system has seen demands drop as much as 50-75% during the life of the pandemic. The return of office-based demands will be a key factor in the need to implement and invest in new parking in the short-term.

Parking Type	Weekday Occupancy Level	Weekend Occupancy Level
System Total	87%	72%
On-Street	85%	85%
LRCVB Off-Street	86%	71%
Other Public	89%	65%

## Pre-Pandemic (2019) Weekday Occupancy



## Pre-Pandemic (2019) Weekend Occupancy

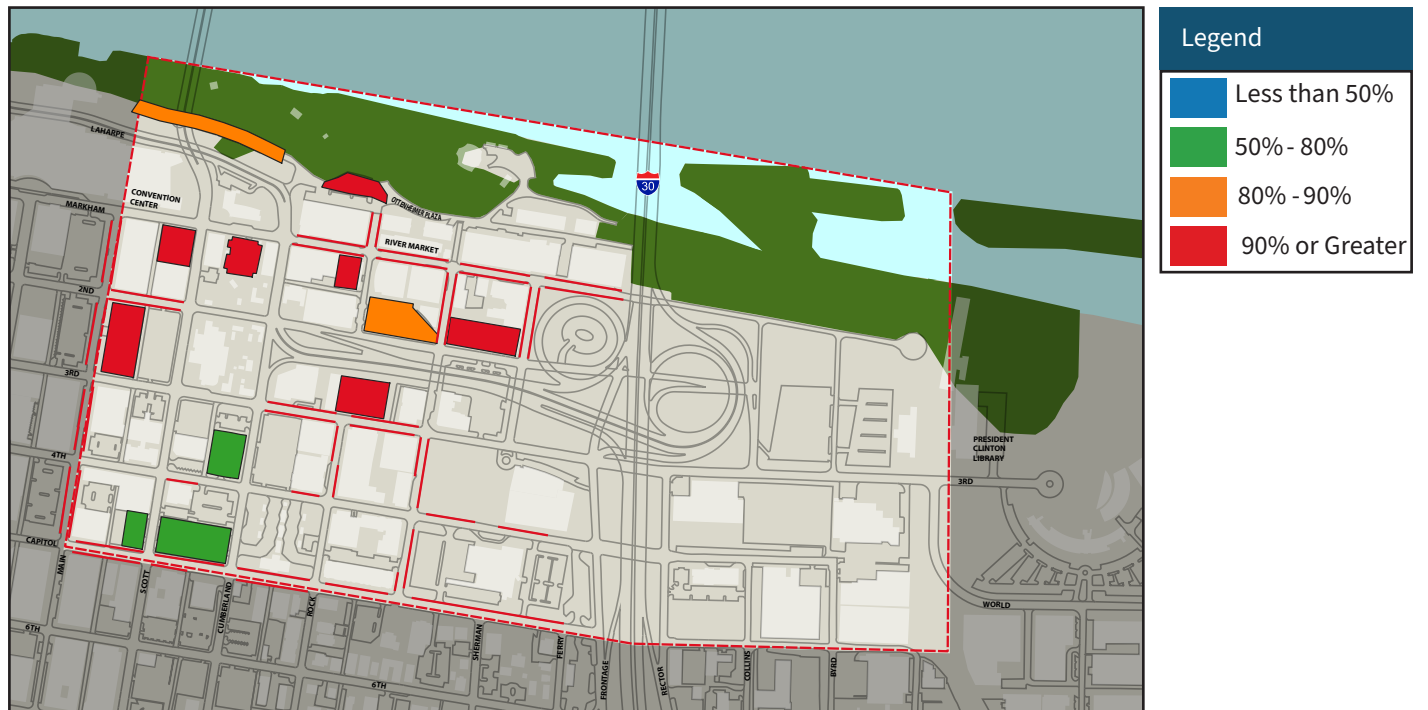


## With I-30 Parking Losses

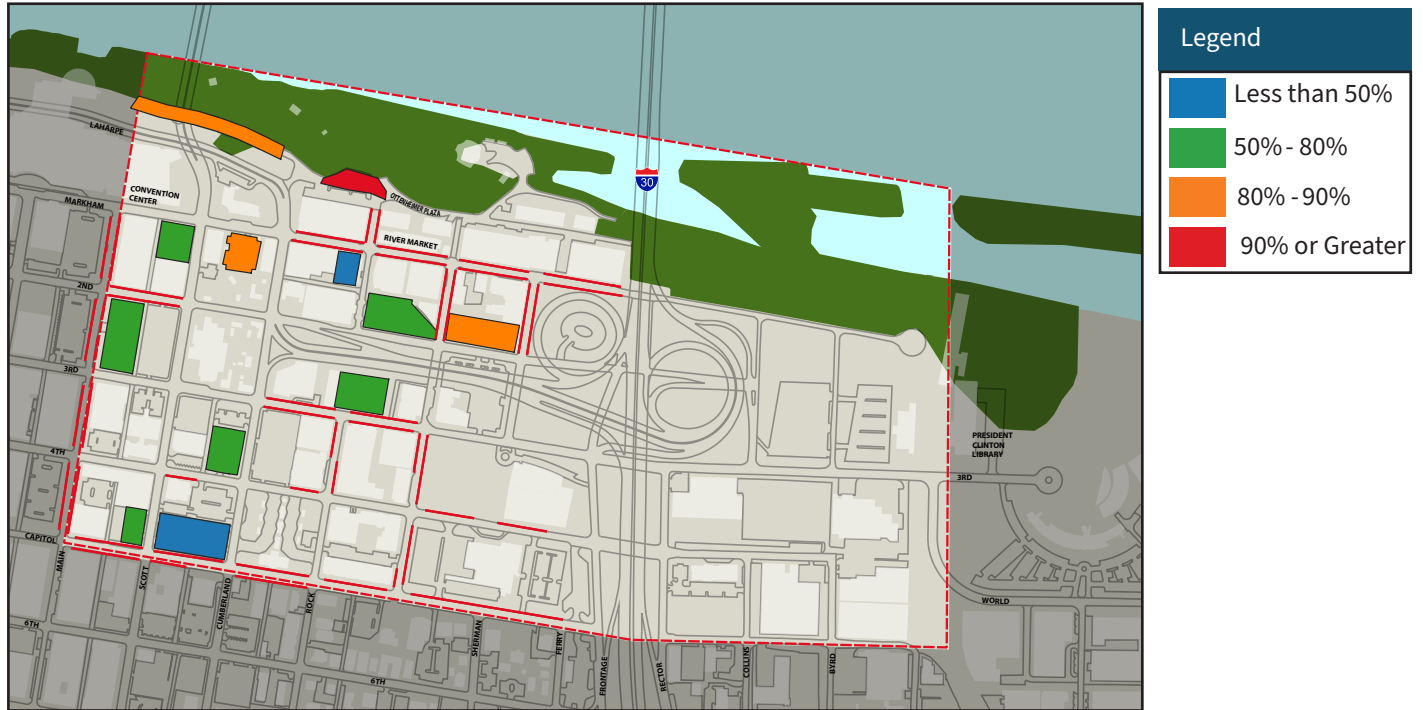
The project team evaluated the impacts to the parking system if it were to reach pre-pandemic levels of demand again after the loss of the I-30 related parking inventory (~200 parking spaces in three parking lots). This modeling essentially reviewed the re-distribution of these demands within the system after the loss of these facilities. This re-distribution included the use of the on-street parking system (preferred location) and public parking spaces with availability. Overall, the on-street system and the River Market garage provided enough capacity to absorb the parking demand from the I-30 lots. Essentially, the parking system would be just above the effective capacity threshold with the loss of these spaces and the full realization of pre-pandemic demand levels. This 3% represents a deficit of approximately **130 spaces** within the parking system. Opportunities to address this potential deficit are discussed in the Policy Toolbox.

Parking Type	Weekday Occupancy Level	Weekend Occupancy Level
System Total	93%	77%
On-Street	100%	100%
LRCVB Off-Street	95%	79%
Other Public	89%	65%

### Pre-Pandemic (2019) Weekday Occupancy with I-30 Losses



## Pre-Pandemic (2019) Weekend Occupancy with I-30 Losses



## Future Considerations

Additional demands (in the form of new development) beyond the current demand levels were discussed with the City of Little Rock planning department. Within the study area boundary there aren't any planned or committed development projects within a reasonable planning horizon. Beyond the timeframe of the I-30 completion (2024/2025) there is the potential for redevelopment opportunities east of the I-30 bridge. There are also likely opportunity sites in the southern portion of the River Market District. Because none of these are defined today, they were not evaluated as part of the demand analysis. Should any of these sites come to fruition, LRCVB and the City of Little Rock should evaluate opportunities for shared parking and the potential for creation of public parking through public private partnerships (as defined in the Parking Investment portion of the Policy Toolbox).

# Stakeholder Outreach

The River Market District Parking Study included a robust stakeholder outreach element that focused on creating meaningful interactions with district stakeholders and developing perception-based content to drive the development of recommendations for the Parking Improvement Plan.

The stakeholder outreach included the following elements:

- Focus group meetings with River Market District stakeholders including business owners, hospitality industry employees, property owners, private parking operators, and transportation professionals.
- Interactive exercises meant to stimulate discussion around issues, opportunities, and recommendations.
- Prioritization exercises meant to define the preferred implementation and investment strategies for the district.
- An online survey meant to reach both frequent and infrequent visitors to the River Market District.

The results and key findings from this stakeholder involvement are presented on the following pages.

## Takeaway 1: PARKING ISSUES



**54%** Total Thought Wall responses were related to parking

**61%** Priority Thought Wall responses were related to parking

- Majority of responses established a need for more coordinated parking management
- Very few responses in favor of new parking capacity now
- Creation and implementation of context-sensitive and modernized operations and management

## Takeaway 2: WAYFINDING ISSUES



**25%** Total Thought Wall responses were related to wayfinding

**30%** Priority Thought Wall responses were related to wayfinding

- Majority of responses established a need for clear, consistent, and simple signage
- Improvements to technology options for wayfinding and information sharing

## Takeaway 3: MOBILITY ISSUES



**21%** Total Thought Wall responses were related to mobility

**9%** Priority Thought Wall responses were related to mobility

- Prioritizing non-automotive modes and options
- Minimizing conflicts to streetcar operations

## Takeaway 4: INVESTMENT PRIORITIZATION

**34%**

**Parking Capacity**

adding new surface parking and on-street parking, investing in employee parking and creating priority zones

**27%**

**Technology Improvements**

investing in new meters and payment technologies as well as informational tools for finding parking

**22%**

**Branding & Wayfinding**

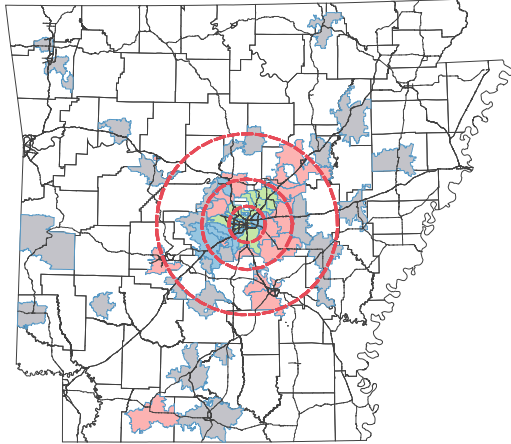
creating a distinguishable brand for the parking system and adding trailblazer signage

**18%**

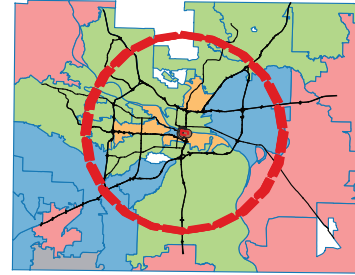
**Curb Management**

adapting the curbside environment to promote alternative transportation and a more active environment

## Stakeholder Outreach - Online Survey Responses



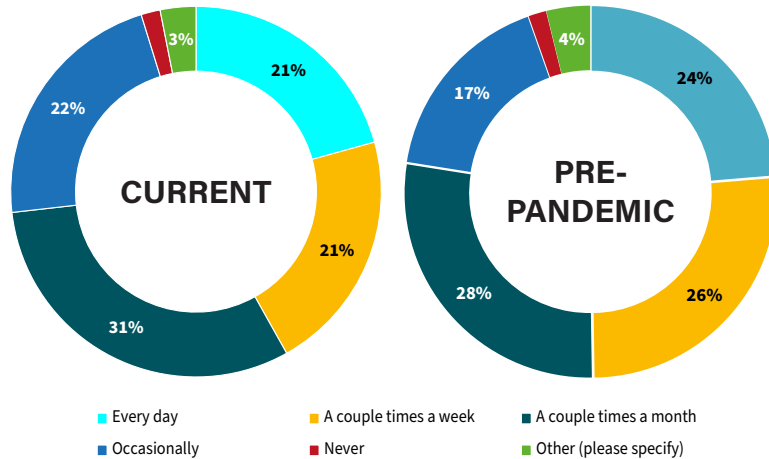
- 84 identified as in the RMD
- 631 responses from within 10 miles of the RMD
- 78 responses from within 10-25 miles of the RMD
- 18 responses from within 25-50 miles of the RMD
- 25 responses from outside of 50 miles of the RMD



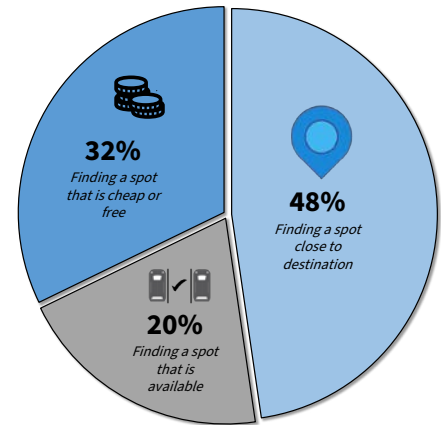
- Responses**
- 1
  - 2 - 5
  - 6 - 10
  - 11 - 50
  - > 50

**834 Survey Responses**

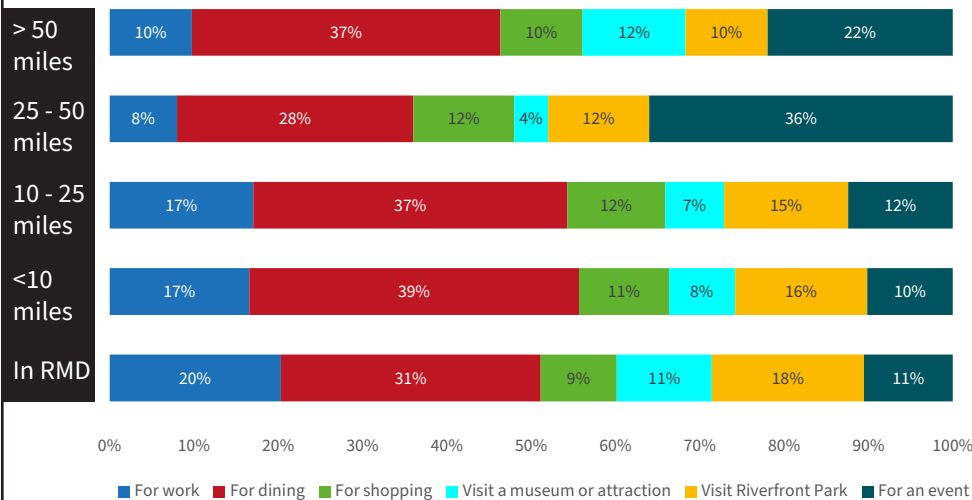
### How Often Do You Visit the River Market District



### Most Important Parking Factor



### What Was the Purpose of Your Most Recent Visit?



### Other Responses



**40% exercise**

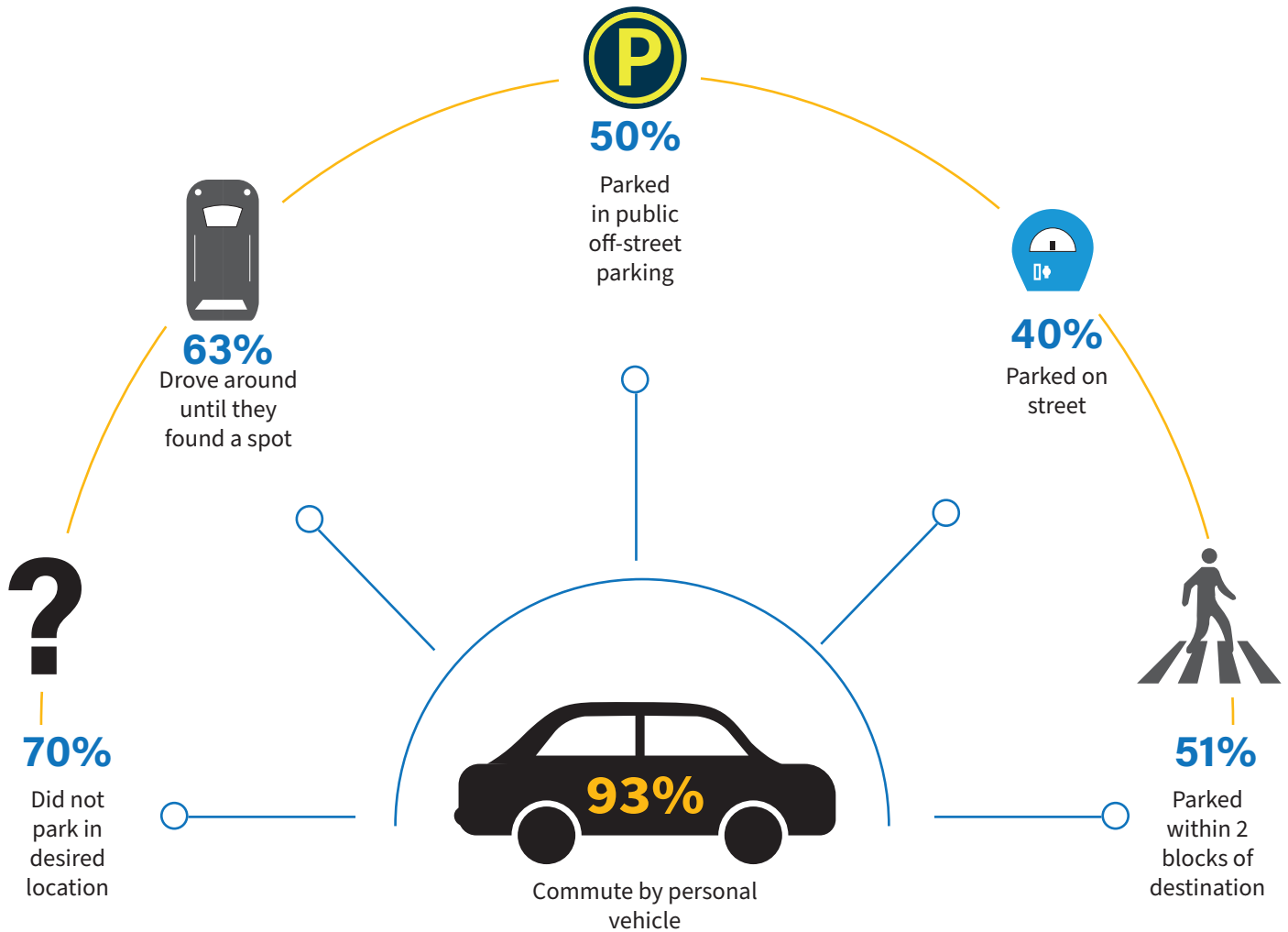
**20% farmer's market**

**15% events, friends, drinks**



## Typical Parking Patron Characteristics

The project team used the online survey to define specific characteristics about typical parking patrons within the River Market District. The graphic below provides a summary of those responses.



## Online Survey - Key Takeaways

### District Visitors

The pandemic has only slightly changed the way people visit the River Market District. The most significant change is for the frequency of commute trips, with more District and Downtown Little Rock employees working from home. This trend could very well influence the need for parking and the type of parking management needed moving forward.

### Parking Preference

Most patrons indicated that they drive to the River Market District and then begin to find a place to park. Most often, the patron is looking for an on-street parking spot as close to their destination as possible. Those patrons that indicated that they were frequent visitors also indicated a deeper knowledge of the parking system and where to park.

### Decision Factors

The majority of patrons indicated that the deciding factor on where to park was proximity to their final destination. This was followed closely by the cost of parking and the availability of parking. This is an indication that providing more prioritized parking closer to destinations would meet the needs of the typical River Market District visitor.



*LITTLE* →

# Policy Toolbox



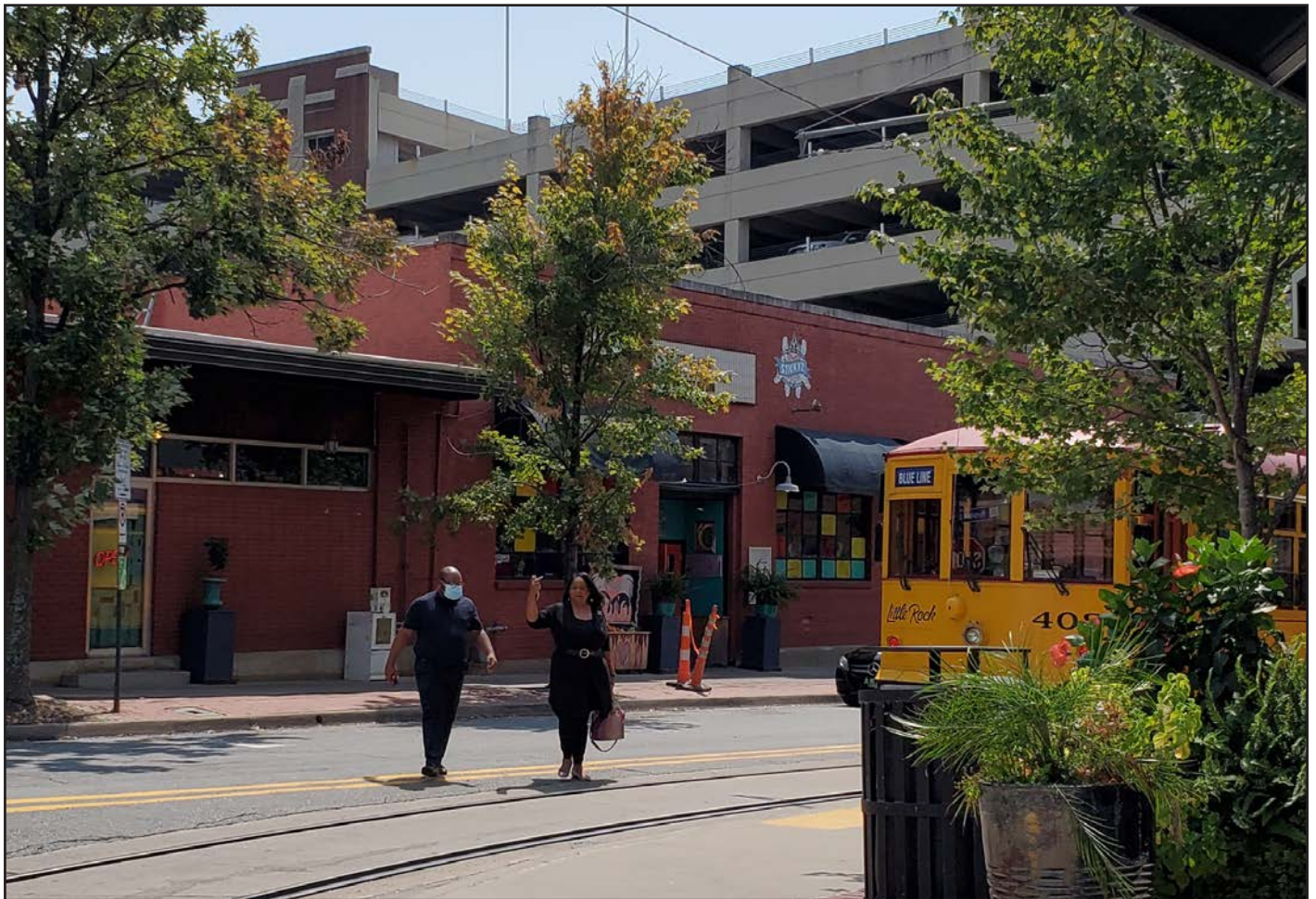


The River Market District parking system is extremely varied from both a policy perspective and an overall usage perspective. The spaces closest to the park and market are typically highly utilized. As you move further away from these destinations, the parking system has lower visibility and utilization. While the ultimate goal of this study was to evaluate parking capacity needs and investments, there is also a need to take a deeper look at modernized policies and practices. Leveraging policy and programming strategies to address parking and mobility challenges needs to be a core tenet of how the River Market District parking system is managed moving forward. There are a range of policy-based strategies to consider throughout the district. The following sections provides a summary of these strategies and recommendations.

This toolbox contains various strategic policies for consideration. Each topic area is presented with sub topics for consideration, listed below:

- Benefits - the optimal outcomes the district should achieve from the implementation of the strategy
- Challenges - unintended consequences of implementation to monitor
- Required Code Changes - code changes to consider
- Supporting Strategies - parallel strategies that will improve the performance of or benefit from the implementation of this strategy
- Performance Metrics - data points that will help to define and manage the success of these strategies
- Key Partners - agencies or organizations within the community that should be engaged in the design and implementation of these strategies

Each policy includes a narrative that describes the implementation and intent of the strategy. These strategies are further defined by phase, potential costs, and implementation characteristics in the Parking Improvement Plan.





# Parking Capacity Improvements and Investment Strategy

In the immediate short-term, there is not a need to identify and invest in new parking capacity within the River Market District. The current recommendation is to better utilize existing parking resources and find more efficiencies throughout the parking system through more collaborative management of all parking assets. The City and LRCVB should consider adding minimal parking resources over the next few years as certain milestones are reached, including the completion of the I-30 reconstruction, the construction of a potential new parking garage at 2nd Street and Louisiana Street, and the relocation of existing parking arrangements. In the long-term, the management entity should consider a more focused parking investment strategy that combines economic development, a balanced approach to access and mobility, and creation of district-driven strategies that promote the customer experience.

## Benefits

- More balanced parking system
- More balanced access into the RMD
- Better utilization of financial resources to improve the customer experience
- Better economic development potential for RMD

## Challenges

- Short-term frustrations as parking system is re-balanced
- Changes to short-term parking plans as area develops
- Loss of surface parking capacity to development

## Required Code Changes

- None

## Performance Metrics

- Parking occupancy
- Traffic volumes

## Key Partners

- City/LRCVB
- Private parking operators
- Rock Region Metro

The central purpose of this study effort was to define whether the parking capacity available today in the River Market District is adequate to support the needs of the existing uses within the district. This question was largely driven by the loss of parking underneath the I-30 bridges that was lost both to the short-term construction of the new I-30 bridge and ramp configuration and the long-term introduction of the new park space that will be housed in the area where the old ramp system met the surface street network in the district.

Before answering the question of how much parking is needed in the area, the project team began the process by evaluating how much parking existed today and how that parking was being used under historic and current conditions. The results of that analysis are documented in the previous section (Defining the Issues) and clearly define that there is a large supply of public parking available within the district today.

While that supply was highly utilized in the vicinity of the River Market District in 2019, there were indications that supply was still available but not apparent to the patrons of the River Market District. For example, the River Market garage, which is the most proximate to the primary destinations in the district and along President Clinton Avenue, was typically only half to two-thirds full on normal days. Most patrons were simply looking for proximate street parking without a real understanding of available off-street spaces, a fact confirmed by this study's online survey (documented in the Defining the Issues section).

The project team evaluated the need for parking today based on a combination of factors, including:

Based on a review of available data from LRCVB, the City of Little Rock, private parking operators, and a review of aerial photography to define the pre-pandemic levels of parking demand. Results are described in the Defining the Issues section of this report.

## Historic 2019 Demand

Based on anecdotal observations in public parking facilities during the on-site project visitations and from discussions with area stakeholders. These results reflect lessened demands due to work from home conditions and reduced social activity during the pandemic.

## Current Activity Levels

Based on reductions in parking supply related to the re-construction of the I-30 bridges and permanent loss of parking with the construction of the new I-30 park. Demands from 2019 were re-evaluated based on these shifts.

## I-30 Reductions



The following sections describe the varying stages of parking needs based on this evaluation.

## Stage 1 - Parking Today

The results of the parking demand evaluation concluded that there isn't a need for new parking today because of the depressed levels of commuter demand which have reduced the overall parking activity in the public parking system. Most of the LRCVB off-street public parking facilities are underutilized today, experiencing reductions in demand of approximately 50% from pre-pandemic levels. The exception to this is the Ottenheimer surface lots, because of their proximity to destinations and relatively affordable pricing (\$5 per day as opposed to hourly rates in other garages and surface lots).

The LRCVB and City should monitor this activity over the next six to twelve months to evaluate when pre-pandemic levels of activity return, including:

- **Daily parking activity for permit holders**, including frequency of activity. In some cases, office employees may be returning to a hybrid work schedule with only a few days per week physically in the office. This new pattern could change the overall activity patterns in the public parking system.
- **Parking permit purchases**, including frequency of new lease purchases and current lease cancellations. If the trends skew towards new permits being purchased there may be a need to move into the next stage of parking investment/management. If the trends include continued cancellations, there is even less need to consider parking space investments.
- **Parking occupancy (on-street and off-street)**, including transaction data for both. If trends begin to show drastic changes over today's activity levels, LRCVB and the City may need to move to the next stage.

The introduction of new technologies to manage payments for both the on-street and off-street systems (outlined in the Technology section of this toolbox) should provide a more functional data set for the LRCVB and City to make these evaluations over time.

## Weekday Parking Demand (2019 Pre-COVID)





## Stage 2 – Short-Term Parking Needs

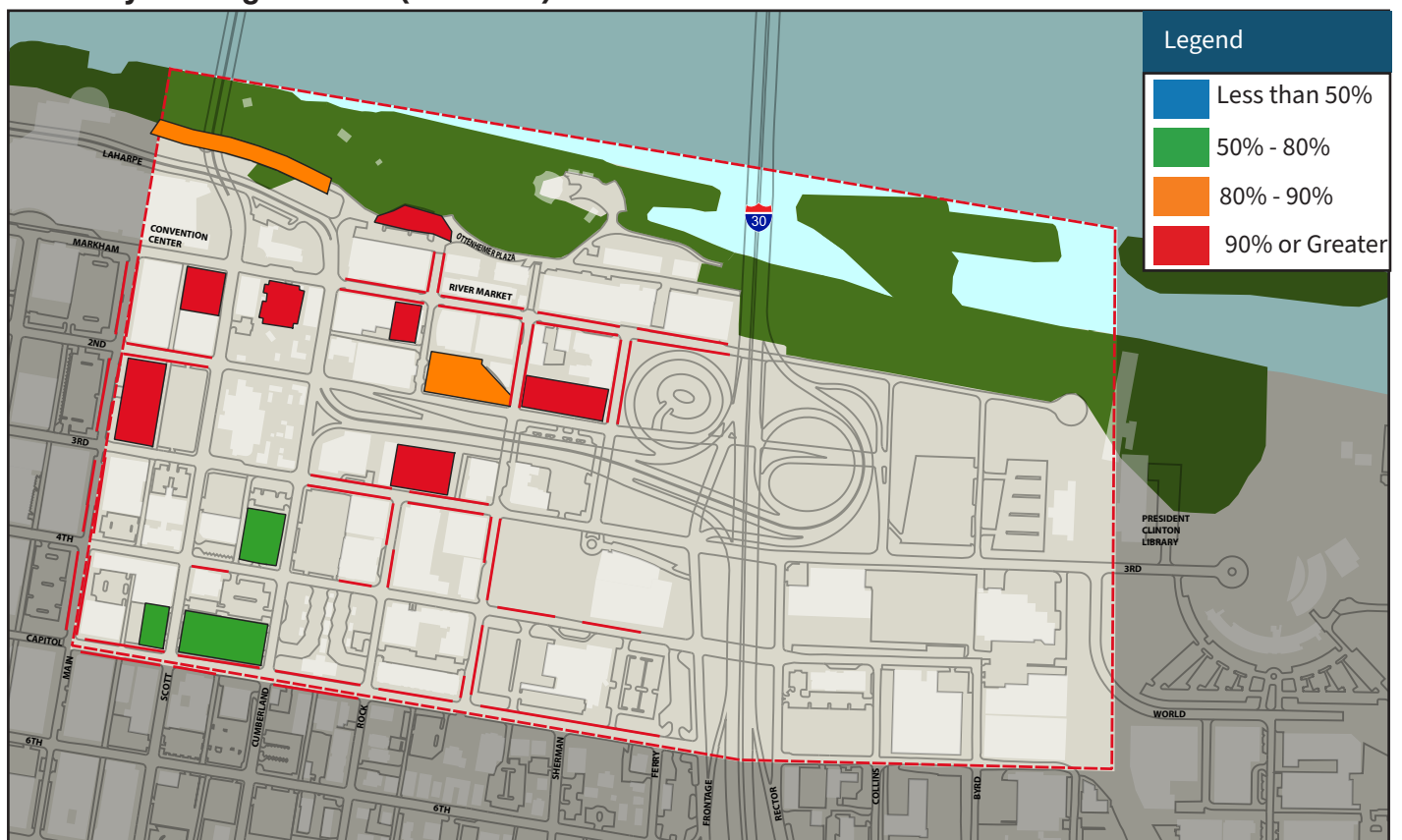
While the evaluation indicated that there wasn't a need for additional parking today, if parking activity levels begin to return to pre-pandemic levels, there could be a need to identify parking investments to support the needs of the district. The project team evaluated what the current parking system (including the removal of the I-30 surface lots) would look like with pre-pandemic levels of parking demand (full commuter parking needs and re-distribution of the demand from the I-30 lots). The results indicate that:

1. The on-street parking system would be effectively full, including both the paid spaces near the market and the unpaid spaces in the south end of the district. Given the proclivity for cheap/free parking and desire for street parking indicated in the survey, it's only natural that these spaces would fill first.
2. The remaining demand would likely be re-distributed to the closest available public parking facility, which in this case is the River Market garage, which consistently had available parking supply before the pandemic.

The results of this redistribution would push the public parking system to approximately 93% occupied, with the on-street system at 100%, the LRCVB off-street at 95%, and the other public parking at 89% (including library parking and public parking operated by private parking operators). While there would still be a few hundred public parking spaces in the system, they would mostly be located in the southwestern portion of the study area and would not effectively serve the needs near the River Market and the park. It should be noted that the President Clinton Library spaces were not included in the analysis due to walking distance thresholds defined in the online survey. However, once the I-30 park is opened following construction, those spaces would no longer be considered outside of an acceptable walking threshold and would provide an additional 225 spaces for free public use.

Additionally, as defined in the Defining the Issues section, parking systems operating above 90% occupancy are effectively full and susceptible to small fluctuations in space availability or events. With this threshold in mind, it's likely that there would be a need for additional parking within the system. To reach an acceptable system-wide level, there would be a need for approximately 130 additional spaces in the public parking system.

### Weekday Parking Demand (Post I-30)



With that 130 space need in mind, there are a few ways that these additional spaces could be realized in the future, including:



Option A

### 2nd Street On-Street Parking

Creation of new street parking on both sides of the re-configured 2nd Street, adjacent to the new I-30 ramp park. Parking would be marked in the outside travel lanes and would most likely need to be restricted during peak commute times, at least in the short-term after the completion of the roadway project.

- **Timeline:** Post I-30 completion (2024)
- **Potential Capacity:** 130 - 140 spaces
- **Potential Cost:** Minimal (technology, signage, and street paint)



Option B

### I-30 Bridge Parking

Creation of surface parking (either temporary or permanent) underneath the new I-30 bridge between 2nd Street and President Clinton Avenue. Parking would most likely need to be designated as free parking. This option could conflict with development plans for the I-30 park.

- **Timeline:** Post I-30 completion (2024)
- **Potential Capacity:** 130 - 150 spaces
- **Potential Cost:** \$500,000 - \$600,000 (associated with resurfacing and landscaping)



Option C

### Re-Purpose Marriott Valet Lot

After the completion of the proposed new parking garage at Louisiana and 2nd, the Marriott valet operations could be relocated to the new garage, freeing up spaces in the surface lot at 2nd and Scott to be used for district parking needs.

- **Timeline:** 2023 - 2024
- **Potential Capacity:** 150 spaces
- **Potential Cost:** Minimal (technology and signage improvements)

## Parking Capacity Improvement Options



Any combination of these potential parking additions would provide sufficient parking for the district. Realizing all of the strategies would provide not only adequate parking, but also a sufficient cushion to absorb small levels of growth in visitations and activity. Realizing all three strategies would also provide a better opportunity to prioritize certain components of the parking system and support varied needs of differing users.

For example, creating new surface parking on either end of the district (the proposed I-30 bridge lot and the repurposing of the Marriott valet lot) would allow for creation of employee parking options. And the introduction of paid parking along 2nd Street would assist in the prioritization of parking in the immediate vicinity of the core areas of the River Market District. Both of these strategies are explored in greater detail in subsequent sections of this toolbox.

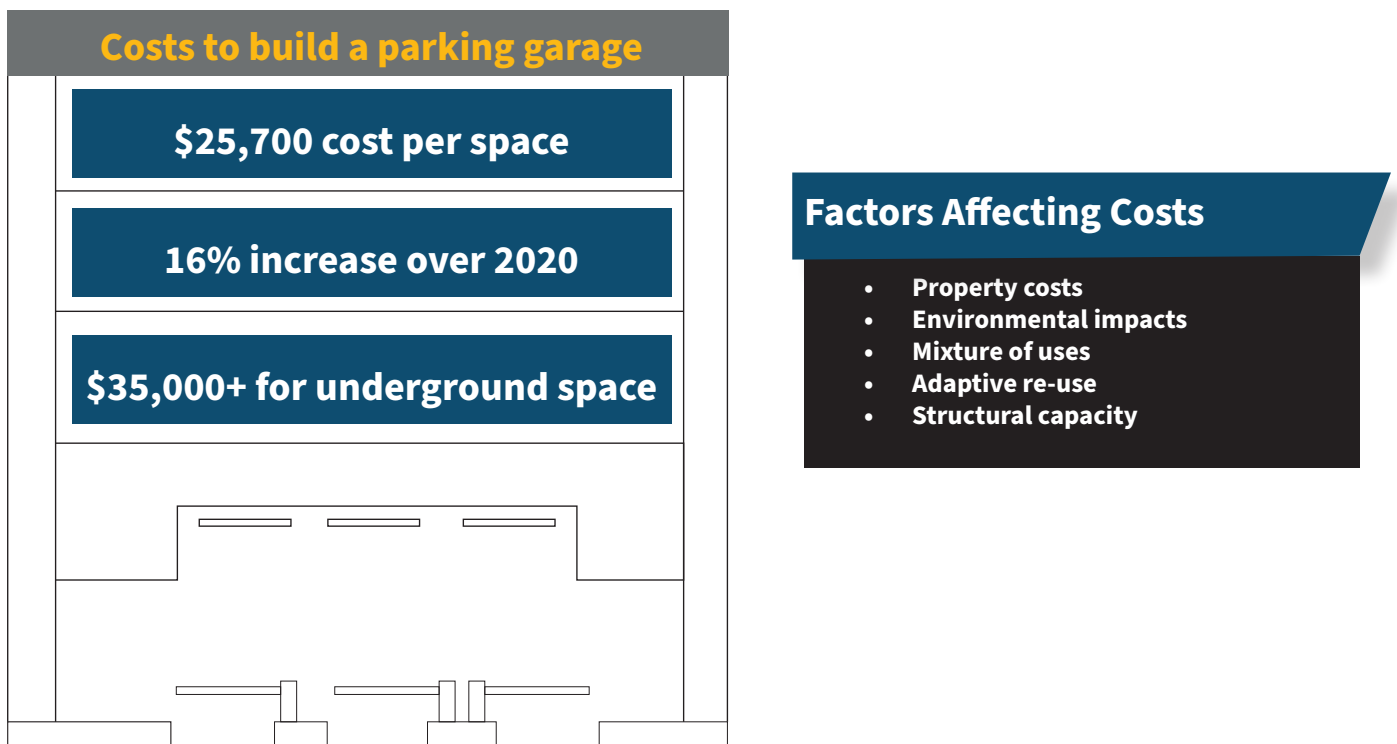
Many of the supporting recommendations within this toolbox are designed to help support a more balanced parking system and better education and understanding of the available parking within the system. Branding/Wayfinding, Technology, and Policy implementations will likely be more effective at solving short-term parking challenges than the investment in new parking structures. Financially, these investments are also significantly less than the cost to construct structured parking.

### Stage 3 – Long Term Parking Considerations

While the majority of this toolbox focuses on more efficient use of the existing system, enhanced management to promote better access, and collective ways to implement mobility and parking solutions, the City and LRCVB may need to implement new parking investments in the community at some point. This need may be driven by demand issues, economic development goals, or opportunities for collaboration with the private sector.

Whatever the reason, it is imperative that the City and LRCVB make good decisions related to the investment in new off-street parking spaces—especially those that are located in off-street parking structures. Based on recently released research related to the construction of parking facilities<sup>1</sup>, the national average cost to construct a parking garage increased approximately 16% over 2020 costs, with an average of \$25,700 per above ground parking space. That price can double for below-grade parking spaces or for adaptive re-use considerations. This average price does not account for increases due to topography or environmental issues. A miscalculation on investment strategy can have tremendous financial impacts to the City and LRCVB.

The following sections serve as a guide for evaluating the feasibility and potential of structured parking investments:



<sup>1</sup> WGI - Parking Structure Cost Outlook for 2021

## Factors Impacting Investment Strategy

The first step in evaluating potential parking investments is to define the factors that contribute to the success of building new parking capacity. These factors could include:

- 1. Location.** The parking facility should be within an ideal proximity of high-intensity destinations that require parking. While a parking facility may be located to serve the development around it, it should also be able to provide demand mitigation for other community destinations.
- 2. Ability to mitigate demands.** The parking facility should be designed and managed to support community parking demands, rather than simply supporting the development associated with its construction.
- 3. Ability to serve multiple users.** The parking facility should be managed to support the peak demands of multiple user types (e.g. commuters and visitors during the day, and those going to dining and entertainment venues in the evening and on weekends), preferably over multiple demand periods. Ideal parking garages operate 24/7, generating revenue and mitigating demand issues throughout the entire day.
- 4. Revenue generating potential.** The parking facility should be developed and managed to generate revenues in excess of operating costs, at least after several years of operation.
- 5. Ability to leverage community and economic growth.** New parking facilities should serve more than a single user type, such that their introduction into the community creates new opportunities for development/redevelopment around them that are supported by centralized shared parking.
- 6. Ability to balance mobility and access away from core.** For those parking facilities that are not located in high-demand areas, they should still serve a purpose by incentivizing fringe area parking with transit access into the core. Alternatively, the parking facility should serve as a “mobility hub” with rideshare, transit, and other mobility elements integrated within the facility.
- 7. Associated costs.** The per-space cost to build the parking structure, as defined by probable engineering estimates of cost, land acquisition costs, and even ongoing maintenance and operational costs.
- 8. Access to Public-Private Partnership.** Some parking facilities are collaborative efforts between the City, LRCVB, and private entities. These arrangements often have the mutual benefit of shared costs, reducing the burden on both parties and creating successful opportunities to promote a more mixed-use of parking facilities.

These are initial thoughts on investment factors. The City and LRCVB should certainly add to this list and further evaluate as it encounters parking investment opportunities.

## Alternatives to Parking Investment

When considering parking investments, the City and LRCVB will also need to determine whether funds are better spent on transportation and mobility improvements than parking capacity. In many cases, the dollars spent on parking capacity can be stretched further and serve a more diverse subset of the population over a greater geographic area. When considering parking investments, the City and LRCVB should also consider the following:

- **Transit investment.** Replacing existing fleet, purchasing smaller vehicles to access more of the community, defining new routing and connectivity, and improving stops and hubs to better support the community
- **Mobility investment.** Implementing enhancements to bicycle, pedestrian, and shared mobility systems to help support better movement around the community without relying on a single occupant vehicle (SOV)
- **TDM investment.** Coordinating demand reduction strategies with employers, developers, and property owners by investing money in transportation demand management (TDM) elements

## Draft Parking Investment Scorecard

Using these concepts, the City and LRCVB can create a scorecard that determines the benefits of investing community funds into completing a particular parking facility. The table below provides an example of a scoring matrix using the factors discussed previously. The scorecard evaluates the positives and negatives of the investment and provides a scale the City and LRCVB can use to make decisions. The City and LRCVB would need to adapt this approach to better prioritize elements that are most important to community growth and development in the River Market District and the greater Little Rock community.

Factor	Low Score (0 points)	Medium Score (1 point)	High Score (2 points)	Score
Location	More than four blocks from destination areas	Between two and four blocks from destination areas	Less than two blocks from destination areas	
Demand Mitigation	Supports demand from associated development only	Offsets up to 100 spaces of parking deficit in adjacent developments	Offsets more than 100 spaces of parking deficit in adjacent developments	
Multiple Users	Supports demand from associated development only during one-time period (weekday, weekday night, weekend)	Supports demand during two time periods (weekday, weekday night, weekend)	Supports demand during three time periods (weekday, weekday night, weekend)	
Revenue Potential	Does not cover operational costs	Covers operational costs with little to no excess	Covers operational costs plus surplus	
Community/Economic Growth*	Does not contribute to surrounding area growth	Stimulates moderate amount of surrounding growth	Stimulates significant amount of surrounding growth	
Balance Mobility/ Access	Does not contribute to changing mobility patterns	Contributes to marginal mobility changes (e.g., first/last mile connectivity)	Contributes to significant mobility changes (e.g., park-and-ride activity)	
Costs**	More than \$26,000 per space	Between \$20,000 and \$26,000 per space	Less than \$20,000 per space	
Public-Private Partnership	Does not include a public-private component	Small number of public spaces in largely private garage	Full shared parking facility in public-private facility	
Total:				

\*The City and LRCVB will need to define appropriate levels for moderate and significant development

\*\*Costs should include construction, land acquisition, design, operations and maintenance; inclusion of these elements will change scoring structure

Based on this example scorecard, the City and LRCVB could simply tally the results of the analysis and determine the viability of the investment. The following results would drive the decision-making process.

### 12 - 16 Points

An investment that meets the needs of the community and would serve the parking and transportation system well

### 8 - 12 Points

A strong investment consideration, but one that should be weighed against other transportation investments before finalization

### 4-8 Points

A weak investment consideration, unless factors can be significantly modified in the decision-making process. Transportation investments would be a smarter investment decision.

### Below 4 Points

An investment that should not be considered

## Example Opportunity Sites

The following sections review various parking investment opportunities that have arisen during the life of this study process. As defined earlier in this section, new parking is not needed at this time and likely not within the short-term immediate future. These examples are considered from an economic development standpoint only. The intent of these reviews is to present how the evaluation process could work, not necessarily to make a definitive choice for these locations. In fact, factors have been removed from the analysis (revenue) because the project team could not readily estimate those factors. These areas are shown on the map below.

### Parking Opportunity Sites



Garage Design Elements	Location A	Location B	Location C
Potential Parking Levels	2.5 (including partial levels due to grade)	3 (including partial at grade level due to retail components)	6 (equal to the adjacent Convention Center Garage)
Potential Parking Spaces	280	230	635
Existing Parking Spaces	0	114	158
Potential New Parking Spaces	280	116	477
Estimated Costs	\$8,400,000	\$6,000,000	\$14,600,000
Estimated Costs Per New Space	\$30,000	\$51,500	\$30,600

## Location A – I-30 and Riverfront Park

The first investment opportunity is the creation of a new parking facility between President Clinton Avenue and the Arkansas River, between the new I-30 bridge and the existing nature center. The site would allow for a unique use of grading between President Clinton Avenue and the Nature Center to reduce the overall visibility of the structure while creating additional capacity that is directly adjacent to some of the larger demand generators in the area. The garage would likely be a catalyst for economic regeneration at street level and could allow for a combination of mixed-use development and public-private investment between the bridge and River Market Avenue. This potential site could create a divide of the park and the heavily utilized trail that runs along the river. It could also create issues with the access road in the back that services the buildings on President Clinton Ave.

The scoring for this facility is shown below with the following factor descriptions.

**Location.** The garage would be within proximate walking distance of many destinations, including the park, market, and primary businesses along President Clinton Avenue.

**Demand Mitigation.** The garage could serve demands along President Clinton if it can be sized appropriately. The introduction of mixed uses at street level may minimize the excess public capacity in the facility.

**Multiple Users.** The garage could serve both development and district visitor needs if it can be sized appropriately.

**Community/Economic Growth.** The introduction of mixed uses at street level could provide new investment in the district.

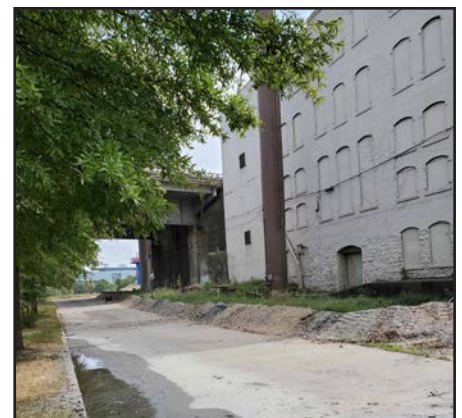
**Balance Mobility/Access.** This garage would introduce more congestion in the heart of the district, minimizing opportunities to shift modes.

**Costs.** Because of the topography and environmental issues, the costs to construct this garage would be higher than usual.

**Public-Private Partnership.** The introduction of mixed-use components at street level would allow for good public-private investment.

Based on the evaluation, the garage would score five out of a possible 14 points, making it an unlikely candidate for investment without some significant enhancement of the capacity of the facility. The enhancement of capacity would come with the unintended consequences of increasing congestion on President Clinton Avenue and cost increases for the facility.

Factor	Ranking	Score
Location	High	2
Demand Mitigation	Low	0
Multiple Users	Low	0
Community/ Economic Growth	High	2
Balanced Mobility/Access	Low	0
Costs	Low	0
Public-Private Partnership	Medium	1
Total		5/14



## Location B- Riverfront Park Sculpture Garden Adjacent

The second investment opportunity is the expansion of the surface parking lot near the sculpture garden in Riverfront Park. Going vertical with that lot, while expanding south towards La Harpe Boulevard could net an additional 116 parking spaces. The vertical expansion would also allow for creation of park-facing retail on the ground level that could continue to activate the park area and create a draw for the community. Depending on the total footprint of this site, the facility could hinder sight lines, take out many established trees, and even divide a portion of the park or limit connectivity within the park. This site could be evaluated in conjunction with discussions regarding reducing the size of LaHarpe Boulevard and/or the expansion of the convention center to the north. This could create an opportunity to move this site south and take up less room in the park.

The scoring for this facility is shown below with the following factor descriptions.

**Location.** The garage would be within proximate walking distance of many destinations, including the park, market, and primary businesses along President Clinton Avenue.

**Demand Mitigation.** The garage could serve demands along President Clinton if it can be sized appropriately. If the capacity only serves to replace the existing surface parking, there would not be much of a benefit to creating the structure.

**Multiple Users.** The garage could serve both development and district visitor needs if it can be sized appropriately.

**Community/Economic Growth.** The introduction of park-facing retail uses could provide a moderate level of economic growth in the area.

**Balance Mobility/Access.** This garage would introduce more congestion in the heart of the district, minimizing opportunities to shift modes.

**Costs.** The costs to build this garage could be escalated if there is a desire to size the top level for human-scale loading for events or park amenities.

**Public-Private Partnership.** The introduction of mixed-use components at park level would allow for moderate public-private investment.

Based on the evaluation, the garage would score five out of a possible 14 points, making it an unlikely candidate for investment. Without the ability to drastically increase supply, this investment is largely more for convenience and reduces the goal of balancing demands throughout the district, instead concentrating more of the vehicular traffic in the very locations that are already congested today.

Factor	Ranking	Score
Location	High	2
Demand Mitigation	Low	0
Multiple Users	Medium	1
Community/ Economic Growth	Medium	1
Balanced Mobility/Access	Low	0
Costs	Medium	1
Public-Private Partnership	Low	0
Total		5/14





## Location C – Marriott Valet Lot

The third investment opportunity is the expansion of the surface parking lot adjacent to the Convention Center garage, currently used for Marriott valet operations. Going vertical on that lot could net an additional 477 parking spaces. With the relocation of Marriott valet parking to the proposed new parking facility at 2nd Street and Louisiana Street, all of these spaces could be devoted to district parking needs.

The scoring for this facility is shown below with the following factor descriptions.

**Location.** The garage is two to three blocks from primary destinations in the district, which is at the edge of preferred walking tolerances (as defined by this projects stakeholder survey).

**Demand Mitigation.** The garage could serve quite a bit of demand in the district if patrons can be appropriately directed to the facility.

**Multiple Users.** The garage could serve both development and district visitor needs, including both the northern and southern parts of the district.

**Community/Economic Growth.** The introduction of this facility could help to stimulate some growth in the southern portion of the district, including the redevelopment of surface parking spaces.

**Balance Mobility/Access.** This garage would promote a more centralized location for parking but would need to be clearly connected to mobility options to support movement throughout the district.

**Costs.** The costs to build this garage would be the lowest on a per space basis, but the size of the garage could elevate the overall price of the facility.

**Public-Private Partnership.** As a stand-alone structure, this might not have the most impact for introduction of public-private partnerships.

Based on the evaluation, the garage would score six out of a possible 14 points, making it a weak candidate for investment. Because of the location of the facility, it would not likely serve visitors to the district, but would instead need to be designed and managed to support groups like employees, residents, and longer-term visitors. If the facility is built but not highly utilized, it might not provide a good return on investment long-term. Additionally, if constructed as a standalone parking structure it would not contribute much to the economic development potential of the area. If this site is considered, the City and LRCVB should actively look for a mixture of uses and a public-private partnership.

Factor	Ranking	Score
Location	Low	0
Demand Mitigation	High	2
Multiple Users	Medium	1
Community/ Economic Growth	Medium	1
Balanced Mobility/Access	Medium	1
Costs	Medium	1
Public-Private Partnership	Low	0
Total		6/14



## Stage 4 - Thinking Beyond Parking

As transportation modes shift and the overall demographics of driving changes, there needs to be some consideration for how to plan for the future while managing for today. Many engineers and planners point to the concepts of adaptive reuse of parking facilities to provide parking today with an eye towards transition in the future. The primary issues with this approach are a) the cost to design and construct adaptive reusable parking facilities is considerably higher than normal parking, and b) the introduction new parking does not account for an oversupply of parking today.

In reality, the best approach to manage parking today with an eye for the future is to make parking more efficient now and strategically consider how to remove parking for future development. This approach, called a Surface Parking Exit Strategy, provides guidance to consolidate parking today and begin to remove parking to account for overages today and shifting demographics tomorrow. The ultimate goal is to provide an opportunity for the community to reach its development potential while also managing the supply of surface parking – a low priority use of available land in a vibrant community like Little Rock and within the River Market District.

### Surface Parking Exit Strategy

The introduction of a surface parking exit strategy will help the City and LRCVB to define where to target management decisions and investment opportunities for private development. The strategy will need to be fluid to respond to changes to community desire, the economy, and the rate of change in the transportation industry (e.g. mobility as a service and autonomous vehicles). Because of this need for fluidity, there is no one direct approach for the strategy, but rather a set of principles to consider that define the overall approach.

1. Manage private parking spaces to create public supply – this is the consolidation of a fragmented system of parking into a more holistic system managed by a single entity (see the Parking Management section of this toolbox).
2. Implement incentives and funding resources for the centralization of parking – these are the tools used to promote centralized parking, including incentives, fee in-lieu programs, or the application of management districts (see the Right-Sized section of this toolbox).
3. Removing surface parking spaces first – as the desire for development and redevelopment occurs throughout the district, the City and LRCVB should target underutilized parking facilities as opportunity sites, with the caveat that shared parking supply around that site can support growth.
4. Only build parking when truly needed – this would dictate that new public parking would only be built when absolutely necessary. In the event that the private sector wishes to build parking, the use of public-private partnerships to create public parking can help to minimize overbuilding parking and support a centralized approach to parking. If parking needs to be built, ideally it would be:
  - a. Be built on the fringes of developed areas so that walkability and density are not adversely affected by standalone parking
  - b. Be created with a mixed-use nature in mind, with portions of the site accommodating development and a mixture of public and private parking at a minimum.
  - c. Be adaptable for connected and autonomous vehicles so that as the transportation system evolves to a more autonomous nature, the interior configuration of the garage can be migrated from human-designed to vehicle-designed with more density in parking configurations and ability to communicate with smart vehicles.

# Technology and Payment Options

Within the River Market District, the City and LRCVB were early adopters of smart parking management technology, including smart meters on-street in the vicinity of President Clinton Avenue and parking access and revenue control equipment in the LRCVB garages. Unfortunately, those technologies are now extremely dated and have surpassed the end of their functionality. The result is a lessened customer experience within the district and an inability to extract data to help define the future of the parking management program. Improvements and investments in parking technology throughout the system should aim to promote better use of parking facilities, improve access for customers, and support the needs of the district, businesses, and events.

## Benefits

- Modernized parking system
- Improved customer experience
- Better tools for data-driven decision-making

## Challenges

- Integration of multiple platforms for data-management and analysis
- Procurement of systems with necessary and specified components

## Required Code Changes

- Changes to Section 32, as defined in this section

## Performance Metrics

- Parking occupancy
- Traffic volumes

## Key Partners

- City/LRCVB
- Private parking operators



There are a number of specific parking technology improvements that the City and LRCVB need to consider, defined in the following subsections.

## LRCVB Parking Payment Technologies

Within the LRCVB off-street parking facilities within (and outside of) the River Market District, there is an immediate need to replace the existing Parking Access and Revenue Control equipment (PARCS). This would greatly improve the operations and management of the facilities, automate the entry/exit process, reduce overall operations costs, and improve interactions with unique customers (e.g. hotels, event patrons, monthly parkers).

The ultimate system would integrate both garages and surface lots and provide a streamlined reporting, validation, and performance management system for the LRCVB parking management team. Whether or not the system is unique to LRCVB or consistent with other parking management entities in the area (see the Parking Management section of this toolbox), there should be opportunities to integrate payment methods or add on technologies like validation scanners to simplify and improve the customer experience. Specifically, the LRCVB should consider the following:

01

Integrate ParkMobile payment technologies to provide a consistent experience for on-street and off-street patrons

02

Consider add-on scanner technologies that allow for consistent validations regardless of facility location or ownership

03

Back-end data management systems that can ingest disparate information from multiple systems and provide a singular parking management dashboard for the district

The specific steps for implementing new technologies in the LRCVB garages (and other public parking locations) include:

1. Work with the parking management collaborative (see the Parking Management section of this toolbox) to define the desired characteristics of the PARCS system and supporting components.
2. Develop a specifications document that defines the objectives and specific components of the system (working with a consultant here can streamline the process and help to improve implementation, ensuring PARCS equipment works as desired).
3. Initiate the procurement process (RFP, purchasing co-op, or piggy-back) to acquire the equipment and services.
4. Work with distributor/integrator to install, configure, and integrate complete system with other systems.
5. Train staff on operation (this should be a specific requirement of the selected vendor).
6. Perform necessary outreach to area stakeholders and businesses (in association with the vendor



and/or the implementation consultant).

7. Go live with new equipment and monitor initial performance and customer response.
8. Work with vendor to adjust performance of system to the needs of the River Market District.
9. Develop, implement, and manage reporting functionality to understand and manage the performance of the off-street system and the parking system as a whole.

## City of Little Rock On-Street Parking Technologies

The City of Little Rock has a combination of parking payment technologies for the on-street system. For much of the community, the spaces are managed by coin-operated meters that only allow for transactions with coin currency (a very outdated approach in 2021). Within the core of the River Market District, spaces are managed by multi-space pay-and-display kiosks. These kiosks allow for multiple payment options but are extremely dated and don't provide much advanced functionality. These two payment options provide no useful data about utilization or revenue generation. And the mixed components of the system lead to an inconsistent customer experience.

Recently, the City implemented a mobile phone payment overlay using ParkMobile, which allows patrons to pay for parking with their phone or smartphone application at any metered space. This most recent implementation provides an excellent foundation for the City to modernize the on-street payment system without a significant capital investment. Additionally, extending the ParkMobile payment platform into the off-street parking system will promote the entire parking system in the patron decision-making process.



The mobile pay functionality essentially works in a pay-by-plate configuration, with patrons entering their license plate into the system as the payment credential. New meter (and enforcement) technologies should utilize this pay-by-plate configuration to improve the parking management function and streamline the customer experience. The pay-by-plate functionality would also support enforcement of code and policy requiring escalated (tiered) payments for longer stays. Additionally, the combination of ParkMobile and a meter/kiosk system configured to pay-by-plate would make it much easier for the City to reprogram meters for rates, hours, and other operating parameter changes.

### Required Code Changes

- Update Sec. 32-401 to clarify the language regarding parking meter technology methods to process and confirm payments
- Update Sec. 32-402 to eliminate ability for a vehicle too large for a delineated space to take additional spaces by paying those meters
- Update Sec. 32-403 to allow Board of Directors to set effective times for required meter payments, remove the specific penalty for non-payment/overstay, and indicate where pay-and-display stub shall be displayed
- Delete Sec. 32-411, which has been integrated into Sec. 32-402

The specific steps for implementing new technologies on the City street network include:

1. Work with the parking management collaborative (see the Parking Management section of this toolbox) to define the desired characteristics of the meter/kiosk system and supporting components.
2. Develop a specifications document that defines the objectives and specific components of the system (working with a consultant here can streamline the process and help to improve implementation, ensuring meter/kiosk equipment works as desired).
3. Initiate the procurement process (RFP, purchasing co-op, or piggy-back) to acquire the equipment and services.
4. Work with distributor/integrator to install, configure, and integrate complete system with other systems. This step will

be critical for integration with other payment functions (e.g. ParkMobile) and enforcement functions (e.g. handheld or license plate recognition equipment).

5. Train staff on operation (this should be a specific requirement of the selected vendor).
6. Perform necessary outreach to area stakeholders and businesses (in association with the vendor and/or the implementation consultant).
7. Go live with new equipment and monitor initial performance and customer response.
8. Work with vendor to adjust performance of system to the needs of the River Market District.
9. Develop, implement, and manage reporting functionality to understand and manage the performance of the on-street system and the parking system as a whole.

## Permit Management System

In addition to the specific payment components of the system, the City and LRCVB should work to implement a permit management system that helps to manage both garage-based permits and system-based permits (recommended in other sections of this toolbox). This system would manage electronic permits (or e-permits) for a wide variety of uses, including employee parking programs or shared parking arrangements where certain people may be exempt from fees or would prefer to park at a contract rate. E-permit systems are flexible, typically allowing each location where permits are required to have multiple permits, each with different business rules (cost, effective period, renewal/rollover policy), and usually can support multiple plates per permit (but only one vehicle on the permit can park at a time).

Just like the recommendations in the previous sections, the permits would be represented by license plates, avoiding the need for providing physical permit media to parkers. The permit system should include options for specification of business rules regarding permit issuance and validity. The preferred system would allow individuals to log into system to apply for permit, arrange for any necessary payments, and enter license plates. The Permit Management System (PMS) should be integrated with the existing Citation Management System (CMS, discussed in the modernized operations section) and the LPR system, allowing either to verify that vehicles have a permit on file.

### Required Code Changes

- Update Sec 32-307 so that physical permits do not need to be issued (allowing a license plate to be the credential)

The specific steps for implementing a system-wide permit management system include:

1. Work with the parking management collaborative (see the Parking Management section of this toolbox) to define the desired characteristics of the permit management system.
2. Develop a specifications document that defines the objectives and specific components of the system.
3. Initiate the procurement process (RFP, purchasing co-op, or piggy-back) to acquire the system and services.
4. Work with chosen vendor to configure the various permit zones and assign City user access.
5. Train staff on operation (this should be a specific requirement of the selected vendor).
6. Create roll-out plan for the public (end users and various groups, such as employers).
7. Add one group at a time and assess before adding next group.

## License-Plate Recognition System

The introduction of advanced parking technology extends beyond the parking payment system. In fact, the investment in and implementation of new technology in the enforcement portion of the parking system can yield significant returns for program performance, behavior management, and data analytics. The introduction of a license-plate recognition (LPR) system for enforcement purposes will improve operational efficiency for both the on-street and off-street system. The equipment can provide the following functions:

- Verifying parked vehicles have appropriate parking rights (payments, permits, etc.) on file
- Verifying vehicles have not exceeded time limits
- Alerting enforcement to vehicles flagged on various watch lists: scofflaws (vehicles eligible for immobilization), wanted vehicles, vehicles with City-wide exemptions to time limits and meter payments, etc.
- Collecting occupancy data for later analysis



The City of Little Rock should invest in new LPR functionality for parking enforcement vehicles. Ideally this equipment would be provided for all enforcement vehicles. While that full investment may take time, at a minimum the investment should be considered for one or two vehicles to improve program performance. The general cost for LPR implementation is \$25K to \$60K per vehicle, depending upon whether there is a new vehicle purchase or if the equipment can be retrofitted to an existing vehicle. Many agencies have determined that the cost for LPR is quickly recovered through the additional efficiency that the system adds to compliance checking. While the initial thought is that the City will write more citations, this is often only a short-term response with patrons adjusting and complying with parking regulations more frequently. The result is a higher return on revenue for parking transactions, supporting this investment (and the others defined in this section).

The specific steps for implementing a system-wide permit management system include:

1. Work with the parking management collaborative (see the Parking Management section of this toolbox) to define the desired characteristics of the LPR equipment and system.
2. Develop a specifications document that defines the objectives and specific components of the system.
3. Initiate the procurement process (RFP, purchasing co-op, or piggy-back) to acquire the system and services.
4. Work with chosen distributor/integrator to install and configure units and integrate complete system with payment systems, permit systems, citation system, DMV, and any justice systems (to acquire stolen vehicle plate lists).
5. Train staff on operation (this should be a specific requirement of the selected vendor).
6. Public Works and City Attorney will need to ensure that appropriate policies are created regarding data sharing and retention, with considerations for State code.



## Data-Driven Approaches to Parking

Data-driven policies can be used to justify and encourage dynamic price and policy, improve marketing, wayfinding, and branding, and create better connectivity within the community. Using ongoing data analytics to drive policy and system performance allows the City and LRCVB to better allocate parking demand to reduce congestion into and around specific parking facilities. The parking management function will need to define data-driven practices to collect, analyze, store, and communicate data and its role in defining parking management changes. Using these tools, the City and LRCVB should be able to change rates, define operational approaches, and support community needs through strategic space allocation.

### Benefits

- Improved decision making
- Community-centric policies and practices
- Improved system performance
- Improved customer experience

### Challenges

- Implementing (and paying for) new technologies
- Integrating disparate data sources
- Communicating changes and performance

### Required Code Changes

- None

### Performance Metrics

- Parking occupancy
- Citation issuance (hot spots)
- System performance (on-street vs off-street)
- Revenue

### Key Partners

- City/LRCVB
- Private parking operators



One of the central tenets of the new approach to parking management in the River Market District should be the use of system data to support better policy, price, and practice decisions that are consistent with the intended vision and outcomes of the program. This will include the frequent collection of data, ongoing analysis of data, and use of performance indicators and benchmarks to define when and how to make changes. As recommendations in this report are implemented, and new policies are put into place, a significant amount of data will be generated.

The City and LRCVB should continuously evaluate the effectiveness of the programs and policies through the use of this data to define patron behavior changes and overall changes within the parking system. Rather than reacting to perceptions, parking demand management strategies are most effective when changes are made incrementally based on data. There are numerous channels for collecting parking data within the system to inform smarter policy, price, and practice decisions, including:

- Manual data collection
- Back-end systems (both on-street meters and parking access revenue control equipment)
- License plate recognition equipment
- Citation management systems
- Program revenue and budget sources
- Complaints to transaction ratio
- Transit and MaaS platforms

Data to be collected includes:

### **Parking & Curb Space Inventory**

Provides the baseline for analysis and allows the City and LRCVB to track changes to the parking system over time and the impacts of those changes (e.g., removal/addition of parking, regulatory changes).

### **Parking Occupancy**

Indicates how well the system is being used and when parking strategies need to be implemented or adjusted. Time limit policies can be adjusted to either encourage or discourage use. Subsets of occupancy that should be evaluated include: parking garage occupancy vs. commitments, metered parking occupancy, residential area parking occupancy, and permit area occupancies.

### **Parking Duration**

Indicates how long people are staying in given locations. Pricing and timing policies can be adjusted based on the surrounding uses and turnover rate.

### **Citation Volume & Type**

Indicates how many citations are issued and whether violations are occurring in isolated areas over a given period of time. An analysis of this information can show whether citations are increasing and may lead to further analysis to figure out why that is happening and if an adjustment in the parking strategies and policies is needed.

### **Program Revenue**

Changes in revenue, when viewed granularly, can define how parking demands are shifting, the success of policy changes, and the realization of pricing and practice changes. Revenues should be viewed as on-street, off-street transient, off-street permit, and citations at a minimum. Observing trends within these categories can indicate changes to performance and behavior.

### **Customer Satisfaction**

Conducting customer satisfaction surveys periodically can define how patrons are reacting to changes in the program. The City and LRCVB should consider satisfaction levels of residents, businesses, employees, and customers at a minimum.

### **Vehicular Congestion**

Reduction in vehicle miles traveled and localized congestion is an indicator that parking management strategies are effective at redistributing demand and overall access to the community.

### **Transit Ridership**

Changes in transit ridership, whether a regional or local route, can indicate a shift in both parking demands and access patterns. When combined with parking specific metrics, the City, LRCVB, and Rock Region Metro should be able to define the effectiveness of specific policy and practice changes.

### **Mode Split**

Overall mode split into the community is a key characteristic in defining shifting behavioral and access patterns. Reductions in drive alone rates can be a clear indicator that parking policies are working.

## Data Aggregation Mechanisms

The current data sources for the City and LRCVB are fairly limited. As the new technologies recommended in the Technology section of this toolbox are implemented, the amount of available data should increase dramatically. When combined with data from partners (private parking operators and Rock Region Metro), there should be ample data to make better policy decisions moving forward.

In order to fully leverage the intended management benefits from the proposed technologies and their back-end systems, the City and LRCVB should consider a data aggregation system that allows for all existing systems to input data into a centralized location. The centralized dashboard should provide the parking management team with the ability to quickly analyze data trends, identify operational challenges, and inform program changes. An ideal system would also allow for flexible customization of data inputs and reporting outputs.

## Data Analytics Processes and Practices

Once there are processes and tools in place for collecting and viewing data, the City and LRCVB should define practices for analyzing data. A few key considerations include:

1. Review similar periods of time and sets of data
2. Utilize similar practices when collecting data for comparisons
3. Create a dashboard of historic outcomes and use the current and historic data points to create ongoing trends analyses
4. When analyzing changing trends, consider what outward influence would affect changes in data
5. Clearly communicate changing trends, influential data points, and outcomes to help drive new policy and practice decisions

As the use of data increases in the management of the parking system, the City and LRCVB could consider the application of a data analytics position within the parking management collaborative. This position could be devoted to the ongoing analysis and communication of changes within the system to support data-driven progression of the program. Alternatively, the City and LRCVB could consider outsourcing analytics to a company or consultant that can process the data and generate meaningful reports.

## Policies and Performance Metrics Tied to Data Analytics

As the City and LRCVB progress along the path to deeper data analytics, the corresponding policies and practices that should be tied to the analytics will become more apparent. Initially, the City and LRCVB should include these policy areas, at a minimum:



Using occupancy data to define how much to charge based on demands (prices will go up and down)

### Performance Metrics:

- Occupancies below 65% should see decreased pricing.
- Occupancies above 90% should see increased pricing.
- Occupancies within 5% of those targets are considered on the cusp of needing price changes and should be monitored.
- Occupancies between 70% and 85% should see rates held constant.



Using occupancy, duration, and citations to define how long people can park and when regulations should be set

**Performance Metrics:**

Reviewing parking durations and corresponding policies and citations should provide guidance on how and when to adjust time regulations. For example, in a section of street with two-hour time limits, if the average duration is routinely three hours and citations indicate a trend of overstaying time limits, regulations should likely be adjusted up (or patrons should be educated of off-street options). Using average durations from data collection (manual or LPR) will provide the guidance needed to set effective regulations.



Using occupancy, citations, and customer input to define the need to manage parking, before or after traditional hours

**Performance Metrics:**

Using occupancy thresholds defined in number one above, the City and LRCVB can effectively monitor nighttime demands, especially in the vicinity of commercial areas. Consistent parking occupancies at or above 90% after enforcement hours is an indication that enforcement hours should be extended.



Using occupancy, commitments, and access information, the off-street system should be managed to customized oversell rates for the parking garages

**Performance Metrics:**

Off-street parking facility occupancy thresholds are similar to on-street pricing thresholds listed in number one above. The off-street facilities should target occupancy levels at 85% or above during peak conditions. This should be inclusive of both committed/permitted spaces and transient spaces. If trends over time indicate that permit users are not maximizing utilization of their spaces, the City and LRCVB should provide those available spaces to transient users until permit trends dictate otherwise.



The application and management of loading zones should be based on proximate delivery space and usage of loading zones. Corresponding policy and price should be adjusted as well

**Performance Metrics:**

Much like the on-street thresholds for vehicular parking, The City and LRCVB should consider demand-based policies and pricing for loading zones throughout the community. In areas where loading zones are in high demand, their location, management and pricing should be dictated by the demand for use. This should include time of day policies for managing loading zones that price use higher during peak congestion periods.

**Seattle, WA**

The Seattle Department of Transportation (SDOT) uses parking occupancy data to adjust onstreet parking rates through its Performance-Based Parking Pricing Program, which began in 2010. This data-driven approach to rate-setting uses the principles of supply and demand to ensure appropriate management of the curb space and to provide reliable access and parking availability. The goal of the program is that parking is well-utilized in high-demand areas and that drivers can reliably find a space near their destination. SDOT is recognized as a leader in the industry in implementing such a data-driven program, and more cities are moving toward a similar system. From 2010 through 2016, SDOT has made over 140 changes to rates, time limits, and paid parking hours based on Annual Paid Parking Study results. Prior to 2016, SDOT generally set one rate over the entire day of paid parking hours. Because demand can vary greatly over the course of the day, SDOT in 2016 began managing parking by time of day.

# Modernized Parking Operations

Using the practices outlined in the previous two sections, the City of Little Rock and the LRCVB should be able to initiate a process of modernizing parking operations. This would include tailoring policies and practices to the needs of the district (and larger Little Rock community) through data-driven decision making and improved technologies. The primary areas for modernization are in the enforcement program, program policies and operations, and parking management practices. Modernization is an iterative process and requires ongoing evaluations and adjustment to ensure that the approach to operations meets the context and needs of the River Market District.

## Benefits

- Community-centric policies and practices
- Improved customer experience
- Improved compliance
- Improved perception of parking

## Challenges

- Increases to staffing (and budgeting)
- Communicating changes to the community

## Required Code Changes

- Various changes to Section 32 (as described throughout)

## Performance Metrics

- Citation issuance (hot spots)
- Gap analyses
- System performance

## Key Partners

- City/LRCVB
- Private parking operators



The previous sections of this toolbox identified the investments needed to modernize the approach to parking management through capacity, technology, and data analytics. Beyond those investments, there are also specific policy and practice considerations for both the City and LRCVB to consider in day-to-day operations that can yield advances in customer satisfaction, operational efficiency, demand distribution, and overall program performance. Those steps are defined in the following subsections.

## Parking Enforcement Program

The current parking enforcement program has some challenges that can be addressed to make it more efficient and effective. The current challenges include:

- There are insufficient staff to provide full coverage throughout the City, including the Parking Meter Zones, particularly the River Market District.
- Officers' shifts end before the end of the enforcement hours for parking meters.
- The City is not using all the tools available to it to collect on citations.
- Officers do not get training specific to their roles.
- The City is not leveraging technology that will make officers more efficient and effective.
- The cost for enforcement can be covered from increased revenue for both parking payments and citations.



Parking management strategies are only as effective as the enforcement practices used to monitor and uphold the policies and regulations. If the policies and regulations are not consistently enforced, users quickly learn how to abuse the system, preventing the parking system from operating efficiently and causing user frustration because parking spaces are not being managed appropriately. Parking enforcement should be conducted regularly and consistently.

Active enforcement encourages compliance with the parking regulations through education and citations, thus maximizing the use of the existing parking resources. Consistent enforcement ensures that users comply with the parking regulations, thus allowing the system to function more efficiently by promoting the turnover of parking spaces to increase availability and provide greater access to the surrounding businesses. When parking spaces turnover, those spaces are made available to more people (as opposed to being occupied for long periods of time by a single user). Increased turnover of parking spaces means that access to businesses improves because more people are able to use the parking spaces to visit the businesses.

### Introduce a Parking Ambassador Program

The preferred approach to parking enforcement focuses on customer service and promoting the proper use of parking facilities. As such, the enforcement staff should be viewed as parking ambassadors, rather than regulatory agents, consistent with the recommendation to modernize parking enforcement as part of parking operations. Their role should be to create a better customer experience by being highly visible and approachable to customers who have questions, not only regarding parking but about the general area. These staff members are likely the first (and sometimes only) interaction patrons have with the parking program.

With this philosophy in mind, the City of Little Rock should take the following approach to enforcement activities:

1. Introduce a compliance-based Parking Ambassador program for customer interactions and enforcement to better reflect a customer-service oriented attitude
2. Focus on educating parkers on regulations, answering customer questions, and selectively issuing warning notices before citations for first-time offenders to ensure that posted regulations are observed

This modernized approach to parking enforcement generates a positive reputation for parking enforcement through more meaningful public interactions. Consistent enforcement coverage will result in higher rates of compliance with parking policies, which is critical for the success of the parking operation and will lead to overall higher revenue throughout the parking system. To truly be effective, the change will also require extra staff to provide coverage during operating/enforcement hours, especially if operational hours are extended.

## Required Code Changes

- Delete Sec 32-36 (b), which authorizes the police chief to designate auxiliary policemen to enforce parking ordinances
- Delete Sec 32-36 (c), which authorizes the police chief to designate police cadets to issue parking citations
- Confirm Sec. 2-114. - Persons authorized to issue ordinance violation citations. (The city manager or his designated representative may issue citations to require alleged violators of any ordinance to appear in the municipal court to answer the violation. The city manager shall designate in writing the individuals who are authorized to issue citations. This list shall be filed with the city clerk.) Update Sec 32-73 (a) to clarify who can write parking citations
- Add Sec 32-73 (b) to cover the situation where the vehicle was driven away before the issuing officer can attach the citation
- Add Sec 32-73 (c) to allow the City to enter into contracts to outsource parking enforcement, citation processing, and sending notices
- Update Sec 32-30 to declare who can issue citations for handicapped parking violations and allows Board of Directors to set fine and rules for towing and impoundment; our suggested changes also refer to State law defining the penalties

## Update On-Street Enforcement Policies and Procedures

In tandem with the recommendation to change the parking enforcement officers to a more customer-service driven model as Parking Ambassadors, the City of Little Rock should also evaluate specific changes to the enforcement program to adapt and modernize the approach to parking regulations and citations. Those specific changes include:

1. Ensure sufficient staffing to maintain sufficient presence in the district, and elsewhere in the City. The City currently has four parking enforcement officers (PEOs) working 8 am to 4:30 pm, Monday through Friday. There are also some part-time staff who will start working later, but the staffing is not efficient for the area covered. The program currently covers not only the River Market District, but four other districts throughout the community. Additionally, there is no Administrative Assistant, so if the supervisor is out, then one PEO is pulled into the office, leaving less coverage throughout the community. There may be insufficient coverage with current hours, but there will definitely be insufficient coverage if hours are extended.
2. The City needs to ensure the program has adequate equipment. Currently, the program has four vehicles for the four officers. If number of officers is increased based on these recommendations, more vehicles will be needed to support operations. As recommended in the Technology section, all vehicles should be equipped with LPR.
3. The City should reinstate the immobilization program to deal with scofflaws. Currently, Section 32-322 of the Little Rock Code of Ordinances permits immobilization if more than \$250 delinquent in the past 3 years.

These changes are intended to modernize the approach to parking enforcement. With proper enforcement coverage, parking compliance should go up, providing more revenue in payment systems. This enhanced revenue would then pay for enhanced enforcement personnel and equipment.

## Required Code Changes

- Update Sec 32-74 to reflect current operations
- Update Sec 32-303 to allow Board of Directors to determine days when parking control is suspended, including holidays
- Update Sec 32-311 to clarify vehicles parked in alleys must be actively loading or unloading, and to allow Board of Directors to establish penalties per revised Sec. 32-301

## Leverage Capabilities of Citation Management System (CMS)

As new policies, practices, and technologies are implemented to support the modernization of the enforcement system, the City of Little Rock should adopt practices to use these tools to allow enforcement officers to work in real time. This would include leveraging LPR capability of both the new vehicle mounted equipment and within existing handhelds.

Connecting these devices to the various payment and permitting systems associated with the parking management system will improve field performance and accuracy. Using these systems, officers can use the function of the handhelds to check a vehicle's history for warnings and citations, ensuring proper citation issuance. The system can interface with the LPR to ensure that all

scofflaws are identified, recognized, and properly alerted to enforcement, in real-time.

The City will need to ensure that the existing (and proposed) systems have all of the necessary integrations with current and proposed payment and management platforms. It's recommended that the City designate a staff member to become a Subject Matter Expert (SME) to help manage performance. This SME would work with the vendor to thoroughly learn the system, revise operational procedures as necessary, export data for program analytics, and help to make sure the system is being leveraged fully.

## Policies and Operations

Beyond the modernization of the approach to the act of enforcement, the City and LRCVB should also consider some specific changes to the overall regulations and policies that define parking enforcement and operations. Today, parking enforcement should be tailored to the needs of the community (or district) that it serves, to make the practice an effective tool to support business needs, promote turnover, and manage patron behaviors in a positive way.

The following specific recommendations are made to support the effective parking system within the River Market District.

### Reconsider Hours of Enforcement & Operations

The current operational hours were established years ago and have not been adapted to the current needs of the River Market District. Without effective parking management during peak conditions, the priority parking spaces often don't function as intended. Entertainment districts throughout the US have recognized these challenges and have been extending hours of operations into the evenings and weekends to support businesses needs. Parking controls should be provided whenever demands are consistently above 85%. Under current conditions, the City and LRCVB should consider extending enforcement until at least 8 pm Monday through Friday, as well extend hours to Saturday to reflect the demand conditions in the district.

#### Required Code Changes

- Update Sec. 32-371 to authorize Board of Directors to establish when time restrictions do not apply
- Update Sec. 32-373 to give the Board of Directors and/or Parking Management more control over restrictions
- Update Sec. 32-374 to give the Board of Directors and/or Parking Management more control over restrictions
- Update Sec. 32-375 to authorize Board of Directors to set time limits on certain streets and hours when they are effective, and authorize the traffic engineer to determine streets needing time limits
- Delete Sec. 32-378, as it separately called out traffic engineer's authority, which now is combined with Sec. 32-375
- Update Sec. 32-403 to allow Board of Directors to set effective times for required meter payments, remove the specific penalty for non-payment/overstay, and indicate where pay-and-display stub shall be displayed
- Update Sec. 32-405 to allow the Board of Directors to establish hours for limited time parking meter zones and the initial deposit required, and to allow the city manager to determine whether time can be extended, and if so, the cost for doing so

### Reconsider Free Parking for Veterans

The City of Little Rock currently has a policy to allow any vehicle with a plate indicating the driver is a veteran to park on-street without payment to the parking meter technology. This policy is not required per state law or City code. This policy, while extremely well intentioned, is ripe for abuse and can causes challenges for the parking enforcement team. There are a number of variations on plates issued to veterans, which causes the PEOs to need to understand and be able to distinguish between all of them. Since there is no legal reason for not requiring payment, eliminating this policy means fewer exceptions for Parking Ambassadors to consider.

This should be a gradual change for the community and PEOs. The City should begin with an announcement to all enforcement officers. Once the rollout is ready, the City should start with an initial phase-in period that provides warnings (in lieu of citations) explaining the changes and offering information on how and where to park. This could even be accompanied with a validation for some limited amount of free parking in an LRCVB garage to help educate the patron. The existing or new enforcement equipment should be configured to be able to define whether a vehicle has received a warning previously before initiating a new citation.

## Increase Penalty for Parking in Disabled Parking without a Placard

The City should increase the citation amount associated with this violation, which has safety consequences for disabled parkers who cannot find an available designated disabled parking space. The current penalty is \$100, with no escalations, and the associated policy states no collections or other penalties. The overall number of citations issued has risen over the past three years (1.53% of citations in 2019, 4.08% in 2021). State of Arkansas code (§ 27-15-305) allows “a fine of not less than two hundred fifty dollars (\$250) nor more than five hundred dollars (\$500) for the first offense and not less than five hundred dollars (\$500) nor more than one thousand dollars (\$1,000) for the second and subsequent offenses, plus applicable towing, impoundment, and related fees as well as court costs,” and has additional provisions.

Enacting this higher penalty level (along with other actions like towing/booting) would provide additional incentive not to park in a designated disabled parking space without appropriate credentials. An initial phase-in period that provides warnings (in lieu of citations) explaining the changes and offering information on how and where to park. The existing or new enforcement equipment should be configured to be able to define whether a vehicle has received a warning previously before initiating a new citation.

### Required Code Changes

- Update Sec 32-302 to declare who can issue citations for handicapped parking violations and allows Board of Directors to set fine and rules for towing and impoundment; suggested changes also refer to State law defining the penalties

## Adjust Penalty for Expired Meter Citations

Nearly 80% of all parking citations issued (from 2019 to date) are for expired meter and/or no pay-and-display receipt. The current penalty for an expired meter is lower than the cost to park at the meter all day. Since the capture ratio (number of violations found divided by the number of violations) probably is low, given the other challenges noted here, it’s safe to say that many people are likely getting free parking on-street. Adjusting this citation rate will encourage people to pay the meter instead of the potential “\$15 for all day” rate. This change could both serve to increase compliance on-street and generate additional revenues from the newly compliant transactions. The City will need to determine an appropriate rate and escalations for this violation and assess regularly to see if trends change.

### Required Code Changes

- Update Sec 32-301 to create a single “Penalties” section for all parking violations; this gives the Board of Directors the discretion to establish or change the penalty amount, the time to make payment before fines escalate, and the amount of escalation for all violations. It also removes obsolete language regarding ticket format and payment to penalty boxes on parking meters.

## Consider Graduated Fine Structures

The City should consider graduated fine structures to help reinforce parking regulations while providing some allowance for first-time offenders. Under this strategy the parking fine for a first-time offender is relatively low or free. The low cost of the fine serves as a way to educate the offender rather than to punish them.

However, the graduated ticket structure penalizes those who repeatedly park illegally with heavier fines. As a result, people are less likely to repeat the offense and obey the parking regulations. The following is the suggested citation ticket structure:

This type of structure has been implemented in communities throughout the US and allows for a more educational approach to parking enforcement, while still allowing for a more severe penalization of scofflaws and habitual offenders.

<b>1st Offense</b>	\$0 fine with warning educating the user
<b>2nd Offense</b>	\$15 fine with an educational component
<b>3rd Offense</b>	\$30 fine
<b>4th Offense</b>	\$60 fine



## Improve Parking Management & Technology for Events

While the previous recommendations focused on enforcement of parking violations, this operational improvement is intended to leverage the improvements to the parking system (management, technology, space allocation, etc.) to help alleviate a very common problem in the River Market District – event parking. The overall recommendation is to leverage recommendations made throughout this toolbox to find more modern and creative solutions to parking challenges for events in (and outside of) the district. This recommendation will need to be iterative in nature as the LRCVB and City evaluates performance.

The general initial tenets of a modern approach to event parking management include:

- Allow attendees to purchase reservations up-front using an online web portal tied to the revenue control equipment in participating garages (LRCVB plus private parking partners). This pre-reservation will provide the patrons the assurance that they have a space waiting for them, limiting frustration and congestion tied to circling for a parking space.
- This pre-registration also allows both the parking management entity and the stakeholders to gauge expected parking demand in advance.
- Each participating location can establish its own rates and policies, irrespective of participation in any employee lot or shared parking programs.
- Once multiple locations are participating, customer options typically involve a trade-off between cost and convenience (i.e., they can choose to park at a location closer to the activity for a higher rate and more restrictions, or farther away for a lower rate and fewer restrictions).
- This approach may require staffing attendants at parking locations to manage traffic flow and ensure that all arrivals with a reservation have a space available.
- Outside of these participating locations it is almost certain that some event attendees will look for free parking opportunities. It will be important to ensure that on-street parking is “protected” from events by creating on-street policies/rates to discourage long-term parking.

The general implementation steps for this initial event parking management approach would include:

1. Determine the types of events and venues that will participate in the rollout
2. Determine parking locations to participate, including all LRCVB facilities and any interested public parking locations (CALs, private operators)
3. Acquire an event parking reservation/payment system plus required scanning equipment for participating facilities
4. Build integrations into affected systems (garage PARCS, off-street lot payment systems, LPR, etc.)
5. Perform outreach to event venues and district stakeholders





# Parking Pricing Considerations

Parking pricing is the most powerful tool in the parking management toolbox. As such, parking prices should be set to reflect actual use and prioritization of space in the River Market District. The City and LRCVB need to implement modernized approaches to parking pricing. In general, the following principles should be followed:

1. On-street parking should be priced higher than off-street parking to promote balance
2. On-street parking near destinations should be managed for turnover to support business needs
3. Parking prices should be higher closer to primary destinations
4. Parking prices should be evaluated and adjusted on an ongoing basis to maintain balance in the system

## Benefits

- Reduced congestion in high demand areas/facilities
- Better utilization of parking facilities
- Equitable parking options
- Better decision-making in commute choice

## Challenges

- Setting the correct price to define behavior
- Enabling over-population of certain facilities
- Ongoing data management and policy changes (needs to be frequent and dynamic to manage assets properly)

## Required Code Changes

- None

## Performance Metrics

- Parking occupancy
- Citation issuance (hot spots)
- System performance (on-street vs off-street)
- Revenue

## Key Partners

- City/LRCVB
- Private parking operators

The parking system in the River Market District is not currently priced to prioritize access and space. The cheapest parking is actually found closest to the biggest demand generators and no policies are tied to the efficient balancing of parking demands. The policies outlined in this section build off of the data-driven policies and practices found in previous sections of this toolbox and aim to provide the City and LRCVB the options to price the system to better allocate resources and modify parking behaviors for a more efficient River Market District parking system.

## Demand-Based Pricing Policies

The primary recommendation for the River Market District on-street parking system is the introduction of demand-based pricing to influence the distribution of parking demand throughout the entire system. More efficient and effective distribution of parking demands will lead to reduced congestion, better access decisions, and a more balanced utilization of the entire parking and mobility systems. The following principles should be implemented as the City and LRCVB move to a more data-driven pricing model for both the on-street and off-street systems.

### Define Pricing Types to Be Used

#### Dynamic or Variable Pricing

Differing parking prices based on observed or historical demands. Each transaction in an area is still governed by time limits and is set to a specific per hour price level.

Prices for parking fluctuate by length of transaction. Time limits are effectively eliminated and duration of stay decisions are monetized. For example, a two-hour transaction could be \$2 per hour, while a three-hour transaction would be \$2 per hour for the first two hours and then \$3 per hour for the third hour. The intent is to remove restrictions and direct behavior through price.

#### Progressive Pricing

#### Discount Pricing

For areas or facilities that are underutilized, the application of discount pricing (when combined with escalating prices in high demand areas) could incentivize higher use of the facilities.

On-street parking rates around large event centers (like the amphitheater and park) should have policies in place to charge event rates and conditions. For example, for a concert, rates could be set to a flat fee of \$10 with no time limits. This rate would cover an hour before the event until enforcement begins again the next morning. Anyone parked and paid before the event would need to pay the event rate to remain parked.

#### Event Pricing

### Define Rate Setting Policies and Practices -

The rates should be set higher in the priority parking zones (see the Parking Prioritization section) and should be evaluated on an ongoing basis (see the Data-Driven section) to help ensure that the goals of the on-street demand pricing system are met. The procured parking technology (see the Technology section) should be specified to meet the needs of this dynamic parking pricing system, with the ability to adjust rates, extract usage data, and communicate changes effectively with customers.

<b>Adjustment Periods</b>	Predefine adjustment periods for rates, including necessary time for data collection and analytics. Initially, the City and LRCVB should strive to do this annually.
<b>Rate Ceiling and Floor</b>	The City and LRCVB should define a minimum and maximum rate that program managers can work within to guide the annual rate setting process. Based on an existing rate of \$1 per hour, the City and LRCVB should institute a ceiling of \$4 per hour and a floor of \$1 per hour.
<b>Rate Adjustment Interval</b>	The City and LRCVB should predefine the adjustment interval so that annual rate changes are predictable and affordable. Based on existing rates, the City and LRCVB should institute a rate adjustment interval of \$0.25 to \$0.50 per hour.

## Minimize Long-Term Parking On-Street

On-street parking is the most utilized parking in the River Market District and survey respondents clearly indicated that they drive to their destination and circle to look for available on-street parking. In consideration of this, the City and LRCVB should implement practices that aim to promote off-street parking as the primary parking location. This approach would include the following tenets:

- On street parking needs to be priced such that off street parking is more cost-effective for long-term stays (i.e. on-street parking should be priced higher than off-street parking).
- On-street parking areas that are typically congested should be time limited to an appropriate amount, promoting turnover and access to businesses.
- On-street pricing should be priced higher during periods of congestion, using time-of-day pricing models.
- The City should consider implementing tiered time limits or a progressive parking pricing model that escalates pricing for those that intend to stay longer than a prescribed time limit
- The City should evaluate data on an ongoing basis and structure pricing and regulation models where core on-street parking spaces are restricted to one or two hours and surrounding areas are restricted to three hours.

The City and LRCVB will need to be mindful that these initial changes could have the unintended consequence of increased congestion as patrons circle for parking on-street or increase activity in adjacent areas where drivers spillover looking for free or cheap parking. There will need to be a marketing and education effort that accompanies these changes to help re-distribute patrons to available parking (likely off-street).

**Required Code Changes**

- Update Sec. 32-405 to allow the Board of Directors to establish hours for limited time parking meter zones and the initial deposit required, and to allow the city manager to determine whether time can be extended, and if so, the cost

The City should take an incremental approach to parking pricing changes by starting with a smaller portion of the River Market District (see the Parking Prioritization section). This initial change will likely result in spillover parking to nearby free parking locations. During this initial implementation, the City and LRCVB should evaluate data on an ongoing basis and make plans to adjust time limits, including changes to meters, signs, enforcement equipment, etc. This initial rollout will likely require extensive outreach, both before and during the implementation and evaluation periods.

## Adjust Off-Street Parking Rates

In conjunction with the changes made to on-street pricing, there are likely specific changes that need to be made to off-street parking pricing to ensure appropriate balance between the on-street and off-street systems. The rates in public parking facilities should be evaluated and adjusted to support this balance. A few specific recommendations include:

- The rates in the LRCVB parking facilities should be set to encourage long-term parking in the facility as opposed to on-street. This could include the use of a first-hour free, lowered parking rates, merchant validations, or other incentives to move people from the on-street system to the off-street system.
- Rates in the Ottenheimer parking lots adjacent to the Riverfront Park should be modified from daily charges to hourly charges and set higher than other off-street parking facilities. This can be accomplished once new revenue control technologies are implemented.
- Adjust practices associated with lost tickets. Currently, the lost ticket rate is lower than the daily rate in LRCVB facilities. This pricing can be adjusted once new technologies are in place that can identify when a vehicle entered the facility (though the use of LPR enabled PARCS equipment).



Just like the dynamic approach to on-street parking, pricing in the off-street system will need to be evaluated on an ongoing basis and adjusted to reflect changing conditions. The capabilities of the new PARCS system should provide data-streams that support these evaluations. The LRCVB and the City should regularly review traffic patterns, revenue reports, lost ticket reports, activity levels, and market parking conditions. Based on this review, rates and operational practices can be adjusted accordingly.

## Introduce a Merchant Validation System

The LRCVB and the City, along with other partners of the public parking system, should evaluate the use of (and implement) a merchant validation system. This system would allow merchants to offer discounted parking to customers, while allowing LRCVB and the City to encourage parking at preferred locations throughout the district. If properly implemented, it would give customers an incentive to park in off-street facilities.

This could be accomplished through a new add-on system or through the existing ParkMobile system that is used in the on-street parking environment. Electronic validation systems provide robust auditing and reporting capability to see where validations were issued and redeemed, allowing for a more holistic understanding of how the parking system is being utilized. A validation system could be especially beneficial if a system of shared parking is established and managed by a system that allows a merchant to issue a validation for any participating location.

The specific steps for implementing a system-wide permit management system include:

1. Work with the parking management collaborative (see the Parking Management section of this toolbox) to define the desired characteristics of the merchant validation system.
2. Develop a specifications document that defines the objectives and specific components of the system.
3. Initiate the procurement process (RFP, purchasing co-op, or piggy-back) to acquire the system and services.
4. Work with chosen vendor to configure the system and assign merchant access.
5. Train staff and merchants on operation (this should be a specific requirement of the selected vendor).
6. Add one merchant at a time and assess before adding next.



## Branding, Marketing, and Wayfinding

The public parking system needs to be represented by a singular brand that clearly identifies to patrons the location, use, and availability of public parking spaces. The introduction of a brand will need to include a uniform and simplified look and feel, as well as educational and marketing components intended to help communicate the how and where of the parking system. This effort will likely need to be one of the first issues tackled by the parking collaborative (see the Parking Management section), including the introduction of consistent signage and wayfinding for the parking facilities included in the public parking system.

### Benefits

- Better understanding of the system for parkers
- Better customer experience
- Improved decision making for patrons

### Challenges

- Implementing singular signage for both public and private assets
- Maintenance and evolution of brand elements

### Required Code Changes

- None

### Performance Metrics

- Facility performance (utilization)
- Customer satisfaction

### Key Partners

- City/LRCVB
- Private parking operators
- Central Arkansas Library System (CALs)

One of the most important aspects of creating a new consolidated parking program will be the efforts related to branding and marketing the program, as well as educating users of the program. The program brand is the common denominator that patrons use to identify the program components. It's not just a logo and a name; it's a way of thinking and operating that symbolize a major change in the business of parking. A parking brand is successful when it evokes a memorable and positive parking experience to users, drawing them back time and time again. A successful parking brand usually includes five key elements<sup>2</sup>.

**BE  
CONSISTENT**

Consistent messaging makes navigating and using the parking system easier for users to understand. Simplifying and consistently communicating prices allows motorists to understand their parking options. Furthermore, communicating through common signage that is both well-lit and strategically located tremendously improves the customer experience.

**BE  
MEMORABLE**

The brand's logo, brand name, and its overall "look" must be memorable so that motorists can easily identify, remember, and associate it with the River Market District public parking system.

**BE  
CONVENIENT**

A primary factor for creating a successful parking brand is to make the system convenient to utilize from beginning to end, which is primarily rooted in effective communication. Thorough communication strategies allow users to easily understand and navigate the parking system, making locating and utilizing the most optimal parking option convenient for drivers.

**BE  
CLEAN & SAFE**

Even when parking is available and affordable, it will not be effectively utilized if motorists feel unsafe and consider the facility unkempt. Improvements such as decreasing clutter, providing additional lighting, maintaining clean facilities, and periodic painting can support a positive image of the parking facility and increase the likelihood of motorists choosing to park there.

**BE  
EASY**

An easy parking system is created when all of the previous elements are implemented collectively. When motorists can identify the location or parking through memorable trailblazer signage, they may quickly and easily access available parking. When parking rates are properly structured, communicated, and presented, the motorists can easily determine how much they will be paying for parking. When vehicle navigation strategies including interactive maps, parking information websites, trailblazer signs, and dynamic messaging signage are implemented, motorists are guided through the parking system.

<sup>2</sup> Source: Todd Pierce, President Pictoform

## Branding the Parking Program

The program brand should include a specific name, logo, and color scheme for the new River Market District parking brand. This brand should easily be able to be expanded into additional public parking elements throughout the Downtown Little Rock community to help establish a clear and understandable presence of public parking in the community. The following pages provide examples of this branding concept and how it would filter from a program brand into elements like wayfinding, trailblazing, and parking facility branding.

### Examples of Signage and Branding



Many communities use large clear signage to indicate directions to a parking facility or who has access to the facility. Consistency in colors and messaging are key.



Clear and visible signage on the exterior of a parking facility is the easiest way to indicate the presence of public parking and to help navigate parkers to an off-street parking location. Signage should use colors and themes consistent with the program brand.



On-street parking should also carry a consistent brand with the overall parking system. Using the same “P” and clear messaging helps to orient motorists to locations, price, and regulations. It’s not necessary to include all regulatory information at the sign. Much of that information can be conveyed in the face of the parking kiosk. Additionally, supporting signage should be clear, easy to understand, and quickly convey the message of how to use parking and support technology.



## Branding Example 1 - Standard "P" Parking Logo



The most easily identifiable brand element is the parking "P". In this example, the P is placed in a blue circle which is the universal symbol for public parking. There are several examples of this signage present today in the River Market District. The primary consideration when using a blue P is to make sure all blue P's look the same, have the same variation in color, and same fonts. Variety leads to confusion which results in patron frustration.

## Branding Example 1 - Trailblazer Signage



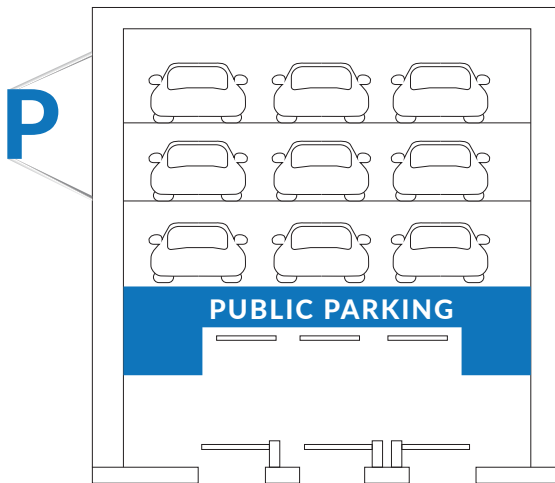
Public  
Parking  
Library



The use of the P for wayfinding and navigation should be clear and easy to understand for the motorist. This example of navigation (or trailblazer) signage uses a combination of information:

- The P on the top of the pole is a large and clear symbol for public parking. To distinguish it from other public parking p's, the circle is removed. This would also identify the p alongside the garage mounted signage (see below).
- The second sign on the pole identifies that the patron is navigating to public parking and identifies the actual parking location (the Library in this example)

## Branding Example 1 - Exterior Garage



This combination of branding at the garage uses a couple of elements:

- A large extruding P (similar to the trailblazer sign above) to help indicate the presence of public parking. Ideally this sign would be illuminated for easy visibility at night.
- The entrance uses the branded colors and fonts to continue the consistent navigation process for the motorist.

## Branding Example 2 - Multi-Color “P” Parking Logo



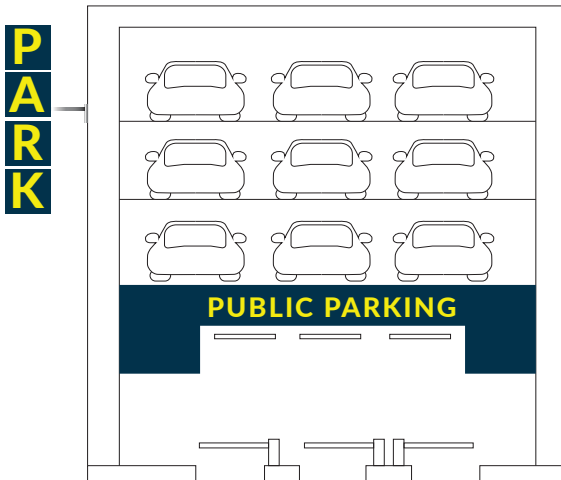
This variation on the traditional p uses the same circular logo but a darker blue than the traditional public parking blue and a yellow accent color that is intended to stand out amongst typical signage clutter in a an urban setting.

## Branding Example 2 - Trailblazer Signage



This example of trailblazer signage uses the blue/yellow p from above and is structured more like a typical wayfinding sign. The distinct differences that help this sign stand out from typical street and MUTCD signage is the use of chevrons instead of arrows and the additional information indicating the navigation towards “Public Parking” and the inclusion of a website on the bottom (in this example, LRPARK.com for Little Rock Park).

## Branding Example 2 - Exterior Garage



This combination of branding at the garage uses a couple of elements:

- A large color-themed exterior sign spelling out the word PARK, indicating the presence of public parking. Ideally this sign would be illuminated for easy visibility at night.
- The entrance uses the branded colors and fonts to continue the consistent navigation process for the motorist.

## Branding Example 3 - Multi-Color “P” Parking Logo



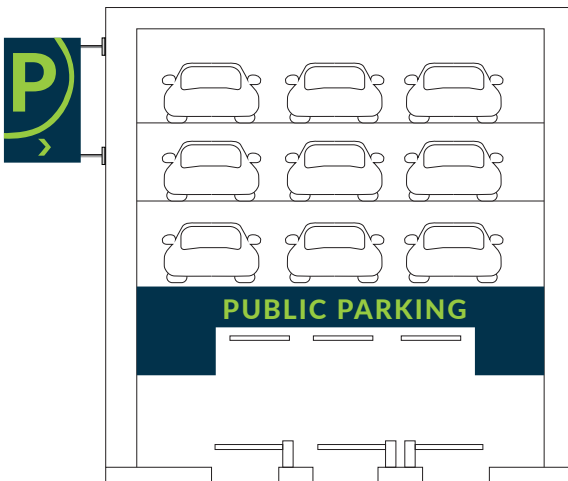
Similar to the previous example, this p uses a darker blue background with a green accent color similar to the ParkMobile signage and materials. The intent here is to simplify messaging between parking and payment signage and create uniformity and consistency for the patron.

## Branding Example 3 - Trailblazer Signage



Similar to the previous example, this trailblazer signage uses a typical size and shape, but uses a non-traditional display for the information. The p is offset to stand out from other parking signs and instead of traditional arrows, the use of chevrons helps the sign separate from other street clutter.

## Branding Example 3 - Exterior Garage



This combination of branding at the garage uses a couple of elements:

- A large exterior sign that is very similar in nature to the trailblazer signage to help the motorist complete the navigation process. Ideally this sign would be illuminated for easy visibility at night.
- The entrance uses the branded colors and fonts to continue the consistent navigation process for the motorist.

## Navigation and Wayfinding

Once a framework for establishing a public parking system is in place, navigation and wayfinding strategies are critical for guiding motorists to designated public parking locations. Proper navigation elements act as “breadcrumbs,” leading drivers from their home, through the street system, and to a final parking location that best matches their district destination.

Numerous navigation elements could be considered, ranging from static signage to technologically advanced systems that communicate route and destination information. Establishing a connected system comprising multiple elements will best support balanced use of the parking system, enhancing the overall parking experience. One of the key takeaways from the existing conditions review was that there is a general lack of understanding of where available parking is within the public (and private) parking system. This is typically a symptom of a poor navigation system and lack of information related to the system. There are several steps LRCVB and the City should take to remedy this issue.

## Improved Wayfinding and Directional Signage

Currently, the wayfinding for parking in the River Market District includes a number of varied parking signs, including pole mounted, A-frame, and temporary signage. To improve this approach to wayfinding, the City should develop a branded signage package that corresponds to a larger program branding effort. The City should invest in branded signs for the program that help communicate the following: presence of public parking, direction to public parking, and destinations associated with specific public parking facilities.

The general rule is to start with directional signage that navigates drivers to destinations, then associated parking signage that defines where to park relative to the destination. Simple and direct branded signage should be used to navigate motorists throughout the system. The addition of real-time parking applications (or coordination with legacy mapping platforms) would serve as an ideal way to communicate availability. The ParkMobile app likely has some of these characteristics and can be leveraged as it is implemented throughout the parking system.

## Implement Marketing and Messaging Campaigns

The approach to branding should include expanded marketing and education efforts to ensure that message and purpose is properly and consistently represented to yield the greatest benefit. The City and LRCVB (along with the parking collaborative participants and the parking advisory committee) should work together to develop appropriate messaging, ensuring that the messages for the on-street and off-street programs are consistent and education efforts strive to balance the overall parking system.

The basic tenets of the marketing and education campaign are to accomplish the following:

- Communicate the new program elements and their benefits to users
- Communicate how to use the program and elements intended for “ease of use”
- Communicate where and when to park for different scenarios
- Communicate how to use technology
- Communicate how to find parking through wayfinding and navigation elements

In combination with the branded signage elements, LRCVB and the City should consider various media (print, television, radio, and social) marketing campaigns to educate users. The same branding developed for the wayfinding system can then be used on marketing and advertising campaigns to create consistency throughout the system for users. LRCVB and the City should review the Toronto Green P radio marketing platform that aimed to direct drivers during commute times to branded city parking facilities. As part of the program consolidation elements, LRCVB and the City should consider implementing a media specialist into the parking program to support messaging.



Example program marketing elements, Tempe, AZ

## Parking Space Prioritization

As an offshoot of parking policies aligned more intently with the needs of the community and a data-driven program, the creation of priorities for parking space allocation will be critical to managing the overall experience within the parking system. Parking spaces – both on- and off-street – nearest to the primary destinations in the River Market District should be prioritized through pricing, policy, and regulations to ensure turnover and distribution of demands to support the needs of businesses and the community. This should include the introduction of elevated pricing structures for proximate on-street parking spaces near the park and the market, as well as time regulation and pricing policies to incentivize patrons to park a block or two further away to better balance access into the district.

### Benefits

- Better space allocation and distribution of demands
- Balance of short- and long-term parking needs
- Availability of parking spaces near primary destinations

### Challenges

- Increased frustrations for patrons after initial price changes
- Communication challenges during rollout and subsequent adjustments

### Required Code Changes

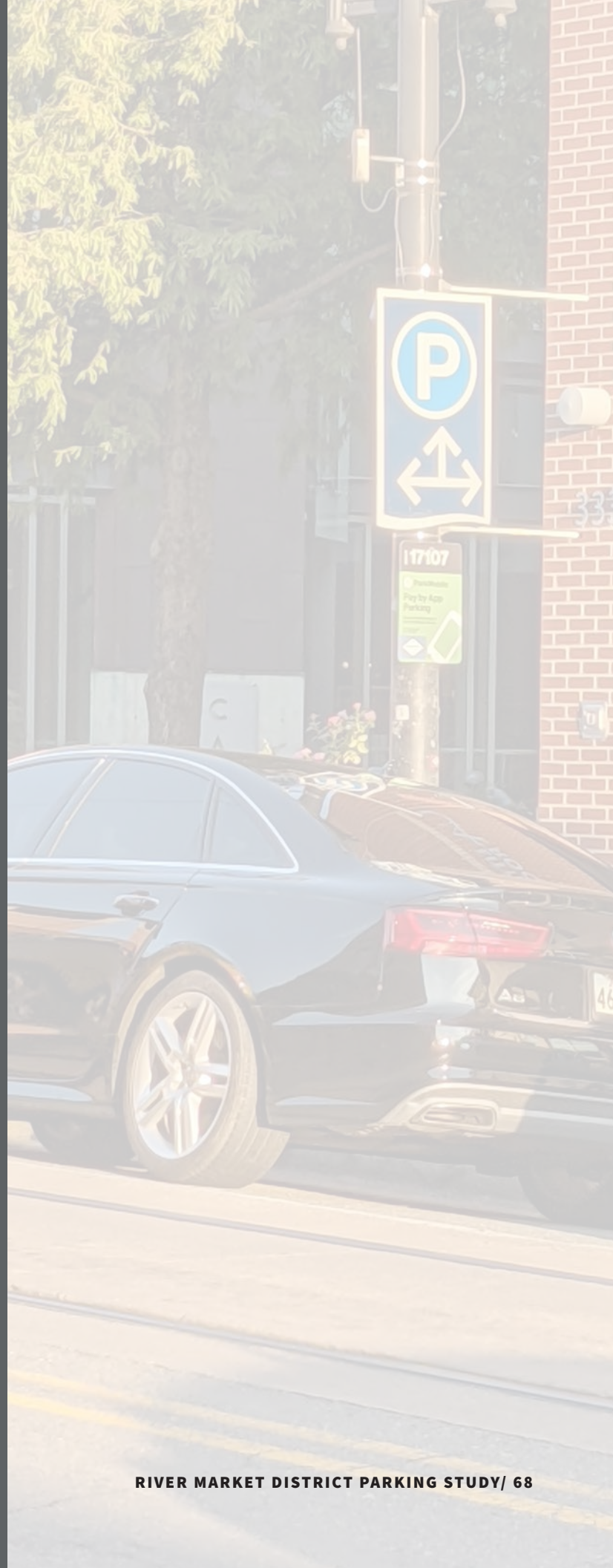
- None

### Performance Metrics

- Parking occupancy
- Parking duration
- Revenue
- Customer/business satisfaction

### Key Partners

- City/LRCVB
- Area stakeholders
- Rock Region Metro



The current parking system in the River Market District does not distinguish or prioritize parking in any real way. The closest exception to this is a slightly elevated price for on-street parking in the core of the River Market District (\$1.25 per hour at the kiosks versus \$1 per hour at non-credit accepting parking meters). This discrepancy is not enough to dissuade parkers from driving directly into the heart of the district to find street parking directly adjacent to their destination. Additionally, the off-street parking in the heart of the district is also priced higher than on-street parking, further incentivizing the decision to cruise for on-street parking, causing congestion on-street and frustration on the part of patrons.

In order to alleviate these challenges, the City and LRCVB should consider the implementation of a prioritized parking area that reflects the heightened demands for parking in the heart of the River Market District. The map below provides a depiction of that area. The principles of data-driven pricing and policies outlined in other sections of this toolbox should be applied in this area to help re-distribute demands throughout the district, with the intended outcome of balancing parking demands, reducing congestion, and improving the overall utilization of the parking system.

## Parking Prioritization Zone



The initial boundaries of this area should include the Riverfront Park to the north, the I-30 bridge to the east, 2nd Street to the south, and Scott Street to the west. Over time, the City and LRCVB should evaluate these boundaries and the policies informing prioritization to make adjustments as demand and activity dictate.

## Considerations for the Prioritized Parking Area

The following parking management policies and practices should be considered in this area (and beyond as demand dictates):

- On-street prices should be set higher than off-street hourly prices to promote movement of demands into the garages or outside of the prioritized area
- The parking rates and operational practices at the Ottenheimer lots should be adjusted so that prices are based on hourly usage and set to be as high (or higher) than the on-street pricing in the prioritized parking area
- Employee parking areas should be established (see the Employee Parking section of this toolbox for specifics) to provide parking areas outside of the prioritized parking area
- Parking enforcement and pricing should be extended until 6 pm and on Saturdays (within this area at a minimum)

Mobility options and potential mobility hubs (see the Mobility section of this toolbox for more details) should be coordinated outside of the prioritized parking area to promote options for connectivity and access.

## Employee Parking Programs

One of the primary efforts for defining a prioritization within the parking system is identifying areas that support long-term parking needs for one of the more critical user groups within the River Market District – area employees. As the system is currently configured, the most prioritized parking areas for hospitality workers is on-street parking near their place of work because of the relatively low (or no) cost.

To support the prioritization of those spaces as short-term, turnover-driven parking to support access to business, special areas for employee parking should be established within the existing system. LRCVB has already defined rooftop parking areas in the River Market garage. Longer term, there should be consideration to creating employee parking areas in existing/proposed surface lots on the fringes of the district.

### Benefits

- Re-allocation of short-term on-street parking spaces for priority use
- Creation of dedicated employee parking at low (or no) cost
- Guaranteed access to parking for employees
- Employees can be offered discounted parking on an as-needed basis
- Turnover of parking spaces

### Challenges

- Creating employee buy-in and support
- Enforcement of both prioritized and employee parking spaces

### Required Code Changes

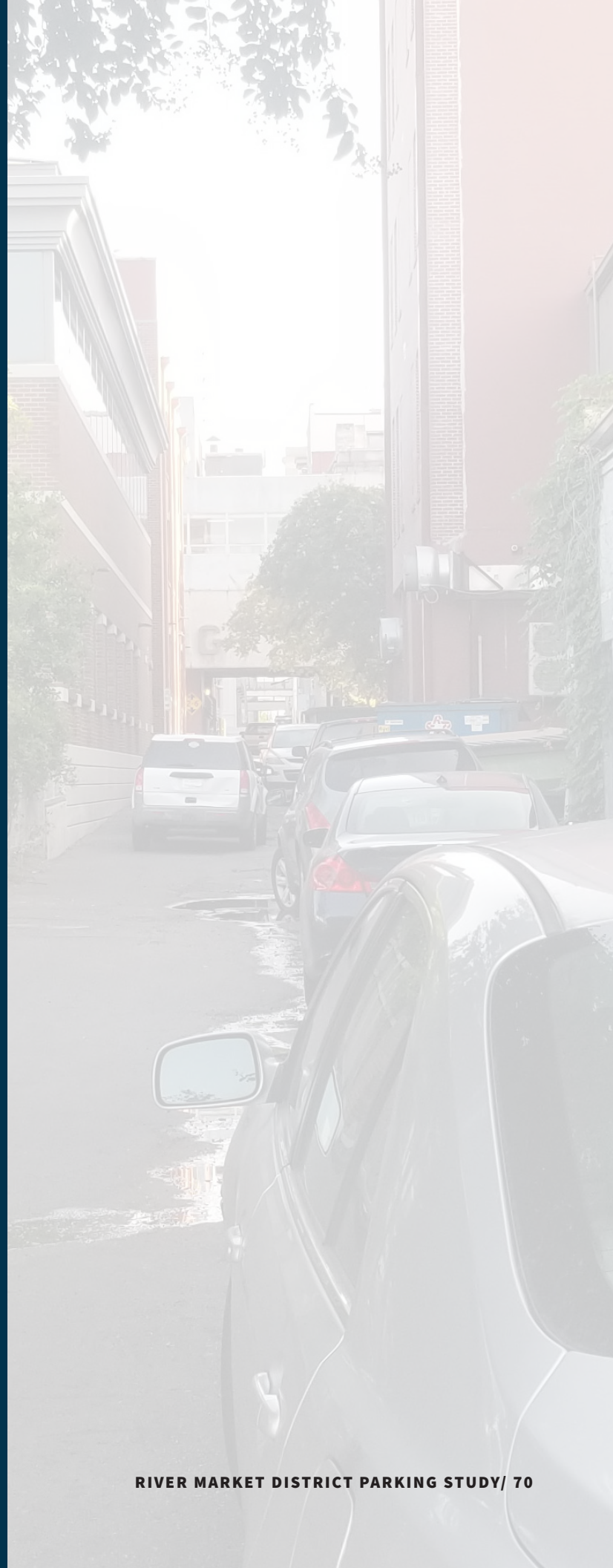
- None

### Performance Metrics

- Utilization, both on-street and in employee parking areas
- Turnover
- Employee satisfaction

### Key Partners

- Business community



The creation of prioritized parking areas (described in the previous section) has the intended effects of making close-in parking more available for patrons and creating effective turnover to provide more access to district businesses. In order for that strategy to be effective, parkers with longer term needs have to also be considered within the system. In the River Market District, that means there needs to be an equitable and efficient solution for employees. That begins with defining locations and practices for providing employee parking to incentivize moving them out of higher priority on-street spaces.

Two very specific considerations with the implementation of an employee parking program include:

- In order build a successful program, collaboration with the business community will be critical. LRCVB and the City should proactively engage downtown business owners throughout the planning process and make a commitment to share ongoing data results once launching the program.
- It is important that the program be closely monitored so policies, locations, and prices can be optimized. Consistent enforcement and ongoing education and outreach will be critical for the success of this program in order to encourage compliance and measure the true impact of policies.

## Location Considerations

Currently, there aren't many dedicated options for employees to find parking. Recently, the LRCVB began to provide reduced price parking on the roof of the River Market parking garage. While the program isn't highly utilized now, as more demand begins to return post-pandemic, this program could see an uptick in usage to support employee needs.

Beyond this approach, the LRCVB and the City could also identify future opportunities for employee parking, including one of the potential new parking locations identified in the Parking Capacity section. The potential repurposing of the Marriott valet lot after the completion of the proposed new parking structure at Louisiana Street and 2nd Street could allow for a specific designation of that lot as employee parking. Given its walking distance to the core of the district, it is not likely ideal for patrons. However, with good connectivity (employee shuttles, ride coordination, etc.) it could make an ideal location for employees of district area businesses.

## Permit/Pricing Considerations

Once LRCVB and the City decide to implement an employee parking program, there should be some specific considerations for establishing permits and defining a price for the program. Those considerations include:

<b>Permit Pricing</b>	Permits should ideally be provided on a monthly basis at an affordable rate (e.g. \$5.00 per month). It is important for permit holders to understand the value of parking, especially if a permit will guarantee an easy parking experience. If given away for free, there will be less flexibility for using rates to influence behavior, such as pricing lower demand locations at a more affordable rate.
<b>Permit Eligibility</b>	Applicants should be required to provide proof of employment to qualify for a permit such as a payment stub or letter from their employer. Employers should also have the option to purchase permits in bulk for all of their employees in order to streamline the process.
<b>Employer Management Options</b>	The City and LRCVB should establish a web portal that allows employers/employees to manage their parking permits, including the ability to apply for permits, upload necessary documentation, and add/change license plates associated with permits. The program can apply expiration dates to permits to ensure that they are not abused after an employee leaves a position or changes jobs.



### Enforcement/ Operations Considerations

A permit should be required to park in permit areas during designated hours such as 8 am until 5 pm. This could be extended into the evening to accommodate evening shift employees, or shared parking locations could be pursued to offer separate evening permit parking locations. If possible, separate daytime and evening permit parking areas can be more effective because the operating hours for each permit type may overlap. For example, a portion of evening shift employees may arrive in the district at 4 pm. before most daytime employees depart. Separate locations for daytime and evening employee parking will provide the most flexibility to adjust operating times as needed based on demand.

### Other Considerations

LPR equipment (as discussed in the Technology section) can be used to establish a license plate based permit system that not only provides improved efficiencies for enforcement efforts, but also reduces inconvenience and confusion for permit holders related to lost or stolen placards or the need to physically pick up new stickers or tags on a regular basis. Permit holders may even update their registration information if they are using a temporary vehicle through an online portal. This information can then be updated almost immediately with enforcement officers in the field, often leading to a reduction in contested citations, increased customer satisfaction, and more current records for active permit holders, with employees renewing their own permits.

### Chattanooga, TN

The City of Chattanooga and its parking/transit agency (CARTA) developed an employee parking program for employees within the hospitality industry (hotels, restaurants, bars, retail). The program was implemented in 2012 and initially provided five locations for employees to purchase reduced price permits. Over the past decade, the program has been amended to account for employee demands and currently includes rooftop parking options on CARTA's two primary parking garages. The parking passes available on the rooftop are available at a 50% discount on normal permit prices. Additionally, CARTA runs a hospitality shuttle that connects these two garages to the primary entertainment districts in the community.

### Charleston, SC

In 2018, the City of Charleston made the decision to raise on-street parking prices and extend enforcement hours into the early evening to promote turnover on City streets, especially in the entertainment districts in the community. The changes made it more difficult for employees in the hospitality industry to find affordable parking near their places of employment. In response, the City along with the local transit agency (CARTA) implemented a park and ride location in the northern portion of the downtown community. The park and ride costs \$5 per day for parking and the shuttle route is free for anyone to utilize. The shuttle runs from 6am to 3am and connects to eight stops within the various entertainment districts within the Downtown Charleston area.

## Curbside Management

Over the past decade there has been a momentum change relative to how curb space is allocated and positioned to serve the varied needs of a community. What was once the domain of the parked car has now become a much more active resource for businesses, commerce, and mobility. This includes dedicating space for loading (both commercial and passenger), transit, micro-mobility, and active non-vehicular use. This has been expanded during the pandemic as new uses like streeteries, curbside restaurant pickup, and active pedestrian space have been introduced at the curb.

For the River Market District, the primary curbside environment that is ripe for re-evaluation is along President Clinton Avenue. That commercial corridor is home to numerous destinations that draw people to the district. By introducing alternative uses at the curb, the City and LRCVB can evaluate the opportunity for that corridor to better serve the diverse needs of the district. Conducting pilot evaluations of curbside structure changes could help to prove the value of this street as an attraction within the community.

### Benefits

- Promotion of alternative modes of travel and alternative uses in the street
- Ability to expand business functionality outside of brick and mortar
- Cultivation of non-traditional event settings as a means of attracting new district visitors
- Reductions in congestion related to streetcar blockages and cruising

### Challenges

- Business owner buy-in for changes to parking spaces
- Reduction and redistribution of vehicular traffic
- Maintaining streetcar access throughout corridor

### Required Code Changes

- Section 32 (as described in this section)

### Performance Metrics

- Parking occupancy
- Sales tax revenue generation for businesses/ community
- Business owner support
- Community support

### Key Partners

- Business Community
- Rock Region Metro
- Police

With the rise of new mobility and parking trends, curb space is arguably the most important and precious resource in our cities today. Demand for curb space is increasing as cities work to balance transit demand, on-street parking, Transportation Network Company (TNC) passenger loading/unloading, truck loading/unloading, personal deliveries (e.g. package delivery such as UPS, FedEx, and Amazon, and food delivery services such as GrubHub), dockless on-demand mobility devices such as bikes and scooters, emergency services, pedestrian streetscape amenities, and other users. This demand has been further stretched over the course of the pandemic as curb space has been allocated for new uses like restaurant pick-up/drop-off, streeteries, slow streets, and more active human-scale use of the curb.

All of these users want free and unimpeded access to curb space, and like other public resources, cities must operate and manage the curb effectively to provide access for a variety of users, while optimizing overall public benefit. The core tenets of an effective flexible and dynamic modern-day curb lane management program are:

- The program prioritizes and manages often competing curb uses by location, day of week, type of user, and time of day compared to the relative value each of them brings
- The program articulates objectives for different curb uses and different parts of the city (i.e. mobility/SOV reduction, parking occupancy goals, revenue, maximization of passenger curb access, etc.)
- The program includes a comprehensive inventory of curb uses across the city
- The program outlines clearly when, where, and how to implement changes to curb use designations
- The program includes a process for monitoring the use of the curb with technology (LPR, space sensors, Bluetooth, parking transactions, etc.) for enforcement, effective curb pricing and payment, curb demand management, and data analytics

The following sections describe some of the improvements the City and LRCVB should strive to develop in relation to its curb lane management program.

## Understand the Curb Lane Inventory

One of the first critical steps to efficient curb management is gaining the knowledge of what is actually occurring at the curb. The on-street parking and curbside inventory within the district (and throughout the Downtown) are somewhat limited and have not been updated in some time. The City should identify resources and opportunities to digitize the curbside environment to better understand space allocation and overall structure of the curb today. There are a number of companies that provide easy handheld digitization tools that also have deeper curbside management back-ends that support space allocation decisions and curbside policy development. As examples, COORD's Collector app and Populus's Curb Manager tools provide robust tools for advanced curb digitization and management.

The smartphone-based application allows staff to walk the curb side and quickly input information about curb use, restriction, and signage. That information would then be uploaded into cloud-based mapping for use by the City. Once uploaded, the information becomes an extremely valuable resource for communication, decision-making, and management of the curb. The City should explore the use of these applications to better define how the Little Rock curbside is structured today and better manage how that structure changes over time.

## Develop Curb Lane Priorities

The City and LRCVB will need to establish prioritization for curb lanes based on surrounding context and user need. There will very likely be a need for differing prioritizations in differing areas. Advanced communities use varied priority sets to define how to allocate curb space based on setting. Those priorities are used to clearly communicate how decisions are made related to curb space use.

The City and LRCVB (in conjunction with the members of the parking collaborative) should develop a similar set of priorities for the curb space in the River Market District and throughout the Little Rock community.



## Identify Optimal Usage of Curb Space

Once the City and LRCVB have established priorities, it should use those to guide decisions about how to implement changes to the curb space. The definition and allocation of curb space should be data-driven (using many of the tools outlined in the Data-Driven Policies section). Using realistic data about the context of the curb space being modified, the City and LRCVB will likely follow the following process when identifying changes:

- Refer to the curb lane inventory to determine what's in place today
- Identify how the adjacent land uses need to use the curb and how they might react to changes
- Identify alternative curb lane configurations or proposed changes, using prioritization, stakeholder input, and data analytics to define preferred solutions
- Implement preferred treatments
- Monitor data and determine refinements to achieve goals

As the City and LRCVB follow this process, the third step will likely be where most of the time is spent defining approaches for changing curb space. There are typically three general approaches to changing curb space.

### Clustering Uses

This approach seeks to relocate uses so that there is more clarity and efficiency in use. For example, on blocks where parking and loading spaces are intermingled, defining who can use which space and promoting efficient use of space is difficult without significant signage. And in the case of commercial loading, fragmented spaces may limit access to only vehicles that can fit in a singular parking space. Converting uses aims to structure the uses more predictably. The City of Charlotte took this approach with their curb lane program and were able to increase parking capacity by locating it center block and placing accessory uses at the ends of street blocks. The result was an easier parking experience as well as a more predictable and accessible environment for loading vehicles.

### Modifying Uses

This approach simply converts the existing use to something that is more appropriate based on the surrounding context and prioritization. For example, in restaurant and entertainment areas, on-street parking might be removed for passenger loading to support rideshare trips in the area. In areas where on-street parking demands are lowered, this is a good option to promote alternative mode usage to access destination areas.

### Defining Flexible Uses

This approach combines the clustering and modifying approaches and creates distinct uses by differing times of day or during different demand periods. Taking this approach requires a more comprehensive approach to communication (and likely technology) but will likely serve the most users throughout the day. A simplistic example is to have a commercial loading space transition to a passenger loading space based on the time of day. This requires the least amount of impact to parkers and takes advantage of space availability for curb uses when they are needed the most. In extreme situations, entire blocks convert based on the time of day. Washington DC has piloted the conversion of daytime parking to nighttime passenger loading to accommodate higher volumes of rideshare services at night.

## Monitoring Curb Space Use

As curb changes are implemented in the River Market District (and beyond into the greater Little Rock community), it will be imperative that the City monitor how changes along the curb impact not only the curb but also the adjacent street space, pedestrian access, and business success. The analysis of curb use will be driven by much of the data defined in the Data Driven Policies section. The City and LRCVB should define the goal of the analysis and use the necessary performance metrics to support the evaluation.

Recent research has tried to indicate that there can be distinct equations for evaluating curb performance. While the intent of that research is positive, it's solely focused on activity along the curb. The City should use activity (parking transactions, transit loading, passenger loading, etc.) as a metric. But of equal importance are concepts like business support (from parked cars), availability of space from turnover, balanced mode share and community access, and street performance.



## Curb Lane Management Technology

Current technologies are quickly being adapted to help support the rapid move to flexible and dynamic curb space. Unfortunately, no one technology has entered the market that is ready to support completely dynamic curbs. Parking meters can be adapted to support changing rates or access configurations. But signage and communication are not as readily available to communicate flexible space changes (however, recent improvements indicate these technologies are on the horizon). The City and LRCVB should work with their vendors to understand what technology is available to support more efficient curb management. The City and LRCVB should inquire whether current or proposed mobile pay or parking meter vendors have the capability to provide real-time information about curb use that is operated in a dynamic environment.

## Specific Curb Lane Considerations

The previous sections all described curb lane management program strategies. The following sub sections all define some considerations for the River Market District. The Institute of Transportation Engineers (ITE) recently released a technical resource, the Curbside Management Practitioners Guide. These considerations are defined based on a literature review of that document.

## Creating Context-Sensitive Curb Policies

As curb policies are created, implemented, and adapted for various parts of the River Market District, some unique elements could be considered to enhance the context of the district, including:

- Allowing parklets and street cafes to help support activation and/or enhancement of the pedestrian environment. These pedestrian-driven spaces in the curb environment help to create more activity areas, enrich the curbside experience for patrons, and create more unique landscaping or aesthetics in high-intensity commercial corridors.
- Allowing micromobility access at the curb, including bike parking or scooter parking intended to corral these uses into a defined environment, provide a more structured approach to parking, and promote alternative forms of access into the districts.
- Integration of pedestrian and cycling concepts into the curbside environment to better mix parking and mobility uses, protect and enhance mobility trips, and create a more connected environment.

## Asset Light Concepts

Many communities are now reversing their plans of implementing hundreds or thousands of parking meters, and instead using a mixture of mobile payment platforms with a limited number of meters accepting card, cash and coin. This concept, known as “asset light,” is reducing capital expenditures and ongoing maintenance costs, while still providing the same level of customer service as a meter heavy system. The City has made investments in recent years that are putting the parking system on the path to asset light and should continue that process.

The asset light approach in the River Market District would likely include the following components:

1. Fully leverage the introduction of the ParkMobile pay-by-phone platform to promote a touch free payment environment, rather than relying on the traditional use of meters or kiosks. Ideally this payment platform should be available throughout the district, including both on-street and off-street parking assets. The consistency amongst the program will help with quicker integration into the program.
2. For new on-street paid parking areas, the City should promote a fully mobile payment option by not introducing new meter technologies in those areas. For those patrons that prefer to pay by card (or to a lesser extent cash), the City could strategically locate payment kiosks on primary pedestrian paths and near primary district destinations.
3. These kiosks would only be located every two or three blocks to minimize streetside impacts and investments by the City (in fact, the City should explore leasing kiosks as defined in the Technology section of this toolbox).
4. Payment kiosks should be configured for pay-by-license plate, removing the need for a walk-back (pay-and-display) or space numbering for all spaces. In combination with the pay-by-phone system and LPR based enforcement, this system should provide the City with the most efficient approach to payment and management.



Traditional Configuration  
8 kiosks at \$7,000 per kiosk  
Total capital costs: \$56,000



Asset Light Configuration  
4 kiosks at \$7,000 per kiosk  
Total capital costs: \$28,000



Extreme Asset Light Configuration  
2 kiosks at \$7,000 per kiosk  
Total capital costs: \$14,000

This asset light approach will provide costs savings initially and into the future, considering the lessened need for expensive metering technology and ongoing collections and maintenance costs. The graphics below depict the configuration and the potential cost savings.

## Adapting Urban Loading Practices

In high density congested urban cores, the introduction of freight or commercial loading movements can often lead to intense competition for curb space and rapidly increasing congestion. A few of the concepts outlined in the practitioner's guide may be applicable in the River Market District, including:

<b>Monetized Freight Zones</b>	Paid commercial loading areas can help to reduce the duration loading vehicles stay in a space and increase the availability of spaces. When coupled with mobile pay and real-time availability applications, it can increase the predictability of the commercial loading exercise.
<b>Peak and Non-Peak Delivery Pricing</b>	Encouraging off-peak delivery by providing free or cheap access during non-peak periods. Conversely, peak period deliveries would be priced higher to discourage use during those periods. In cities that have implemented these programs, delivery drivers indicated that non-peak delivery movements were easier due to less congestion, faster travel, more abundant parking and less time for delivery activities.
<b>Delivery Vehicle Staging Zones</b>	Designating staging zones for delivery trucks to queue up before accessing available loading spaces can reduce congestion and occurrences of double parking. By combining this approach with commercial vehicle reservation systems and/or real-time availability, the City and LRCVB could manage the flow of delivery vehicles.
<b>Urban Consolidation Centers for Last Mile Delivery</b>	These centers create a centralized hub where packages are delivered before being consolidated into smaller delivery vehicles that reduce redundancy of vehicles and support more efficient goods movement in urban environments with less roadway capacity.
<b>Moving Loading to Side Streets</b>	Loading movements are much shorter duration than other curb movements and are often lower in the priority chain than parking or passenger movement. Because of this, some cities are moving loading spaces off of primary corridors and onto adjacent streets where demands might not be as high.

## Designate Curb Space for Passenger Loading

Curb space is at a premium in the River Market District, as it is in cities across the United States. A variety of often competing uses vie for space along the curb, including on-street parking, loading zones, TNCs, dockless on-demand personal mobility devices, and others. Flexible curb space management is critical to maximizing the efficiency and functionality of the curb to serve the adjacent land uses and prioritizing the right curb use at the right time of day.

For example, a curb zone located near popular restaurants and entertainment establishments that is on-street parking with low turnover during the day is best prioritized as a pick-up/drop-off area during the nighttime entertainment hours. Doing so facilitates greater access to the destinations along particular curbs by giving TNC vehicles access to curb space and reducing the need for these vehicles to stop in the line of traffic to pick-up and drop-off riders (thus helping to relieve congestion).

LRCVB and the City should partner directly with Uber and Lyft to identify and designate flexible curb zones in areas adjacent to commercial entertainment land uses: i.e. curb space that functions as on-street during the day and TNC pick-up/drop-off areas at night when demand spikes. LRCVB and the City will need to initiate discussions directly with Uber and Lyft through the establishment of a business account. LRCVB and the City will then work with an assigned business representative to set up the terms of the arrangement.

## Living Previews

The concept of a Living Preview (essentially a pilot test) is to temporarily install some or all of a curb treatment, even if it is only done with moveable barriers or temporary signage. The living preview allows the surrounding businesses, residents, and patrons to interact with a change before it is permanent. The test also allows for real time collection of data associated with the treatment to determine refinements needed before permanent adoption. Living previews will need initial start up time to help the community orient and adapt to the changes.

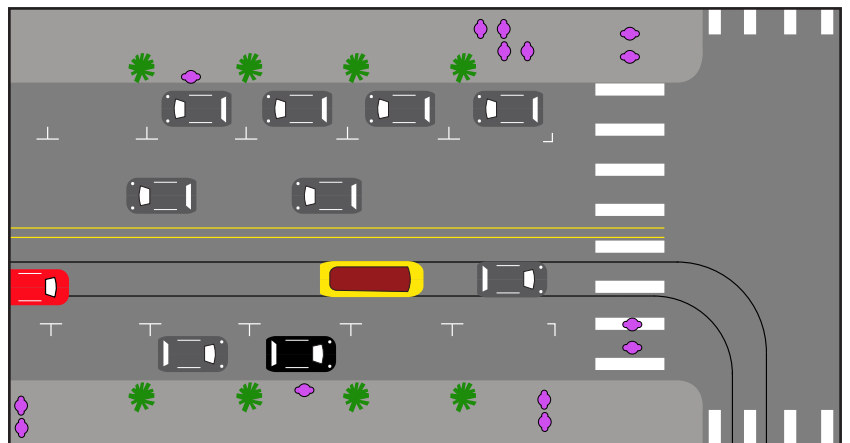
Within the River Market District, there is a valuable opportunity to use living previews today to evaluate the implementation of new curb lane structures along President Clinton Avenue to better meet the needs of patrons, businesses, and that transportation system at large. The street is one of the most traversed by all modes of transportation and is currently a source of great contention around congestion, active space for businesses, and street amenities for non-automotive modes of transportation.

The use of living previews along sections of President Clinton Avenue could have the opportunity to leverage critical space within the right-of-way to overcome these challenges, activate the street network, and support the destination feel in the River Market District. Below are some examples of how this living preview could materialize in the district.

### President Clinton Avenue Today

President Clinton Avenue is a two-lane roadway with parking lanes on both sides of the roadway. The eastbound travel lane also shares the roadway with the Rock Region Metro streetcar. The tracks and the on-street parking lane are often a point of conflict, with slightly mis-parked vehicles affecting the streetcars' ability to traverse the street. The sidewalks along President Clinton are not extremely wide and have to accommodate pedestrians, non-motorized travel, and business amenities (advertising, street furniture, etc.) all in a minimized right-of-way.

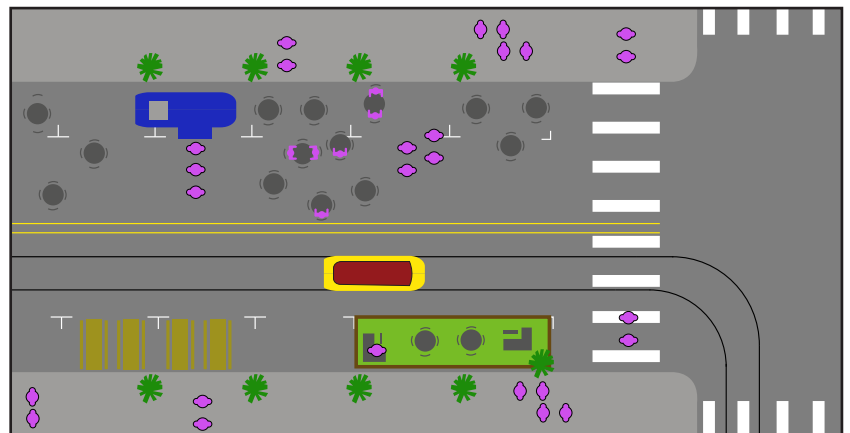
The two blocks of President Clinton Avenue between La Harpe Boulevard and River Market Avenue currently have 41 paid metered parking spaces.



### Temporary Street Closures on President Clinton Avenue

One of the primary living previews that the City and LRCVB could consider is the introduction of temporary street closures along the street between La Harpe Boulevard and River Market Avenue to create more active street space for businesses and patrons. A few examples of active uses that could be included are:

- Temporary parklets to create active curbside amenities
- Streeteries and tables to support outside dining
- Food trucks and active retail
- Music and special events



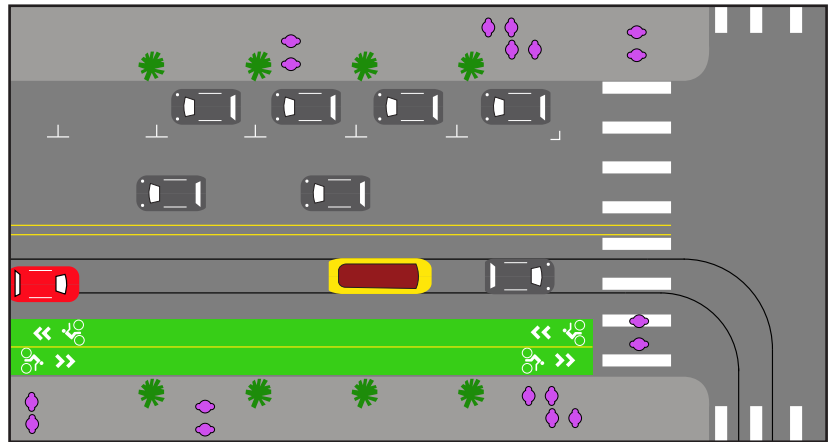
These types of temporary closures can be accomplished in the short term with barricades. In the long term, installation of removable bollards could provide a more permanent and flexible solution.





### Non-Automotive Considerations

Another consideration for street activation for non-automotive uses would be the implementation of curbside bicycle lanes, with an emphasis on locating those amenities on the south side of President Clinton Avenue. With the current conflicts between parked cars and the streetcar, the removal of parking and addition of a two-way cycle track would provide relief from the conflict and a more defined urban bicycle connection in an area that is well known for its cycling amenities and connections.



A temporary cycle track could be tested using a simple combination of cones or temporary bollards and paint. Some considerations will need to be made for the areas that have sidewalk bulb outs (like near Cache). The removal of parking on the south side of President Clinton Avenue would impact 20 parking spaces.

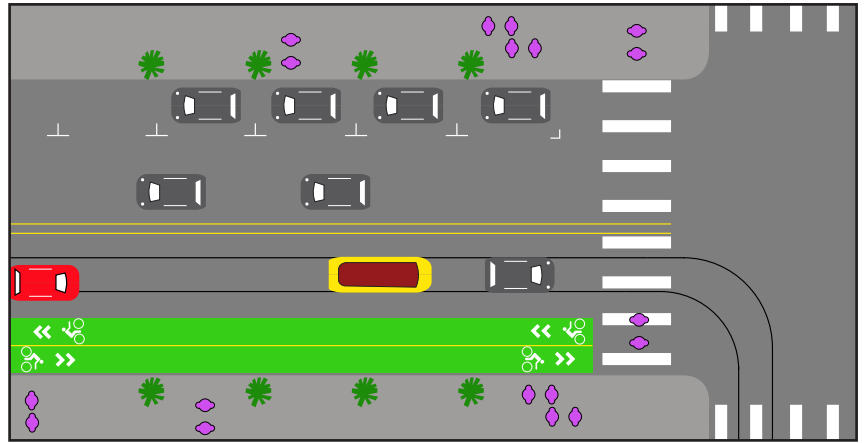


## Closure & Non-Automotive Considerations

Even with the introduction of a two-way cycle track in the living preview, the City and LRCVB could still temporarily (or permanently) conduct street closures without impacts to the bicycle lanes along President Clinton Avenue. In the event that there are potential pedestrian safety conflicts, the City could enact a dismount zone in the areas of street closure, requiring cyclists to walk their bicycles through the activity area.

The City and LRCVB should use upcoming events and Spring 2022 event periods to evaluate the impacts of a living preview on President Clinton Avenue. During events at the amphitheater or weekend Farmer's Market events, the street closure could be enacted to help improve and expand the areas available for patrons and area activation. During the life of this pilot period, the City and LRCVB should evaluate the following data points to determine steps toward more permanent changes along the curb:

- Parking demand impacts from the loss of parking on President Clinton Avenue
- Traffic volumes on adjacent streets from the re-distribution of traffic
- Increases in transit ridership or non-automotive modes of transportation
- Business owner and stakeholder input



# Parking Management

Implementation of a more focused parking management function that combines the on-street (City), public off-street (LRCVB, CALS), private off-street, and mobility (Rock Region Metro) functions into one collaborative decision-making entity would serve to improve overall operations and decision-making throughout the district (and beyond into the greater Little Rock community). This collaborative would be guided by an appointed River Market District parking committee. The intent of this collaborative would be to make better decisions about operations, policies, and investments. In the longer-term this collaborative should continue to be evaluated and could evolve into a more defined management structure, not only for the River Market District, but also the City of Little Rock as a whole.

## Benefits

- Better decision-making and operations
- More focused investment decisions
- Balanced demand across components of system

## Challenges

- Complete buy-in from all entities
- Investments in signage, branding, and marketing
- Revenue-based decision making instead of customer-driven

## Required Code Changes

- Adaptation of the Parking Authority code language to provide for implementation of the collaborative locally to the RMD

## Performance Metrics

- Parking demand balance (utilization of system components)
- Parking turnover/duration (on-street)

## Key Partners

- LRCVB
- City of Little Rock
- Central Arkansas Library System (CALS)
- Rock Region Metro
- Private parking operators
- District businesses



There is a need to establish a more consistent approach to parking management throughout the entire River Market District parking system, including on-street and off-street parking. Traditionally, this is accomplished through the establishment of a vertically aligned parking management structure, often led by the City or a downtown management entity. Because of the unique nature of the River Market District as both an entertainment district that attracts both local and non-local visitors and a growing residential and employment district serving the City of Little Rock, the traditional approach to parking management with one centralized controlling entity might not be the most optimal solution in the immediate future.

The River Market District parking system is currently managed by a combination of groups, each with slightly different approaches to parking management serving the needs of their customers. On-street assets are managed by the City of Little Rock, with a combination of regulations, pricing structures, and technologies throughout the district. The Little Rock Convention and Visitors Bureau (LRCVB) manages the majority of the off-street facilities within the district, with the primary goal of those facilities to serve the interests of the district as a destination for local, regional, and national interests. The remainder of the off-street system is managed by a number of different operators with varying user groups, signage, branding, price structures, rules, and regulations. This diverse ownership within the system lacks adequate coordination and generates frustration among district motorists attempting to find parking, which contributes to a negative impression of parking in the district as a whole.

In instances like this, a collaborative approach to management is often instituted with an acknowledgment that there are several entities that are engaged in the management of the parking system. The approach of the collaborative is to create a singular decision-making structure that begins to focus on how investments and operational changes influence each component of the system. The goal of the collaborative is to create a recognizable and consistent public parking system to enhance and simplify the parking experience for River Market District motorists.

The creation of a parking collaborative, made up of specific and willing parking facilities and operators working together, provides the platform to construct the perception of a consistent public parking system. The perception is built upon establishing consistency between parking facilities through common signage, standardized rate approaches, safety and maintenance standards, access standards, and centralized marketing and wayfinding efforts. These elements can create an identifiable public parking system that drivers easily and continuously identify and utilize. The introduction of the parking collaborative could provide the following benefits:

- Create the perception of a larger “public” parking system
- Improve customer experience within the district
- Improved perception of parking amongst district stakeholders
- Balance parking demands
- Improve parking occupancy
- Increased interest and activity in the River Market District
- Improved access to businesses through newly branded facilities

## Considerations for Inclusion in the Collaborative

The success of the parking collaborative will rely on the willingness of all members involved to work together towards the goal of creating a common public parking system. Part of that willingness is to establish criteria for inclusion that gives the varied facilities a more common and similar look and feel. Such criteria should be structured in a tiered system, allowing for specific standards and preferred conditions.

### Benefits to the Private Parking Market

To generate the commitment required of the private sector, the benefits of inclusion in the collaborative need to be defined and clearly communicated to potential parking operators. Benefits for participation can include:

- Higher transient occupancy and associated parking revenue
- Assistance with marketing and wayfinding
- Assistance with promotion and public relations
- Assistance with enforcement
- Web or app-based vehicle navigation

## Tier 1 Considerations - Specific Requirements

- **Available Public Parking** – facilities must have at least 50 spaces of transient parking available for public use. The intent is to use locations with enough capacity to support a wide variety of public demands.
- **Location** – facilities must be within two to three blocks of primary district destinations.
- **Cleanliness and Aesthetics** – facilities must be maintained and free of trash, clutter, and graffiti.
- **Maintenance/Lighting** – facilities must be compliant with lighting standards found in Little Rock Code of Ordinances.

## Tier 2 Considerations - Preferred Conditions

- **Hours of Operations** – facilities that are open during daytime, nighttime, and weekend activity periods would receive preference for inclusion.
- **Security** – facilities that have security staff or video monitoring and adequate lighting would receive preference for inclusion.
- **Parking Access and Revenue Control (PARCS) Technologies** – facilities must have technologies that accept credit/debit transactions.
- **Pay-by-Phone/Alternative Payment Options** – facilities that provide alternative payment options, such as pay-by-phone applications, would receive preference for inclusion.

This tiered system allows the most important factors for a cohesive parking system to be met, while additional options to further the success of the program are promoted and tested collectively between LRCVB, the City and the private operators.

## Managing the Parking Collaborative

LRCVB and the City of Little Rock will need to work collectively to ensure the parking collaborative is initiated successfully. Program management aspects will include off-street and on-street parking, as well as infrastructure and technology management, marketing and education, enforcement, and program administration. Each entity will oversee their designated area of the parking program, while communicating management collaboratively with the other parties, with a strong focus on enhancing the parking program and improving customer service to support a positive River Market District experience.

The following recommendations should be considered for the implementation of the parking collaborative:

### Create a Parking Advisory Committee

To manage the many moving parts and future initiatives of the overall parking program, a Parking Advisory Committee should be established. The committee should include representatives from the primary entities (LRCVB, the City, private parking operators) and River Market District businesses. Rock Region Metro should also be included in the committee structure to ensure that parking system decisions are consistent with goals of the district transit and mobility system.

The committee would be tasked with responsibilities related to managing, improving, and administering the parking system. The purpose of the committee is to work collaboratively to make decisions and provide guidance for the overall management of River Market District parking assets, with each member representing their aspect of the program. This multi-agency partnership is structured to allow for a system of checks and balances to ensure that parking is managed in a way that aligns with fundamental objectives of the parking program — to support a positive parking experience and ultimately promote the River Market District as a prime destination.



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### **Funding the Initial Phases of the Parking Collaborative**

Initial phases of funding for the collaborative would likely need to be a joint responsibility of the LRCVB and City. This funding would be to support marketing, branding and wayfinding efforts. As the program is established and the collaborative can measure and communicate success, it can establish a funding stream that is either a function of:

- Public parking revenues that are intended to be re-invested back in the River Market District currently
- An assessment on private businesses and participants that contributes to the funding stream for marketing, signage, wayfinding, and technology investments



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### **Staff Support for the Parking Collaborative**

In the initial phases, participants will need to partner to provide appropriate staff power to contribute to the collaborative. As the program is established and the collaborative can measure and communicate success, it should consider the following positions to help further the needs of the district and parking system:

- Parking Director – a position that helps to orient the components and participants in the collaborative towards the outlined goals of the committee
- Technology/data liaison – a position that helps to compile and assess data for decision-making purposes, as well as to help identify appropriate technology integrations amongst participants
- Marketing liaison – a position that helps to craft and distribute messaging for the program through the use of branding, wayfinding, and multi-media platforms

## **Memphis, TN**

The Downtown Memphis Mobility Authority is a function of the Downtown Memphis Commission. It was previously known as the Downtown Parking Authority but was re-branded after a 2019 parking evaluation that concluded that the mission of the program should reach a broader target of connecting both the parking and transportation system for more effective management of the downtown customer experience. The authority is governed by an appointed board of citizens and stakeholders whose mission is to be the convener of key stakeholders and advocate for mobility and parking improvements in Downtown Memphis while maintaining attention to ensuring adequate parking for current use and to support a growing Downtown.

The authority uses a collaborative model that includes input from the City (on-street parking), the downtown organization (public off-street parking management), and the private sector (additional public parking). The authority and the downtown commission contract with private parking companies for day-to-day operations of the public parking system, which includes eight public parking facilities. Beyond those eight facilities, the authority partners with the private sector to include more privately-owned parking into the public system.

Beyond the day-to-day management of the public parking system, the authority also assists with strategic planning for existing and future parking facilities, issues bonds for construction or acquisition of additional parking facilities, and performs data-driven analytics to inform members of the collaborative about how to adjust policies and practices for the parking system. This includes providing guidance to on-street parking policies and rates with the City of Memphis, a key partner in the collaborative effort.

## Tempe, AZ

The Tempe, AZ parking program is currently housed within the Downtown Tempe Authority, a business improvement district (BID) in the community. The program includes on-street parking and enforcement, publicly owned off-street parking, and a variety of privately-owned parking facilities used for public parking. The program has been recognized on multiple occasions as an award-winning program by both the International Downtown Association and the International Parking and Mobility Institute.

Before the current iteration of the program was established, the program began as a parking collaborative between the City, the BID, and a number of private parking operators. The structure of that original collaborative program included:

- In the mid-1990's, Downtown Tempe was in an economic downturn with regard to retail, very few downtown residents and an office market that had yet to develop. Restaurants and bars were the only thriving segment outside of Arizona State University. Parking was largely fragmented and designed to serve private interests within the community.
- The program was created with the idea of promoting all parking in the downtown district in the same manner, presenting a unified parking public program through multiple property owners and parking management firms. To be included in the program each parking operation had to agree to the following items:
  - Agree to use the ParkiT signage/branding provided by DTA
  - Agree to offer all customers the first hour of parking free
  - Agree to accept DTA created validations. The validations were sold to downtown businesses at a 50% discount and subsidized by the DTA. All participating parking operators were reimbursed at full face value.
  - DTA provided enhanced marketing to promote the parking program which included mainly printed materials and signage at the time but later included online promotions.
- At the time many shared parking agreements and parking easement agreements were being created for buildings in need of parking that did not have parking. The DTA was able to look across all facilities and work closely with all owners/operators to solidify these agreements which solved building owners' issues of needing parking and parking operators' needs of filling unused spaces. Prior to implementing the collaborative, there was a perceived parking shortage. By creating a more holistic public parking system and focusing on shared usage it was determined that there was not a shortage, allowing for more focus on economic investment, rather than parking investment.

The program continued in this fashion for a number of years until local property owners began selling to larger out of state companies and REITS. These companies started developing buildings, hotels and residential towers. The need to be part of the cooperative was no longer a necessity. The first hour free was eliminated at all but one facility and discounted validations were also eliminated.

The DTA realized that although many of the benefits of the cooperative were no longer in practice, the need to present a unified parking program was still valuable. The DTA began meeting with each parking garage/lot owner in an effort to become the operator of choice. The unique selling propositions offered were similar to those of the collaborative (enhanced marketing and consistent signage) and now included having a true parking professional on staff, boots on the ground management focused solely on the Tempe community, and a commitment that all management fees earned would be reinvested back into Downtown Tempe. Today the DTA manages more than 18,000 spaces generating more than \$10,000,000 in revenue and generating more than \$400,000 in management fees to be reinvested back into the Downtown.



## Shared Parking Considerations

As the River Market District continues to grow, it will be imperative to develop a more comprehensive approach to shared parking within the district, actively promoting the joint use of centralized parking facilities. This approach helps to right-size parking investments, support a more walkable district, and reduce the over-commitment of valuable land to parking infrastructure. Creating strategies to leverage public-private partnerships reduces the burden on one entity to finance, construct, and manage parking. And operating a shared parking system will help to promote a more holistic parking experience for users, consistent with recommendations for collaborative management, branding, and overall parking space allocation.

### Benefits

- Right-sizing parking investments and construction
- Promotion of economic development potential in the district
- Support for a centralized public parking system

### Challenges

- Buy-in from private property owners and parking operators
- Identification of appropriate sites for future parking investment

### Required Code Changes

- None

### Performance Metrics

- Facility performance (utilization)
- Customer satisfaction

### Key Partners

- Private parking operators
- Private property owners
- Developers



Given the way many North American cities developed between the mid-20th Century and today, it is very uncommon for a municipality to have an off-street public parking supply as large as Little Rock's, especially in the River Market District. Because of this industry-wide lack of public parking, many North American cities have begun to implement community-wide shared parking programs, led by the municipality in close coordination with the private sector. The intent is to try to create the appearance of public parking supply by leveraging available parking spaces in private facilities.

The public entity usually provides support with management, operations, marketing, wayfinding, and enforcement. The private entity provides the capacity (at a minimum) but may also contribute to the management and operations. The benefit of expanding the shared parking system is that it will expand parking options and improve access by opening parking to the public that may have previously been restricted to specific users.

While shared parking should always be a consideration for the City, both in the application of new parking and the use of existing parking, searching out shared parking opportunities should be a lower priority because LRCVB and the City already have so much public shared parking and much of the non-City owned off-street parking is already publicly accessible (even if privately owned). There are still benefits to creating a shared parking system that serves the entire district, but it is more critical to prioritize the prioritization of on-street assets and developing a more cohesive management structure moving forward.

With that said, in the event that new parking is required to alleviate localized deficiencies, the City should consider finding and applying shared parking before constructing new parking spaces. The cost to lease private spaces or share the cost to manage private spaces will be considerably lower than the cost to build new public spaces.

## Considerations for a Shared Parking System

In the event that the City and LRCVB begin to explore the investment in a shared parking system throughout the district (or beyond into the greater Downtown Little Rock area), the following elements should be considered through the implementation phase:

- Developing a defined management structure and operations plan for the shared parking assets, including the provision of management resources, installation of technology, collection of revenue, and oversight of the parking facilities.
- Enforcement of the shared parking assets, which would require the creation of management agreements that allow City staff to enforce parking citations on private property.
- Implementation of wayfinding, branding, and marketing elements of the parking program consistent with today's practices and the recommendations outlined in this toolbox.
- Provision of liability insurance for the shared parking facilities to help reduce burden of liability on property owners.
- Security resources to help monitor and manage access onto the private facilities, maintain access for tenants, and reduce the likelihood of criminal incidents on private property.

### General Rules of Thumb to Consider:

The City and LRCVB should use the following criteria when evaluating shared parking opportunities:

- The parking facility must meet all requirements as defined by city codes
- It is recommended that proposed shared facilities have at least 20-30 spaces in the facility available at all times for public parking use
- The parking facility must be within a quarter mile of primary district/Downtown destinations.
- The parking facility must be made available for paid parking
- The parking facility should be open to interface with LRCVB and the City's preferred parking system vendor to ensure simple and consistent alternative payment alternatives

## Sacramento, CA

The City of Sacramento, CA operates a shared public parking system with a combination of public and private parking facilities. The City has developed a common brand for the shared parking system, called SacPark, and has partnered with community and business organizations on marketing and communications such as the Sacramento Downtown Partnership.

As of this writing, the City of Sacramento has 80 facilities within their shared “public parking” program, with the majority of those being privately owned facilities that look to the City for management of the system. The shared parking program includes large garages and small surface lots all managed under a common system with hourly, daily, event, and permit parking available through the program. Sacramento passed legislation to allow the City to enforce parking at private facilities through an agreement with the facility owner. The increased enforcement has reduced parking violations and increased parking availability.

The City of Sacramento has integrated the on and off-street parking management program with common branding and communication materials. The City of Sacramento has leveraged technology investments to improve parking management for the shared parking program. It is unlikely that individual facility owners would invest in technology such as License Plate Recognition (LPR) for enforcement. Now private property owners can contract with the City to provide enforcement. The shared parking system uses consistent technology for a consistent user experience.

## Tempe, AZ

Over the past decade, the City of Tempe and the Downtown Tempe Authority (DTA) have identified many underutilized properties and worked out arrangements to allow for additional users from neighboring properties to park. Specifically, they have converted six lots and garages (including more than 1,800 additional spaces) that were previously used exclusively as private parking. In all cases the properties had substantial vacancy and the owners struggled with controlling illegal parking. The additional spaces have allowed the City to advertise parking more aggressively and remove a lot of the confusion that previously existed with regard to vacant parking lots with inadequate or in some cases no signage.

Once properties were identified, the City would approach the owner to simply learn more about the property, including initial questions related to current uses/needs, future plans, or whether or not encumbrances were present that would prevent any changes to the operation. Often, the owner didn't know that sharing the parking or converting to public/paid parking were available options. In some instances, the parking was converted to paid public parking, while in other cases, an allotment of parking was brokered to another user needing more parking than what they were afforded in their lease.

A major difficulty with installing paid parking in private lots in Tempe was the difficulty of enforcing the drivers' responsibility to pay at private meters. If private operators cannot issue enforceable tickets for violations, the only legal ways to ensure compliance is to boot or tow the violators, which is expensive, inconvenient, and unpopular with both drivers and merchants. To solve this problem the city enforcement arm entered into agreements with private property owners and private operators to enforce parking. This allowed the City of Tempe and DTA to provide enforcement for private lots, ensure compliance, and promote a more efficient parking system throughout the community.



# Leveraging Mobility

The River Market District is home to a wealth of mobility options including the Rock Region Metro streetcar line, micro-mobility options like scooters, and world-class pedestrian amenities like the Riverfront Park and the Arkansas River Trail. Not only do these amenities run throughout the district, but they also provide critical linkages between the River Market and adjacent districts like Downtown Little Rock, South Main, and North Little Rock. Despite the presence of all of these transportation tools, they are largely underutilized and do not provide the intended benefit of reducing automotive traffic. The City, LRCVB, and Rock Region Metro need to work collaboratively to incentivize use of these tools by linking decision making in the parking process with the quick and ready access to these modes. Through iterative policy and prioritization changes, the community could begin to take advantage of all of these resources.

## Benefits

- Reduction of automotive demands into and within the district
- Linkage to other districts
- Improved balance of parking demand distribution

## Challenges

- Creating balanced incentives and disincentives
- Promoting correct tools for behavior change

## Required Code Changes

- None

## Performance Metrics

- Ridership
- Parking occupancy

## Key Partners

- Rock Region Metro
- Business owners
- Neighboring districts



The world of mobility is rapidly changing. Just within the River Market District there has been an extreme transformation with the introduction of mobility as a service and the Rock Region Metro streetcar. The advent of all of these mobility options provides a great platform for shifting the way that residents, employees, and visitors arrive in and move around the downtown community. While this effort focuses on advanced parking management strategies, there should be a distinct connection between parking and mobility to make both systems compatible and successful.

## **Integrate Walking and Biking Improvements**

Walking and bicycling are the foundational benchmark for good urban places. Walking, in particular, is the most basic form of transportation, and all travelers, no matter their primary mode of travel, are pedestrians at some point in their trip. Walkability and bikeability are the positive outcomes of good urban form, land use policy, and design. The River Market District, with its compact size, gridded streets, and attractive urban form, is inherently walkable and bikeable.

Despite inherent advantages, specific efforts should be taken to further invite and encourage walking and bicycling. The goal of effective pedestrian and bicycle programs is to establish walking and biking as normal, convenient, everyday travel modes, and encourage users of all ages and abilities to feel comfortable walking and biking in “low stress” facilities that are buffered from motor vehicle traffic. A few specific examples to consider in the River Market District include:

- Protected bike/scooter lanes to significantly improve safety, experience, and shorten distances between districts and more remote parking areas
- Opportunities for cycle tracks or bicycle lanes that are buffered/ separated from moving vehicular traffic by curbs, landscaping, bollards, and/or parked vehicles
- Retrofit of existing on-street parking spaces as corrals for bike parking and for parklets to enhance the pedestrian experience and calm traffic
- Integration of dockless on-demand mobility devices where possible and designate appropriate curb space for parking these devices

## **Consider District Mobility Hubs**

Shared mobility options can play a critical role in addressing “first-mile/last-mile” connectivity needs at the beginning or end of a trip. First-mile/last-mile connectivity means connecting travelers between destinations and parking facilities or transit stations, either during the first leg of the trip, or during the return trip. These are particularly effective in filling the first-mile/ last-mile access gap for those traveling via transit, thus facilitating a non-single-occupant vehicle multimodal trip.

LRCVB and the City should work collaboratively to create “mobility hubs” by clustering TNC loadings areas and dockless on-demand personal mobility devices near or adjacent to streetcar stops, large parking structures, and/or major destinations like the Riverfront Park or the new I-30 park area.



## Adopt Policy Frameworks to Manage Micro-Mobility Elements

LRCVB and the City should adopt policies that set the terms of operation by shared mobility services like TNCs, dockless on-demand personal mobility devices, and other options. Adopted policies ensure the city earns its fair share for providing service platforms access to its residents, the city can glean vital information on user mobility behavior, and services positively enhance the overall access, circulation, and mobility for all users without causing externalities.

LRCVB and the City should initiate the following practices:

- Where possible, initiate Requests for Proposal for the provision of shared mobility service. Doing so allows LRCVB and the City to set the terms of operation and dictate requirements such as service location and objectives, accessibility compliance, data sharing, operations and maintenance, and evaluation and reporting.
- Collaborate with TNC's to collect and share their anonymized user data with LRCVB and the City. This data is a robust snapshot of user mobility behavior and could be integrated into data sets to inform transportation and parking management decisions.
- Review and stay abreast of policies related to TNC monetization. Cities around the United States are providing TNCs with access to their street space, limited curb space, and ultimately, their customers. Cities deserve commensurate value in return. The City of Chicago imposes a fee of \$.67 on every Uber and Lyft ride, money that is used to fund public transportation improvements.
- Adopt a platform that consolidates shared mobility and parking elements into one management dashboard, allowing for the collection of user data, the management of mobile parking payments and the opportunity to monetize curb access by shared mobility options.

## Leverage Micro-Mobility Options

Urban trips of one to three miles are too short for most people to drive and park, or even take transit (unless the transit service is conveniently located), and too long for people to walk. On-demand mobility options are emerging and evolving in today's marketplace, some providing rides in a vehicle shared with other rides (like Uber and Lyft, as well as Gotcha Ride, for example), while other options offer personal mobility devices (like dockless shared bikes and scooters). Shared mobility platforms like Gotcha Ride, Uber, and Lyft are aggregating multiple device options within a single mobile platform, so users can catch a ride in a rideshare vehicle and then utilize bike share and scooters as well from the same platform provider.

Dockless on-demand mobility devices like scooters and bikes (which offer personal transportation) are filling this important flexible mobility need in the overall transportation ecosystem. New vendors and platforms have been emerging in recent years, but there is an evolution toward dockless human-powered and electric-assist devices that are shared between users and available via a mobile platform at a moment's notice. These devices are readily available, enjoyable to ride, easy to use, and offer point to point connectivity. New and different kinds of devices will continue to emerge as technology changes, but on-demand personal mobility devices are here to stay, and cities must adapt and evolve as well.

LRCVB and the City should evaluate and embrace shared mobility devices by:

- Maintaining a philosophy of openness and acceptance to new shared and personal on-demand mobility options. New and different options, with different vehicle types, are expected to continue to evolve and come online. LRCVB and the City should set up policies that are flexible and emphasize and promote the city's top mobility priorities, no matter the specific shared mobility device.
- Adopting policies that outline to providers the terms of operation, maintenance, data sharing, and allocation/re-balancing of dockless units across the city.
- Integrating the provision of space and resources for shared and alternative mobility devices in development requirements for new developments.
- Integrating shared mobility devices in all public mobility resources and communications to increase the exposure and access to information about devices among the public.
- Implementing policies and education campaigns that regulate where devices should be operated.
- Ensuring there is adequate on and off-street infrastructure for these devices to operate.
- Designating space on the sidewalk and/or along the curb for parking of dockless devices. This is being done with dockless scooters and bikes in Arlington VA, Minneapolis MN, and other cities. These cities are designating the parking areas on and off the street with paint and leveraging the GPS capabilities within the mobile apps to identify the virtual parking hubs.

## Consider Transportation Demand Management Policies

Transportation Demand Management (TDM) strategies consist of programs, services, and policies designed to encourage transportation alternatives. Implementation of TDM measures helps mitigate traffic impacts and parking demand associated with single occupancy vehicle (SOV) trips. TDM measures vary and can include bicycle- and pedestrian-facility improvements; promotion of vanpool, carpool, and transit; provision of other shared mobility services like on-demand rideshare and shuttle services; and commute incentive programs to encourage employees to use transit, bike, or walk to work.

LRCVB and the City should consider the following types of TDM programs in the design and implementation of large developments moving forward:

- Financial Incentives/Disincentives – Develop programs that encourage or discourage certain behaviors by making transportation options more or less expensive. For example, offer reduced cost transit, subsidies for vanpooling, or a guaranteed ride home program.
- Parking Regulations – Implement parking regulations that promote efficient use of existing parking resources. For example, eliminate free parking and utilize demand-based pricing.
- User Information and Marketing – Establish user information and marketing platforms such as mobile apps, maps, websites, etc. to locate available parking spaces in real time, so users know where to go to park thereby reducing “hunting” for spaces. This promotes sustainability through reduced carbon emissions and increases customer convenience.
- Provide employer based TDM programs – The city should encourage employer participation in the TDM program by sharing information about incentives such as pre-tax commuter benefits, subsidized transit passes, and preferential parking for carpool and vanpool participants. The intent of these incentive programs is to not only give employees options on how they travel to work but also to incentivize the choice to not drive a personal vehicle by offering some type of monetary compensation.
- Consider residential TDM components – most residential developments are providing parking at one to two spaces per residential unit. This only subsidizes the decision to drive frequently. Implementing residential based TDM programs, such as unbundling parking from leases or sales of residential units, can help to incentivize lower car ownership and use.

### Oklahoma City, OK

In Oklahoma City, the community’s parking authority and transit authority are housed under the same agency (Embark). This integration has allowed the community to integrate parking and mobility improvements and help support a more balanced approach to transportation and parking demand in the area more fully. A critical component of this effort has been the structure of a Park Once environment between many of the community’s business districts with a combination of parking policy combined with streetcar and mobility amenities. This includes advertising parking as a component of the transit experience, developing park-and-ride strategies for events and entertainment districts, and combining the ability to pay for parking and transit passes from the same parking kiosks. The intended result is a more balanced approach to movement in the community and a reduction of superfluous district-to-district trips.





METRO is Hiring!

1 PULASKI

2106



METRO streetcar

QR code and other informational text





# Parking Improvement Plan



# Parking Improvement Plan

The Policy Toolbox in the previous section provided a summary of issues and recommended improvements within a number of categories ranging from Capacity Improvements to Leveraging Mobility. This action plan summarizes the key recommendations from that toolbox and provides a simpler way to view recommendations, organized by the intended timeframe for implementation. The tables on the following pages provide a description of the recommendation, the category where that recommendation is found, and a general description of the cost considerations for the recommendation.

The recommendations are organized within three timeframes, including:

- **Immediate** - those strategies which should begin immediately after adoption of this study
- **Short-term** - those strategies that should be initiated within the next year
- **Long-term** - those strategies that should be initiated a year or more from now

## Immediate Recommendations

Category	Description	Timeframe	Cost Estimate
<b>Modernized Operations</b>	Adopt changes to municipal code to help modernize parking system and improve operational efficiency	Immediate	Staff time
<b>Parking Capacity</b>	Adopt parking investment strategy and begin using as metric for future parking considerations (public + public-private partnerships)	Immediate	Staff time
<b>Technology</b>	Develop RFP for procurement of new on-street parking meters (preference is for lease option based on asset light plan)	Immediate	Staff time (or consulting support)
<b>Technology</b>	Develop RFP for procurement of new off-street parking access and revenue control equipment (PARC) for LRCVB facilities	Immediate	Staff time (or consulting support)
<b>Technology</b>	Develop an asset light design plan that strategically places new meters at high-pedestrian movement locations	Immediate	Staff time
<b>Parking System Prioritization</b>	Implement a prioritized approach to parking within two blocks of key destinations (market, park, President Clinton Avenue) and begin to adjust pricing and policies in conjunction with demands	Immediate	Staff time, plus signage and marketing
<b>Curb Lane Management</b>	Initiate a road closure pilot on President Clinton Avenue to evaluate the effectiveness of activated curbsides (retail/restaurant usage and/or non-automotive modes)	Immediate through 2022	Staff time, plus road closure + police costs, plus marketing

## Short-term Recommendations

Category	Description	Timeframe	Cost Estimate
<b>Modernized Operations</b>	Adjust enforcement policies as defined in the Policy Toolbox	Q1 '22	Staff time
<b>Branding &amp; Wayfinding</b>	Develop and implement a new parking brand in conjunction with City and LRCVB parking assets	Q2 '22	Staff time (or consulting support)
<b>Modernized Operations</b>	Develop plans to transition to a Parking Ambassador program, including policies, practices, equipment/uniforms, etc.	Q2 '22	Staff time (or consulting support)
<b>Parking Capacity</b>	Evaluate full capacity and design options for parking under I-30	Q2 '22	Staff time (or consulting support)
<b>Technology</b>	Initiate procurement process and implement new PARC equipment	Q2 '22	Staff time (or consulting support) + \$20k per pay on foot kiosk, \$40k per lane
<b>Technology</b>	Initiate procurement process and implement new on-street parking meters	Q2 '22	Staff time (or consulting support) + \$5k per kiosk (or \$150 per month per kiosk leased)
<b>Modernized Operations</b>	Adjust hours of enforcement to match the demand profile of the district and prioritized parking areas	Q3 '22	Staff time
<b>Parking Pricing</b>	Adjust pricing for on-street parking, particularly in prioritized parking area	Q3 '22	Staff time
<b>Parking Pricing</b>	Consider adjustments to off-street parking pricing as system performance allows	Q3 '22	Staff time
<b>Curb Lane Management</b>	Inventory curbside uses today and create an up-to-date database for curb management purposes moving forward	Q3 '22	Staff time (or consulting support)
<b>Curb Lane Management</b>	Develop curb lane priorities for the district (prioritized zone, adjacent areas, fringe areas) to help dictate curbside decisions moving forward	Q3 '22	Staff time
<b>Modernized Operations</b>	Updated enforcement policies and practices, in conjunction with Ambassador Program	Q3 '22	Staff time

## Short-term Recommendations (continued)

Category	Description	Timeframe	Cost Estimate
<b>Data-Driven Approaches</b>	Develop analytics practices and policies using new equipment	Q4 '22	Staff time
<b>Parking Pricing</b>	Introduce a merchant validation system, in conjunction with new LRCVB PARC equipment	Q4 '22	Staff time + \$25k hardware/software
<b>Modernized Operations</b>	Initiate the transition to a Parking Ambassador Program	Q4 '22	Staff time, plus uniforms and marketing/education
<b>Technology</b>	Develop RFP for procurement of new license plate recognition (LPR) system (compatible with enforcement vehicles, permit management system, on-street meters, pay-by phone system, and LRCVB system)	Q4 '22	Staff time

## Long-term Recommendations

Category	Description	Timeframe	Cost Estimate
<b>Branding &amp; Wayfinding</b>	Implement branded wayfinding in conjunction with existing and proposed wayfinding improvements in the district and in the community	Q1 '23	Signage costs, dependent upon design and locations (\$15-30k per exterior sign, \$250 - \$1k per trailblazer sign)
<b>Curb Lane Management</b>	Consider permanent installations along President Clinton Avenue	Q1 '23	Dependant on permanent installations included
<b>Data-Driven Approaches</b>	Consider the implementation of data-aggregation mechanisms and/or data analytics partners	Q1 '23	Staff time (or consulting support)
<b>Modernized Operations</b>	Improve usage of the Citation Management System in conjunction with new technology procurements	Q1 '23	Staff time
<b>Modernized Operations</b>	Implement technology-based approach to event management, as defined in the Policy Toolbox	Q1 '23	Staff time (or consulting support)
<b>Technology</b>	Initiate procurement process and implement new LPR system	Q1 '23	Staff time + \$25k - \$60k per vehicle
<b>Demand-Based Pricing</b>	Implement a data-driven approach to parking pricing, in conjunction with new City and LRCVB technologies and analytics approaches	Q2 '23	Staff time (or consulting support)
<b>Technology</b>	Initiate procurement process and implement new parking permit management system	Q2 '23	Staff time (or consulting support) + \$8-10k per year

## Long-term Recommendations (continued)

Category	Description	Timeframe	Cost Estimate
<b>Parking Capacity</b>	Implement new 2nd St on-street parking, including signage and technology	Q3 '23	Staff time, signage, + meter costs
<b>Parking Management</b>	Consider inclusion of private parking operators in the collaborative parking entity as demand and/or development pressures dictate	Q3 '23	Staff time
<b>Parking Management</b>	Develop branding/messaging strategy for collaborative public parking system	Q3 '23	Staff time
<b>Parking Management</b>	Consider developing and implementing parking management staff for parking collaborative	Q3 '23	Assume \$40-60k + benefits for non-director level; \$120k + benefits for director level
<b>Parking Capacity</b>	Construct parking under bridge at I-30	Q4 '23	\$3,500 - \$5,000 per space
<b>Parking Capacity</b>	Re-purpose Marriott valet lot to employee parking, including clean-up, re-striping (if necessary), and application of signage and new technology	2024	Staff time, plus signage and PARCS costs
<b>Employee Parking Program</b>	Implement a permitted employee parking program with support from local merchants using up to two locations - Marriott valet lot and/or I-30 bridge parking	2024	Permit costs (unless using virtual permits) + staff overhead