Downtown Parking Study
Salisbury, North Carolina

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Prepared For
City of Salisbury

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Glossary of Terms

The following is a brief list of phrases and terms that are used within this report.

ADA parking – marked or signed parking spaces that are available to persons with disabilities and displaying either an ADA placard (hang tag) or ADA license plate.

Demand – an estimation of the number of vehicles that are in need of a parking space during a specified period of time. Existing parking demand will typically refer to the busiest period of the busiest day of the week based, and on parking occupancy counts.

Demand margin - assumes that the vehicles observed during the peak period does not include individuals who may be working from home, on vacation, or otherwise away from their normal place of business on the day of data collection. For the purposes of this study the demand margin will be 10%.

Effective capacity – surplus parking minus 10% demand margin accounting for people who were not at work on the date of the data collection but would normally be utilizing a surplus space.

Effective future capacity: calculated as effective capacity minus future demand as shown in Section IV.

Efficiency – the highest and best use of a parking lot, which involves maximizing the physical layout of parking spaces as well as the oversell of parking permits to maximize the number of parkers without reaching 100% capacity during the peak period.

Employee – individuals who regularly park within downtown for a typical work week. This category excludes irregular visitors that may be arriving for meetings, errands, special events, or other activities, such as jury duty.

Employee parking – spaces or lots that are generally available during regular business hours (8am to 5 pm, Monday through Friday).

Future parking demand – the estimation of additional vehicles that are generated by development; also refers to a specified period to time (either AM or PM peak period).

Length of Stay – the duration of time that a vehicle is parked, either within a single (on-street) parking space, or among several parking spaces in a common area.

Loading Zone – on-street parking location that is shared among nearby businesses for the purposes of very brief loading and unloading of delivery vehicles.

Metered parking – parking spaces that are controlled by a parking meter devise for the purposes of encouraging short parking duration and turnover within a high demand area.

Occupancy – parking spaces that contain a vehicle during a specified time period (typically measured during AM, mid-day, PM, or evening).

Periphery parking location – parking lot or block that is located along the boundary of a specified area, further than other locations. These areas are generally low-demand.
**Permit parking system** – a physical sticker or hang tag that allows access to either a specified lot or a limited number of lots and is coordinated by an organization or agency that efficiently manages parking resources for all users.

**Proximate parking location** – a parking lot or block that is more centrally-located within a specified area, closer than other locations. These locations are generally high-demand.

**Raw surplus parking** – total spaces minus number of cars counted

**Regular parking** – any non-reserved parking space that is generally available to any and all parkers. This category would include any timed on-street parking spaces, unless specifically stated otherwise.

**Reserved parking** – signed parking spaces that are designated to a single individual, and are rented for a monthly fee.

**Resident** – an individual that lives within or adjacent to the study area.

**Resident parking** – parking that is associated with nearby dwellings, typically single-family homes, townhomes, or condominiums.

**Supply** – the total number of physical parking spaces that are available for parkers. Parking supply may refer to existing or future conditions. Public or private ownership of the parking supply may be an important distinction.

**Surplus parking** – calculated as [existing parking supply] – [effective demand].

**Turnover** – the number of vehicles that will utilize a single parking space during a specified time. Parking turnover is usually discussed in terms of on-street parking spaces within a high demand area. An on-street parking space with a 1-hour time limit will (in theory) have a higher turnover rate than one with a 2-hour time limit. This assumes that active enforcement will discourage any illegal parking.

**Visitor** – an individual that irregularly arrives within the study area for either business, pleasure, or errands, and is not a downtown employee.

**Visitor parking** – parking spaces that are provided for short-term clients/customers, typically at no charge to the individual, however may be subsidized by the department or agency. Visitor parking spaces may either be specifically signed as ‘Visitor’, or may include metered parking.
Executive Summary

The purpose of this parking study is to evaluate existing conditions, utilization, policies and practices within Downtown Salisbury. This report documents the analysis from these activities and recommends near-term (1-5 year) and long-term (5-10 year) improvements that are expected to

- improve the public’s understanding of downtown parking availability
- support more efficient parking management through better enforcement
- balance the parking needs of all users in an equitable manner
- add some spaces through a potential parking lot on the west side of Downtown Salisbury, in proximity to the City Hall.

Community Involvement

The project team conducted six (6) stakeholder interview sessions with various stakeholders and groups and a larger stakeholder input session that was during a scheduled Downtown Salisbury Inc. (DSI) meeting. The purpose of these interviews was to gather first-hand knowledge of the City’s parking challenges, parking enforcement, revenues generated by parking, daily management of the parking system, and other related topics. The project team also attended the Cheerwine Festival in Downtown Salisbury and interviewed 97 individuals. All of these community involvement events allowed participants to provide direct input and fill out the digital/written survey.

The perception of (evening) safety issues was the most frequently discussed topic, particularly relating to walking to/from public parking lots. This topic was routinely mentioned as the rational to park within on-street spaces in front of their place of business or employment.

General Topics of Agreement

Stakeholder interviews revealed a perceived lack of parking or at least a lack of parking in strategic areas. The interviews also revealed a positive reaction toward installing on-street parking meters and increased enforcement to ensure availability for customers/shoppers. There was also a repeated desire among business owners to allow validation of paid parking for customers, as was previously available.

General Topics of Disagreement

Stakeholder interviews revealed that all groups of parkers were routinely occupying on-street parking spaces in high-demand areas for a majority of the day. The take away message is that all stakeholder groups value free, convenient parking locations over the ‘greater good’ philosophy of leaving on-street parking spaces for retail customers and visitors. This is will be an important challenge for the City to overcome as the parking management system evolves.
### General Topics of Uncertainty

The stakeholder interviews showed the project team a sense of uncertainty about how future developments and projects located in and outside of downtown would impact the aesthetic, culture and mobility in and out of the downtown. Residential properties that develop without providing parking also helped create a sense of uncertainty.

### Existing Supply and Utilization

VHB conducted a field inventory of all parking spaces within Downtown Salisbury. Field work confirmed the total number of parking lots, documented whether the lot was public or private, and counted the number of parking spaces of each type (e.g. municipal reserved, municipal general unreserved or private parking). The project team also collected field surveys to document parking utilization, as well as an analysis of on-street parking turnover.

Public parking spaces, maintained by the City, accounted for 1,516 (43%) of the total 3,509 spaces available in the city. Of this, 783 spaces are located in off-street parking lots (28% of off-street supply) and there are 733 on-street spaces (21% of total supply).

The city currently leases 40 parking spaces in block 24, diagonal to the courthouse, that are included in the municipal parking supply—however, this leased parking agreement will end within the next five years.

The City of Salisbury does not currently have a shortage of parking supply to meet the existing demand, as there were more than 1,900 empty spaces observed during the peak period of 9 AM-11 AM in Downtown Salisbury. During the peak morning period, only a 52% utilization rate of municipal parking was observed.

However, in high-demand downtown locations such as near the Rowan County Courthouse, the current distribution and balance of parking supply may be contributing to a perceived parking shortage.

- A modest number of on-street parkers are ‘shuffling’ their vehicles to multiple locations, oftentimes to the other block face.
- Public perception must be addressed in order to effectively utilize all parking resources
- Enforcement should be strengthened to discourage “parking shuffle” by patrons utilizing on-street parking spaces in downtown Salisbury for extended periods of time during the day

### Future Parking Demand

The VHB team identified near-term development projects that are expected within the near-term (1-5 years) and long-term (5-10 years), estimated the parking demand that can be anticipated from these projects, and determined if additional parking supply will be necessary to meet this future demand. The project team developed a spreadsheet model that quantifies parking
generation from square footage and land use type inputs using standards from the Institute of Transportation Engineers (ITE) Parking Generation (4th Edition) manual. The City of Salisbury is expected to have a future municipal parking supply shortage, especially on the western side of downtown, in the near-term (1-5 years) and in the longer term (6-10 year) timeframe, based on pending development. Assuming no private parking is added to accommodate expected growth, a shortage of 413 municipal parking spaces is expected in Downtown Salisbury in the 6-10 year timeframe.

Based on this projected shortage of municipal parking, the following recommendations were identified:

Expect certain blocks of high-demand to experience a shortage of parking during peak periods and promote the availability of parking in low-demand areas through enhanced wayfinding signage, physical map kiosks and online parking maps. Improve bicycle and pedestrian access to downtown Salisbury through enhanced pedestrian crossings, addition of bicycle parking, and improved bicycle and pedestrian facilities on approach to and throughout downtown Salisbury.

Investigate potential parking lot expansion west of Innes Street, with a special focus on the following site:

- Block 1—consider converting existing green space to a paved parking lot in the near term (this will add approximately 60–75 spaces to offset a portion of the projected long-term shortage of 214 parking spaces within two blocks (#2 and #5 on Figure 1) west of Main Street that are closest to Block #1)
- Continue to seek public-private partnership opportunities to help fund the construction of a parking deck on this or an alternate site in the future
- Consider opportunities for a public-private partnership that would support a future parking deck facility; avoid undertaking a structured parking (parking deck) facility in the absence of funding partners due to high costs, a long payback period and uncertainty associated with autonomous vehicles adoption and disruption to the parking patterns

**Implementation Plan**

Some of the key recommendations identified to help improve parking in downtown Salisbury include the following:

**Short-term**

- Strengthen parking enforcement
- Add a paved parking lot with 60–75 spaces in block #1, with a planning-level cost estimate of $425,000 plus contingency
- Add downtown bicycle parking through city and developer-provided bicycle parking infrastructure
Deter on-street parking by downtown employees through education, enforcement, and financial controls

Improve wayfinding signage

Improve pedestrian safety in downtown Salisbury

Address security, lighting and maintenance concerns related to public surface lots

**Long-term**

- Pursue public private development opportunities to add public parking to the downtown, including potential structured parking

- Evaluate the potential to add paid (metered) parking within the most convenient and heavily used spaces if time limit enforcement is ineffective or if demand warranted paid parking

**Parking Administrative Changes Recommendations**

- Employ technology to improve the efficiency of parking enforcement such as electronic tire-chalking to monitor parked time, electronic ticketing and ticket-tracking software

- Providing the parking enforcement officer (or multiple staff) with a small electric vehicle in lieu of Segway to enable ease of data collection and entry (since Segways require both hands).

- Whether keeping parking enforcement within the Police Department or moving this function to the City of Salisbury Engineering Department, make sure the parking enforcement staff are familiar with and can better coordinate with physical infrastructure improvements planned for downtown Salisbury.
Section I – Introduction and Background

The City of Salisbury initiated this parking study to better understand the current and future parking demands, and to identify specific strategies and steps to implement parking policy changes and parking infrastructure improvements to best meet the parking needs of visitors, businesses, employees and prospective investors seeking to improve and develop downtown properties.

The project team of VHB Engineering working in coordination with Walker Consultants initiated field data collection in March 2019. Following the assessment of existing parking supply and utilization, the project team met with stakeholders during seven (7) interview sessions on Tuesday, April 30 and Wednesday, May 1st to discuss and solicit feedback on existing parking issues and potential parking management solutions. Stakeholders included representatives of the City of Salisbury, Rowan County, Salisbury Downtown Inc., local merchants, developers, downtown employees, and residents.

This report documents the analysis from these activities and recommends near-term (1-5 year) improvements that strives to:

• educate and transform the public’s perception of downtown parking,
• formalize and strengthen the administrative role(s) of the City’s parking management system, and
• balance the parking needs of all users in an equitable manner.
• The study will also prepare for more long-term improvements (5-10 years) that support further economic development opportunities in the City.

Plan Purpose and Goals

The purpose of the Downtown Salisbury Parking Study was to understand current parking demand and potential future demand, and to identify recommendations that will help the City of Salisbury best meet the parking needs as perceived by visitors, businesses, employees and by prospective investors seeking to improve and develop downtown properties. The City of Salisbury was looking to develop an overall parking plan and strategy to complement the revitalization of downtown and to support continued success of downtown economic development strategies.

The goals for the study were as follows:

• Review current patterns of parking utilization
• Conduct a future parking needs analysis
• Develop recommended strategies to ensure adequate parking for future parking needs
• Improve wayfinding and access to/from visitor parking areas
• Review parking management policies and strategies and identify opportunities for improvement
Section II – Community Involvement

Background

The study team was asked to include stakeholder and community involvement elements as part of the study approach, to ensure that local context knowledge and understanding would support the study of parking challenges in the City of Salisbury. Without this local context understanding, the parking study recommendations could miss out on specific nuances based on local community concerns and characteristics.

Overview of Community Involvement

The community outreach program for the Downtown Salisbury Parking study consisted of three separate elements. The first was a series of six (6) stakeholder interviews that occurred on April 30th and May 1st, 2019. A larger group stakeholder input session was held on the morning of April 30th during a Downtown Salisbury Inc. (DSI) meeting. The two meetings totaled approximately 70 attendees, with 30 originating from the smaller stakeholder group meetings while the other 40 attended the DSI meeting. The second outreach element was a public input survey, that was administered between April 29th and June 3rd, 2019. Most survey responses were collected in electronic format, with a few paper responses collected as well. A total of 224 participants engaged in this activity to solicit both multiple choice and open-ended questions response. Lastly, a booth was set up during the Salisbury Cheerwine Festival, in which 40,000 people attended and 97 participated with the booth. At this event, participants had an opportunity to complete the study survey, provide comments for the project, and engage in an interactive exercise.

Stakeholder Interviews

The stakeholder interviews consisted participants from a myriad of local backgrounds. Representatives of the Salisbury City Council, Salisbury Engineering Department, Rowan County Sheriff’s Office, Downtown Business owners and property owners, Downtown Salisbury Inc. representatives as well as non-profit and development community representatives participated in the interviews. Topics are arranged based on a general sense of agreement, disagreement, and general uncertainty, as well as concerns about area safety.
Topics of Agreement

There was a general consensus regarding the main thoroughfares of Salisbury, Main St. and Innes St. Regarding the former, participants felt that Main St. needed wider sidewalks for pedestrian activity, even at the expense of a narrower roadway for traffic flow. Interviewees felt that traffic calming measures for Innes St. are warranted, as they feel unsafe crossing the road. This could be due in part to the turning lanes on Innes backing up, making the crossing difficult.

Respondents also agreed that the parking problem is primarily perceived, rather than being an absolute issue. Major factors playing into this perception of scarcity include: workers and owners parking in prime spots in front of their stores; a lack of parking enforcement for violators; and people are unwilling to walk from a more remote location due to safety considerations and a lack of pleasant street aesthetic. To reduce these issues, respondents cited better parking facilities for government workers and improved parking signage would aid the parking dilemma.

Topics of Disagreement

Of great debate in parking management was the installation of parking meters. Proponents of this measure argue that parking meters will reduce the two-hour ‘parking shuffle’, deter abuse of the posted 2-hour limit, create flexible time restrictions, and can be placed along high-demand corridors to reduce pressure. However, there is opposition in having to pay to park and that in doing so could dampen the number of patrons that a business receives.

The issue of building a parking structure was another highly contested item. Arguments for the structure include: convenience for visitors, ease for employees, an increase in the perception of safety, and could aid the stress put on by county workers. Those against the project cite the
uncertainty of the county keeping its offices in downtown Salisbury, in addition to not wanting to pay to use the structure and incur such a large municipal expense.

A minor issue also presented itself on whether to convert angled parking on Main St. to parallel parking to increase sidewalk width. Concerns about this proposed change include loss of spaces and thus a loss in customers. Those who favor this idea believe it will allow the area to become more pedestrian and bike friendly, in addition to addressing the visibility restrictions of angled parking for smaller vehicles. Converting angled parking to reverse-angle parking is also a possibility that would improve safety for bicyclists and for drivers parked next to large vehicles when they are trying to back out, but there was no consensus on this topic.

**Topics of Uncertainty**

Topics in this category primarily relate to the future of downtown Salisbury. Often, participants were concerned about how the current and proposed developments will affect the aesthetics and culture of the area. They are unsure how the Empire Hotel and I-85 widening projects will impact the viability of Salisbury to act as a suburb for Charlotte commuters and bring in an influx of younger residents to this otherwise aging town. Furthermore, the county has yet to decide whether they will be keeping their downtown facilities or moving them to another location, which would have a significant impact on the aesthetics of the area. This move would also impact, to a great extent, the number of people working in the downtown core.

**Safety Concerns**

As previously discussed, safety has been a major concern for respondents across the board. Locations that have been identified as unsafe or troublesome include: near the train depot and railroad tracks due to transient populations; the juror parking lot; the unpaved lot near the cemetery (block 20), Hogan’s Alley, and the lot behind City Hall. Violent crime was also discussed as a reason some people do not feel it is safe to walk from some areas to others within downtown Salisbury at night. To improve the feeling of safety, respondents suggested adding more lighting in key locations and to create a greater sense of safety outside of the main corridors. There are plenty of spaces in lots within a 2 to 3 block radius of points of interest, however they are underused because of perception of feeling vulnerable either at the parking location or during the 2 to 3 block walk to a destination. The difficulty crossing Innes St. for some pedestrians is another factor in the perception of pedestrian safety. This effectively creates a barrier for pedestrians through the middle of the downtown core.

**Cheerwine Festival Public Engagement**

The Cheerwine Festival took place in downtown Salisbury on Saturday, May 18th, 2019, with an estimated 40,000 – 50,000 people in attendance. A project information booth was set up to encourage public participation, in which 97 individuals visited and interacted (0.22% capture rate). At the booth, community members and town visitors had the opportunity to participate in the
study survey, both on paper copies and online via QR code cards, in addition to writing comments for the project and partaking in an interactive money allocation exercise.

Those who attended and took part of writing comments identified four major categories of interest or concern. The most prominent concern was with ADA needs, such as the inclusion of more ADA accessible sidewalks, additional handicapped parking, and better placement of handicapped parking or creation of wheelchair accessible curbs next to designated parking. Pedestrian accessibility was the second most prominent point, in which citizens pointed out malfunctioning crossing signals, particularly along Innes and Long, in addition to the desire for more crosswalks. Multimodal transit was also discussed, in which commenters would like to see more multi-modal transit options and additional bike parking. Lastly, others brought up the fact that Chewy.com will be bringing in an additional 1200 jobs close to the town, and another would like to see more open street events.

The interactive exercise at the booth, entitled ‘how would you spend your city’s dollars to improve parking’, had 55 participants. Those partaking in the exercise were given $40 in play money and were told to make investments in the following categories: pedestrian improvements and crossings; street lights and security; parking meters on Innes and Main Street; and parking deck. A total of $2,210 was distributed across the categories. The highest allocated category was for pedestrian improvements and crossings with 33.7% of allocations. The creation of a parking deck followed with 29.6% of allotted funds. Funding for street lights and security was allocated 28.5% of all funds, with the installation of parking meters only given 8.1%. The amounts allocated by the 55 participants loosely correlates to the total responses and levels of agreement mentioned in both this engagement and stakeholder interviews.
Survey Responses

A total of 224 people responded to the Salisbury Downtown Parking Survey between April 29 and June 3, 2019. Of these respondents, employees made up the largest participant category with 85 respondents (38%), followed by customers/visitors (29%), business owners (17%), residents (13%), and commercial property owners (3%). Those who were left unclassified (<1%) were omitted from analysis.
Survey respondents primarily came from the 28144 ZIP code (51%), the same ZIP code in which the town resides. Other notable areas include: 28146 (14%), just south of I-85, and 28147 (13%), immediately west of Salisbury.

The awareness of available public parking in downtown Salisbury is moderate, with 57% of respondents indicating they are ‘aware’ or ‘generally aware’ of parking. However, 25% of respondents indicated that they are ‘very limited’ or ‘limited’ on public parking locations. Residents and commercial property owners in this survey are most likely to consider themselves experts on parking in downtown Salisbury.

The public perception of the availability of public lot options is subpar according to survey results. 55% of respondents feel that public parking is either ‘very limited’ or ‘limited’. Only 17% feel that parking is either ‘available’ or ‘widely available’. Those who feel parking is least available tend to be employees and business owners, followed by customers and visitors. It should be noted that nearly one-quarter of respondents feel that parking is generally available in the downtown area.
Similarly, survey participants believe that parking is not easy to come by. A nearly identical number of respondents feel that parking is either ‘very difficult’ or ‘difficult’ to find (46%) as those who feel parking is ‘generally easy’ or ‘easy’ to come across (47%). Employees are more likely to say that it is not easy to find public parking spaces whereas commercial property owners are more likely to argue the opposite. Except for employees, a majority of participants in each respondent category feel that parking is at least ‘generally easy’ to find in downtown Salisbury.

Once parked, those who are active in the downtown area have a short last mile trip by foot or other method. 79% of those surveyed indicated that once they park, they only travel five minutes or less to get to their destination. Only 11% of respondents take 6 – 10 minutes to reach their destination once parked and just 4% need more than 10 minutes. Residents are most likely to have to walk farther to their destination after parking than any other category (unclassified is not counted due to small sample size). Commercial property owners are most likely to need the least
amount of time to reach their destination, followed by employees and customers/visitors. A total of 5% of respondents found this question not applicable to their situation.

Despite the perceived shortage of public parking in downtown Salisbury, surveyed respondents are not willing to pay an hourly fee to ensure parking is available when they need it. 66% of those questioned said they would not be willing to pay for parking. This is compared to just 21% who said they’d be willing to pay for parking. Residents of downtown Salisbury have the strongest feelings against this proposition, followed by business owners and employees. Commercial property owners are most likely to favor paid parking to ensure availability.
When participants were asked what barriers they faced when choosing to come to downtown Salisbury, parking issues topped the list with 64 respondents. Below is an ordered list to the most common barriers as stated by survey participants (responses grouped for clarity):

- Parking issues (64)
- Safety concerns (17)
- Lack of shopping options (13)
- Traffic (9)
- Parking restrictions and meters (8)
- Pedestrian concerns (8)
- Handicapped parking (7)
- Store hours (6)
- Parking violation tickets (4)
- Bike safety (3)
- Kid friendliness (3)

In a similar manner, participants were asked how to improve parking in the downtown area. The creation of more parking was the most common answer, tallying 120 responses. Below is an ordered list to the most common solutions offered by survey participants to address parking (responses grouped for clarity):

- Parking deck (73)
- More parking [lots, conversion, other] (49)
- Improve signage (31)
- Worker designated parking (30)
- Parking enforcement (15)
- Longer time allowance/all day parking (9)
- Increased trolley ride/ transit (8)
- Bike improvements (7)
- Traffic modifications (7)
- More handicapped parking (6)
Survey results showed a mixed thought process amongst participants in the feasibility of some commonly cited parking solutions. Thirty-one respondents suggested that improving the signage for parking would assist parking issues. In a related survey question, 69% of participants who answered thought that having clear signage would create awareness of public lots and limit the use of on-street parking. Nearly a quarter weren’t sure if this method would aid in solving the issue. Likewise, six respondents suggested that store validation would help limit the use of on-street parking. However, only 50% thought that this could be a useful tool, whereas 14% thought it wouldn’t aid the issue and 36% were unsure. Lastly, a combined 20 respondents thought that pedestrian and bike improvement would allow for greater downtown accessibility. Nearly 47% indicated that if improvements were to be made, then they would be likely to increase their time walking or biking downtown.

### Recommendations based on Stakeholder and Public Input Received

The following qualitative recommendations are based on the local information and perspectives formulated during the project stakeholder interview process. Section VI of this report will provide more detail on the proposed implementation of these recommendations.

- Strive for equity among all users, especially the disabled (ADA accessibility), visitors and employees, particularly for on-street parking spaces in high-demand areas
- Establish marketing strategies and outreach initiatives to begin the process of changing perspectives on parking as a limited resource that is shared equally among all users
- Consider increasing the minimum parking citation ($5 currently) to discourage over-stay parking
- Increase parking enforcement and consider utilizing an updated data collection and ticketing system
- Offer a variety of parking options based on location and price, and allow users to choose an appropriate level of parking service
- Deter on-street parking by downtown employees through education, enforcement, and financial controls
- Offer parking validation options (digital, print, or other) for merchants to provide to their customers
- Address pedestrian safety issues, especially at intersections and mid-block crossing locations
- Review surface parking lots for security and adequate lighting concerns, especially for lots on the periphery of downtown
• Study the pattern of reserved parking spaces throughout a typical year, and identify any peak demand trends

Section III – Existing Parking Supply and Utilization

Background
The study team was asked to organize and conduct a field inventory of the existing parking supply as well as a determination of existing utilization. The project study area was defined as a 28-block portion of downtown, bounded by E. Franklin St to the north, N. Long St to the east, E. Horah St to the south, and N. Jackson St to the west (Figure 1). The on-street parking turnover analysis was limited to a 25-block area (Figure 1), which was bounded by the railroad to the east and E. Kerr St to the north.

Overview of Existing Parking Supply
Part one of this section discusses the number of parking spaces, by type and location, within the study area, while part two of this section discusses how these spaces are being used.

Parking Inventory
On Tuesday March 5th, 2019 the project team conducted a field inventory of all parking spaces within the defined 28 block study area. The field work confirmed the total number of parking lots, documented whether the lot was public or private, and counted the number of parking spaces of each type (e.g. 2-hr, unlimited, ADA, or reserved). The total parking supply is displayed in Figure 2.

On-Street Parking
A total of 733 on-street parking spaces exist along 68 block-faces (Table 1). A block face is defined as parking available on one side of the street or of a block. For example, a street with parking on both sides for a single block would count as two block faces.

Two-hour time limit parking accounts for 440 (60%) of on-street parking spaces. The remaining 293 spaces are classified as unrestricted time allowance.
Table 1: On-street Parking Spaces by Street Name

<table>
<thead>
<tr>
<th>Street Name</th>
<th># Block-faces</th>
<th>Total Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jackson St.</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Church St.</td>
<td>11</td>
<td>119</td>
</tr>
<tr>
<td>Main St.</td>
<td>12</td>
<td>188</td>
</tr>
<tr>
<td>Lee St.</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>Depot St.</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td>Liberty St.</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>Council St.</td>
<td>9</td>
<td>88</td>
</tr>
<tr>
<td>Innes St.</td>
<td>6</td>
<td>52</td>
</tr>
<tr>
<td>Fisher St.</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>Bank St.</td>
<td>4</td>
<td>57</td>
</tr>
<tr>
<td>Horah St.</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>68</strong></td>
<td><strong>733</strong></td>
</tr>
</tbody>
</table>
Figure 1: Project Study Areas
Figure 2: Total Parking Supply by Block

The City of Salisbury
Downtown Parking Study
Off-street Parking

A total of 69 parking lots were inventoried, totaling 2,776 off-street parking spaces. The supply is fairly well distributed, with noticeable low supply on blocks 3, 5, 19, 21, and 24 (Figure 3).

Private parking lots accounted for 77% (53 lots) of the total parking lots and 79% (2,190) of the total off-street parking spaces (table 2). Of the available 586 public parking spaces, 49% are all day parking, 9% are two-hour parking, and 34% are only available during evenings and weekends.

Table 2: Off-street Parking Spaces by Type

<table>
<thead>
<tr>
<th>Lot Type</th>
<th># of lots</th>
<th>Total Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>51</td>
<td>2077</td>
</tr>
<tr>
<td>Private - pay</td>
<td>2</td>
<td>113</td>
</tr>
<tr>
<td>Public - 2-hr</td>
<td>2</td>
<td>54</td>
</tr>
<tr>
<td>Public - all day</td>
<td>7</td>
<td>287</td>
</tr>
<tr>
<td>Public - evenings/weekends</td>
<td>6</td>
<td>199</td>
</tr>
<tr>
<td>Public - reserved</td>
<td>1</td>
<td>46</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td></td>
<td><strong>2776</strong></td>
</tr>
</tbody>
</table>

Total Parking Supply by Block

Parking spaces were aggregated from on-street and off-street spaces up to the block level (Table 3, Figure 2). The blocks with higher parking supply are located primarily around the Rowan County Courthouse with an additional high supply lot adjacent to the library.

Table 3: Parking Spaces by Block

<table>
<thead>
<tr>
<th>Block #</th>
<th>On-Street</th>
<th>Off-Street</th>
<th>Total Spaces</th>
<th>Private</th>
<th>Public</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>49</td>
<td>75</td>
<td>124</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>45</td>
<td>53</td>
<td>98</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>28</td>
<td>135</td>
<td>163</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5</td>
<td>51</td>
<td>39</td>
<td>90</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>63</td>
<td>82</td>
<td>145</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Block #</td>
<td>On-Street</td>
<td>Off-Street</td>
<td>Total Spaces</td>
<td>Private</td>
<td>Public</td>
</tr>
<tr>
<td>--------</td>
<td>-----------</td>
<td>------------</td>
<td>--------------</td>
<td>---------</td>
<td>--------</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>81</td>
<td>88</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>111</td>
<td>143</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9</td>
<td>44</td>
<td>95</td>
<td>139</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>35</td>
<td>215</td>
<td>250</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>7</td>
<td>63</td>
<td>70</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>9</td>
<td>129</td>
<td>138</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13</td>
<td>46</td>
<td>84</td>
<td>130</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>14</td>
<td>48</td>
<td>155</td>
<td>203</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>15</td>
<td>29</td>
<td>74</td>
<td>103</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>36</td>
<td>113</td>
<td>149</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>9</td>
<td>78</td>
<td>87</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>18</td>
<td>35</td>
<td>149</td>
<td>184</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>45</td>
<td>0</td>
<td>45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>31</td>
<td>76</td>
<td>107</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>15</td>
<td>0</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>26</td>
<td>165</td>
<td>191</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>25</td>
<td>225</td>
<td>250</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>12</td>
<td>40</td>
<td>52</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>0</td>
<td>76</td>
<td>76</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>26</td>
<td>0</td>
<td>170</td>
<td>170</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>0</td>
<td>147</td>
<td>147</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
28 0 134 134 X

Total 733 2776 3509

Table 4: Municipal Parking Spaces

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Total Spaces</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>733</td>
<td>54%</td>
</tr>
<tr>
<td>Municipal - Visitor</td>
<td>286</td>
<td>21%</td>
</tr>
<tr>
<td>Municipal - Reserved</td>
<td>138</td>
<td>10%</td>
</tr>
<tr>
<td>Municipal - Evenings/Weekends</td>
<td>191</td>
<td>14%</td>
</tr>
</tbody>
</table>

Subtotal 1348

*Excludes Rowan County parking lots

Municipal Parking Supply

Public parking spaces, maintained by the city, accounted for 1,348 (38%) of the total 3,509 spaces available in the city. Of this, 615 spaces are located in off-street parking lots (22% of off-street supply) and all 733 on-street spaces (21% of total supply).

The city currently leases 40 parking spaces in block 24, diagonal to the courthouse, that are included in the municipal parking supply (Table 5). It should be noted that the leased parking agreement will end within the next five years of this report being written. Once this parking lot is no longer available publicly, there will be an added burden for parking in this area.

The City of Salisbury does not have maintenance authority over private parking lots, however parkers are utilizing both public and private lots throughout the week, month, or year. For this reason, all parking spaces were included in this analysis.

There is a noticeable gap in city-owned parking lots near high-use areas. There are no public lots in blocks 18 and 22 despite being located near the Rowan County Courthouse, which sees a high usage rate during the peak period. Further, blocks 12 and 17 lack city-owned lots despite having high utilization rates. The data suggest that the Rowan County Courthouse and City Hall are important generators of parking demand, with the areas surrounding the Salisbury Depot also creating significant demand.
Table 5: Municipal Parking Facility Ownership

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Total Spaces</th>
<th>Leased</th>
<th>Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>733</td>
<td>0</td>
<td>733</td>
</tr>
<tr>
<td>Municipal - Visitor</td>
<td>286</td>
<td>0</td>
<td>341</td>
</tr>
<tr>
<td>Municipal - Reserved</td>
<td>138</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Municipal - Evenings/Weekends</td>
<td>191</td>
<td>40</td>
<td>159</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>1348</strong></td>
<td><strong>40</strong></td>
<td><strong>1308</strong></td>
</tr>
</tbody>
</table>

*Leased parking lots are identified in Table 6 and Figure 4

Table 6: Leased Parking Lots by Parking Space Type

<table>
<thead>
<tr>
<th>Leased Parking Lot</th>
<th>Total Spaces</th>
<th>Regular</th>
<th>ADA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juror Lot (Soldiers Memorial AME Zion Church)</td>
<td>40</td>
<td>38</td>
<td>2</td>
</tr>
</tbody>
</table>
Figure 3: Municipal Parking Supply by Block
Figure 4: Municipal Parking by Ownership
**Existing Parking Utilization**

A parking utilization survey is one method to approximate the existing demand, taken during a single ‘snap shot’ in time. Existing parking utilization rates were collected on Thursday March 14th, 2019. The total number of parked vehicles observed during the AM peak period was 1,596 cars (45% of total occupancy).

For a planning-level analysis such as this, an 85% occupancy rate during the peak period is the ideal level of utilization, which balances the efficient use of parking resources while maintaining a reasonable number of available spaces for visitors. This target is especially true for on-street parking, where one could expect one vacancy for every seven on-street spaces. There are exceptions to this rule-of-thumb, such as ADA, reserved, or metered spaces, however the 85% target is an accepted planning-level metric.

**Utilization of Total Parking**

The most heavily occupied parking areas are those near government buildings and the Salisbury Depot. All parking lots in excess of 56% utilization are located in one of these areas. In turn, it may be assumed that these are the major attraction points of the downtown area. On-street parking is most heavily used on the block surrounding the Rowan County Courthouse (block 19). Note that parking blocks around the periphery, apart from blocks 1 and 4 around City Hall and block 23 adjacent to the Rowan County Courthouse, contain the largest surplus of spaces.

During the peak parking demand period, between 9 – 11am, the overall utilization rate was 45%. Of all on-street parking spaces, 53% were being utilized during this period compared to 44% of total lot spaces.

The most utilized block for off-street parking is block 12 at 70% total utilization (out of 129 spaces).

Areas of high on-street parking, with at least 85% utilization rates include:

- Main St. (88% of 25 spaces) between Bank St. and Fisher St. (blocks 4 and 5)
- Lee St. (100% of 7 spaces) between Fisher St. and Innes St. (blocks 7 and 8)
- Depot St. (100% of 2 spaces) between Innes St. and Council St. (block 12)
- Main St. (92% of 97 spaces) between Innes St. and Kerr St. (blocks 13/14, 18/19, 22/23)
- Church St. (98% of 42 spaces) between Council St. and Kerr St. (blocks 19/20, 23/24)
- Council St. (100% of 21 spaces) between Jackson St. and Church St. (blocks 15 and 20)
Table 7: Observed Peak Period Occupancy

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Total Spaces</th>
<th>Cars</th>
<th>Occupancy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>733</td>
<td>377</td>
<td>51%</td>
</tr>
<tr>
<td>Municipal - Visitor</td>
<td>286</td>
<td>192</td>
<td>67%</td>
</tr>
<tr>
<td>Municipal - Reserved</td>
<td>138</td>
<td>32</td>
<td>23%</td>
</tr>
<tr>
<td>Municipal - Evenings/Weekends</td>
<td>191</td>
<td>88</td>
<td>46%</td>
</tr>
<tr>
<td>Private</td>
<td>2098</td>
<td>907</td>
<td>43%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3446</strong></td>
<td><strong>1596</strong></td>
<td><strong>45%</strong></td>
</tr>
</tbody>
</table>

Utilization and Availability of Municipal Parking

The numbers and patterns of unoccupied (raw surplus) spaces are shown in Figure 6. There are numerous open parking spaces at the primary intersection of Innes Street and Main Street. Municipal lots are being used at a higher capacity as one nears the major destinations of the Rowan County Courthouse and City Hall. The Salisbury Depot also sees less available parking during the peak demand time period. Parking lots with significant open spaces include: block 8, adjacent to City Hall; block 20, behind the courthouse; and block 25, north-east of the Salisbury Depot.

It is possible that some of the 689 observed vehicles located within on-street, municipal-visitor, municipal-reserved, and municipal-evenings/weekends parking spaces will also periodically park within private parking lots (Table 8). The current parking model within downtown does not restrict parking beyond the timed on-street parking, and it is reasonable to assume that most people park anywhere they find convenient. This theory reinforces the need for a relatively conservative approach, including a targeted maximum occupancy rate of 85% to provide flexibility for this analysis.

Table 8: Municipal Parking Occupancy and Availability

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Total Spaces</th>
<th>Cars</th>
<th>Occupancy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>733</td>
<td>377</td>
<td>51%</td>
</tr>
<tr>
<td>Municipal - Visitor</td>
<td>286</td>
<td>192</td>
<td>67%</td>
</tr>
<tr>
<td>Municipal - Reserved</td>
<td>138</td>
<td>32</td>
<td>23%</td>
</tr>
<tr>
<td>Municipal - Evenings/Weekends</td>
<td>191</td>
<td>88</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>1348</strong></td>
<td><strong>689</strong></td>
<td><strong>51%</strong></td>
</tr>
</tbody>
</table>
Utilization and Availability based on Location

Eleven study area blocks were observed to be more than 50% occupied during the AM peak period. Three of these eleven blocks contained fewer than 100 parking spaces, leaving eight blocks that are considered to be the high-demand locations. Blocks with fewer than 100 parking space have grey shading in Table 9.

Table 9: Study Area Blocks with Greater than 50% Observed Occupancy

<table>
<thead>
<tr>
<th>Block #</th>
<th>Total Spaces*</th>
<th>Cars</th>
<th>Occupancy %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>124</td>
<td>68</td>
<td>55%</td>
</tr>
<tr>
<td>4</td>
<td>163</td>
<td>102</td>
<td>63%</td>
</tr>
<tr>
<td>5</td>
<td>90</td>
<td>47</td>
<td>52%</td>
</tr>
<tr>
<td>12</td>
<td>138</td>
<td>95</td>
<td>69%</td>
</tr>
<tr>
<td>13</td>
<td>130</td>
<td>71</td>
<td>55%</td>
</tr>
<tr>
<td>14</td>
<td>203</td>
<td>115</td>
<td>57%</td>
</tr>
<tr>
<td>17</td>
<td>87</td>
<td>62</td>
<td>71%</td>
</tr>
<tr>
<td>18</td>
<td>184</td>
<td>110</td>
<td>60%</td>
</tr>
<tr>
<td>19</td>
<td>45</td>
<td>38</td>
<td>84%</td>
</tr>
<tr>
<td>23</td>
<td>250</td>
<td>175</td>
<td>70%</td>
</tr>
<tr>
<td>26</td>
<td>170</td>
<td>93</td>
<td>55%</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1584</td>
<td>976</td>
<td>62%</td>
</tr>
</tbody>
</table>

*Includes on-street and off-street parking areas

* Rowan County parking lots excluded from this table
Figure 5: Total Parking Utilization at Peak Period (9 – 11am)
Figure 6: Municipal Raw Surplus of Parking
On-Street Parking Turnover and Length of Stay Analysis

The study included a length of stay and turnover analysis of the 2-hour time-restricted on-street parking in the downtown. This analysis utilized vehicle mounted LPR (License Plate Recognition) technology, which records and tracks individual license places, GPS coordinates, and time stamp information. The data was collected on Thursday, March 6th, beginning at 8:00 AM and ending at 6:00 PM. Table 10 below shows the average length of stay, total vehicles recorded, equivalent parking hours, and number of parking patrons found to be exceeding the posted time limit by street.

Table 10: Summary of Length of Stay by Time Restriction (Source: Walker Consultants)

<table>
<thead>
<tr>
<th>Street</th>
<th>Average Length of Stay</th>
<th>Parked Vehicles</th>
<th>Parked Hours</th>
<th>Over 2-Hours</th>
<th>Percent Violating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Church Street</td>
<td>2.39 Hours</td>
<td>100</td>
<td>239</td>
<td>28</td>
<td>28.0%</td>
</tr>
<tr>
<td>Main Street</td>
<td>1.59 Hours</td>
<td>513</td>
<td>818</td>
<td>71</td>
<td>13.8%</td>
</tr>
<tr>
<td>Depot Street</td>
<td>1.14 Hours</td>
<td>14</td>
<td>16</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Liberty Street</td>
<td>2 Hours</td>
<td>56</td>
<td>112</td>
<td>15</td>
<td>26.8%</td>
</tr>
<tr>
<td>Council Street</td>
<td>1.78 Hours</td>
<td>121</td>
<td>215</td>
<td>21</td>
<td>17.4%</td>
</tr>
<tr>
<td>Innes Street</td>
<td>1.52 Hours</td>
<td>182</td>
<td>277</td>
<td>20</td>
<td>11.0%</td>
</tr>
<tr>
<td>Fisher Street</td>
<td>1.39 Hours</td>
<td>136</td>
<td>189</td>
<td>11</td>
<td>8.1%</td>
</tr>
<tr>
<td>Bank Street</td>
<td>2 Hours</td>
<td>20</td>
<td>40</td>
<td>4</td>
<td>20.0%</td>
</tr>
<tr>
<td>Combined</td>
<td>1.67 Hours</td>
<td>1,142</td>
<td>1,906</td>
<td>170</td>
<td>14.9%</td>
</tr>
</tbody>
</table>

The average length of stay within the study area was 1.67 hours compared with the posted 2-hour limit. The overall percentage of parked vehicles found to exceed the 2-hour limit was roughly 15 percent, although this varied by street, from no vehicles exceeding the posted time limit to 28 percent of the vehicles exceeding the posted 2-hour limit.

The data indicated 37 vehicles parked on at least two different streets during the observation period. Vehicle movements were typically from one block face to an adjacent block face, indicative of re-parking to stay within the posted time limit or to avoid a citation.

A summary of the vehicles parked by hour is provided on the following table. While the majority of vehicles were parked for less than two hours, there are a significant number of vehicles observed that remained parked for all or most of the day without moving. This does not count the vehicles that park on multiple streets to avoid exceeding the time limit within a single space.
Summary of Existing Conditions

- The City of Salisbury does not have a shortage of parking supply to meet the existing demand, as there were more than 1,900 empty spaces observed during the peak period.
- In high-demand downtown locations, the current distribution and balance of parking supply may be contributing to a perceived parking shortage.
- During the peak morning period, there is only a 52% utilization rate of municipal parking.
- A modest number of on-street parkers are ‘shuffling’ their vehicles to multiple locations, oftentimes to the other block face.
- Public perception must be addressed in order to effectively utilize all parking resources.
- Enforcement should be strengthened to discourage “parking shuffle” by patrons utilizing on-street parking spaces in downtown Salisbury for extended periods of time during the day.

Recommendations-Existing Supply and Utilization

The following recommendations are based on the quantitative analysis of available and field-collected parking data and best management practices:

- The City of Salisbury should pursue a balanced utilization of all parking lots, whether they are located proximate to downtown or located along the periphery.
- Deter on-street parking by downtown employees, as well as over-stay parking from all users, through education, enforcement, and financial controls.
• Encourage the preservation of on-street parking spaces for use by customers and visitors to downtown for short-term, high-turnover use

• Improve wayfinding signage and ease of finding parking maps on the City’s website; add signage that clearly states which public parking lots are free for the public to use for the entire day

• Prepare for the potential transition (even if this day is many years from now) to metered parking along certain blocks of downtown utilizing a variety of technologies such as meters that accept credit cards, multi-space pay stations and parking apps. Establish a program to collect peak period occupancy counts on a regular basis and summarize the findings over time to substantiate any changes to the management or enforcement of parking resources, and document these findings

• Conduct a curb activity inventory in Downtown Salisbury to document whether additional allocation of curb space away from parking might be needed for loading/unloading zones, rideshare (Uber/Lyft) and micro-mobility uses

Section IV – Future Parking Demand Estimation

Background

The VHB team identified near-term development projects that are expected within the near-term (1-5 years) and long-term (5-10 years), estimated the parking demand that can be anticipated from these projects, and determined if additional parking supply will be necessary to meet this future demand.

Overview of Future Parking Demand Estimation

There are many quantitative methods for determining the approximate future parking demand. There are likewise many assumptions that must be made based on the best available information. The project team developed a spreadsheet model that quantifies parking generation from square footage and land use type inputs. The Institute of Transportation Engineers (ITE) Parking Generation (4th Edition) manual was referenced for this analysis.

Using the available building square footage and assumptions based on land use, the project team quantified the number of future developments that may occur before the effective future capacity is reduced to a point that future parking is needed.
Assumptions for Future Demand Analysis

**Existing supply:** includes only municipal parking within the Downtown study Area. This consists of on-street parking spaces, City of Salisbury owned lots and one lot leased for public use in the following location:

- 200 block of W. Liberty St. (Owned by Soldiers Memorial A.M.E. Zion Church)

**Planned Increase:** existing supply includes planned increases to municipal parking in the following areas:

- City Hall lot expansion (net increase of 32 public visitor spaces)
- On-street parking expansion at future Bell Tower Park (net increase of 33 spaces along Fisher, Jackson, Church streets along the perimeter of the park)
- On-street parking expansion of 15 spaces along the west side of Depot St. between Council and Liberty streets (part of planned improvements to the Amtrak depot)

**Utilization:** estimated based on parking utilization counts collected during the AM peak period of Wednesday March 14, 2019

**Demand margin:** assumes that the vehicles observed during the peak period does not include individuals who may be working from home, on vacation, or otherwise away from their normal place of business on the day of data collection. For this study the demand margin is 10%.

**Effective Capacity:** calculated as raw surplus parking minus a specified demand margin to account for individuals who were not at work on the day of data collection [90% of raw surplus parking]

**Surplus parking:** calculated as [existing parking supply] – [peak period vehicles observed]

**Effective future capacity:** calculated as [effective capacity] – [future demand]

Near-term projects include potential development opportunities in the 1-5 year timeframe, addressed by City of Salisbury staff.

Long-term projects represent prospective developments and currently vacant properties that are assumed to be re-activated in the 5-10 year timeframe, and the potential land uses are assumed based on previous or current use.

Total future parking demand that is generated from redevelopment will be needed at different times of the day, and therefore the total number of parking demand should be viewed as a ‘no greater than X spaces’ figure. Shared parking opportunities are greatest with residential parking, or fine-dining restaurants with limited lunch-time demand.

- Most residential development units are not intended to be live-work units, and therefore the parking demand may be shared by other land uses during the day.

Management of parking spaces will remain a function of the City through some version of a permitting system, rather than conveyed directly to a developer for private use. This strategy will allow the City to maximize shared parking opportunities.
All currently leased parking lots are assumed to be renewed or extended without disruption of service.

**Future Development Projects – Near-Term (1-5 years)**

Working in coordination with the City of Salisbury, VHB identified 19 near-term projects that are anticipated to generate additional parking demand within downtown.

VHB applied standard parking generation ratios per 1,000 Gross Square Foot (GSF) to each land use category in order to estimate the future demand that may be expected. The summary of near-term projects is shown in Table 11 below, sorted by ascending ratio.

**Table 11: Near-Term Future Parking Generation by Land Use**

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Est.</th>
<th>Unit</th>
<th>Ratio</th>
<th>Parking Demand</th>
<th>Private Provided*</th>
<th>Net Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>60</td>
<td>Dwelling</td>
<td>1.5</td>
<td>90</td>
<td>94</td>
<td>-4</td>
</tr>
<tr>
<td>Recreation</td>
<td>3.8</td>
<td>Per acre</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Mixed Use</td>
<td>102,675</td>
<td>GSF / 1,000</td>
<td>2.5</td>
<td>257</td>
<td>257</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>10,970</td>
<td>GSF / 1,000</td>
<td>2.5</td>
<td>27</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td>82,800</td>
<td>GSF / 1,000</td>
<td>2.5</td>
<td>207</td>
<td>207</td>
<td></td>
</tr>
<tr>
<td>Office</td>
<td>3,260</td>
<td>GSF / 1,000</td>
<td>3</td>
<td>10</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Bank (Drive-in)</td>
<td>5,000</td>
<td></td>
<td>3</td>
<td>15</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td>204,705</td>
<td></td>
<td></td>
<td>614</td>
<td>520</td>
<td></td>
</tr>
</tbody>
</table>

*Private Provided = 94 existing private spaces to accommodate the Empire Hotel Apartment development

Mixed Use development represents the single largest parking demand generator within the first 5 years (257 of 552 new parking spaces needed).

An estimated combined demand for 249 new parking spaces is due to an expected increase in retail/commercial development land uses and a planned drive-through bank site. There is an expected 98,770 square feet of combined new development expected to occur in the first 5 years in these categories in downtown Salisbury.

Demand for residential Units (90 spaces) will be covered by 94 privately provided spaces. These will be provided in two lots, both of which will be designated to support parking for the only planned residential units, at the Empire Hotel Site.
Office (10 spaces), and recreation (8 spaces) constitute the remainder of the total net demand for 552 new parking spaces. How expected parking demand will be satisfied by effective capacity of municipal parking can be seen in Figures 7 and 8.

The new parking demand generated will not be evenly distributed across all downtown blocks. Working in conjunction with the City of Salisbury and based on the best available information to date, the distribution of future parking demand generated by near-term projects is shown in Figure 7. On-street and off-street parking is not differentiated on this figure because the new parking demand includes customers, employees, and residents. There are three study area blocks that stand-out with high future demand (blocks 5, 8 and 9), all three are expecting primarily commercial/mixed-use development. block 5, is the only of these that is expecting residential development in the near-term.

The Empire Hotel residential project planned for block 5 is estimated to generate demand for 162 spaces. The residential portion of the project is expected to demand 90 spaces, of which 62 of these will be absorbed by existing private parking (block 2) and another 32 will be absorbed by an expansion of surface parking planned (block 4 behind City Hall). The mixed-use portion of the development is expected to generate demand for 73 additional parking spaces. It is important to note that while 94 spaces of the total demand created by the project will be satisfied privately, the current utilization of the 62 private spaces in block 2 that will be designated for the development will inevitable either conflict with demand from the development here or will spill over to neighboring lots or on-street parking. For the purpose of looking at the parking supply and demand balance between future demand and municipal parking in this portion of the study, we will focus on the net demand of -4 spaces for the residential portion and 73 spaces for the mixed-use portion for a total additional need for 69 spaces which the city will need find ways to satisfy.

The development of the Bell Tower Park is included as a near-term project. A park or recreation area of this size does not generate a significant parking demand, as compared to other land uses (residential, office, restaurant, etc.). Annual or occasional events which may be hosted at the park, however, may draw several thousands of attendees to downtown, which represents a tremendous parking demand. Events such as these are managed as special events with unique parking considerations that are simply not directly connected with the typical weekday analysis included in this plan. If the Bell Tower Park generates significantly greater parking demand than anticipated within the first five (5) years, there is estimated to be a positive balance of surplus parking spaces to meet this demand.

The proposed Amtrak depot improvements have not been included in the list of projects that will generate future parking demand. The improvements, which include a new outdoor plaza and entrance as well as a large pavilion for buses do not generate additional parking needs. A potential future increase in the number of Amtrak stops per day at the station may increase ridership and subsequently increase use of the facility, but how this may affect parking cannot be determined. However, plans for improvements to the facility call for the addition of 15 newly created on-street parking spaces on Depot Street adjacent to the depot as well as the rehabilitation of approximately 7 existing spaces on Council Street between Depot Street and the railroad tracks. The planned spaces have been included in the total number of municipal on-street parking spaces for the study.
Figure 7: Future Demand Generated by Near-term Developments
Future Development Projects – Long-Term (5-10 years)

Working in coordination with the City of Salisbury, the project team identified an additional 8 prospective opportunities which will utilize currently vacant and underdeveloped properties and would potentially generate additional parking demand within downtown. Parking demand for 216 new parking spaces is anticipated based on their approximate square footage and assumed land use types (Table 12).

**Table 12: Long-Term Future Parking Generation by Land Use**

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Est. GSF</th>
<th>Unit</th>
<th>Ratio</th>
<th>Parking Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed-Use</td>
<td>51,700</td>
<td>GSF / 1,000</td>
<td>2.5</td>
<td>130</td>
</tr>
<tr>
<td>Commercial</td>
<td>34,600</td>
<td>GSF / 1,000</td>
<td>2.5</td>
<td>86</td>
</tr>
<tr>
<td><strong>SUBTOTAL</strong></td>
<td><strong>86,300</strong></td>
<td></td>
<td></td>
<td><strong>216</strong></td>
</tr>
</tbody>
</table>

An estimated demand for 130 new parking spaces is expected from Mixed-Use development land uses, totaling and estimated 51,700 new GSF. An estimated demand for 86 new parking spaces is expected from Commercial development land uses, totaling an estimated 34,600 new GSF. These two categories share parking ratios that are identical (2.5 new spaces per 1,000 GSF), and the details of these potential future development projects are not fully defined.

The distribution of future parking demand generated by long-term projects is shown in Figure 8. The resulting pattern of parking demand generated centered around the west central and west end areas of Downtown, similar to near-term demand projections. This indicates a pattern of growth shifting to the west and a need for additional municipal parking west of Council Street.
Figure 8: Future Demand Generated by Long-term Development Opportunities
Balance of Parking Supply and Demand

Based on the existing utilization count analysis described in Section III, there were 728 vehicles observed within municipal parking spaces during the AM peak period.

Existing municipal parking spaces totaled 1,348 parking spaces during the time of utilization count analysis. A planned increase in the near-term of 48 on-street spaces are accounted for in the future parking balance with a total of 1,364 municipal parking spaces.

With a raw surplus (number of empty spaces) of 636 minus the 10% demand margin (i.e. individuals who may be working from home, on vacation, or otherwise away from their normal place of business on the day of data collection) this translates to an effective capacity of 574 parking spaces unutilized during the peak period that can be leveraged to satisfy future demand or additional future development.

Near-term development projects are expected to generate a net demand for 552 new parking spaces. This future demand will be accommodated by the current effective capacity, leaving an estimated balance of approximately 50 parking spaces in the near-term.

Long-term development opportunities could generate a parking demand for an additional 141 parking spaces. If all of these development or redevelopment opportunities are realized, then the number of effective capacity parking spaces during the peak period will be surpassed by future demand during this 5-10 year timeframe, and additional parking supply may be needed.

Table 13: Existing Supply, Demand, and Surplus of Parking

<table>
<thead>
<tr>
<th>Parking Type</th>
<th>Total Spaces</th>
<th>Planned Increase*</th>
<th>Cars</th>
<th>Raw Surplus</th>
<th>Demand Margin</th>
<th>Effective Capacity</th>
<th>Demand</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Street</td>
<td>733</td>
<td>48</td>
<td>377</td>
<td>404</td>
<td>0.9</td>
<td>364</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Municipal Visitor</td>
<td>294</td>
<td></td>
<td>196</td>
<td>130</td>
<td>0.9</td>
<td>117</td>
<td>-552</td>
<td>-141</td>
</tr>
<tr>
<td>Municipal Reserved*</td>
<td>289</td>
<td></td>
<td>155</td>
<td>134</td>
<td>0.9</td>
<td>121</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBTOTAL</td>
<td>1,364</td>
<td>728</td>
<td>636</td>
<td>574</td>
<td></td>
<td></td>
<td>-552</td>
<td>-141</td>
</tr>
</tbody>
</table>

Parking Balance    |               |                   |       |             |               |                   | +22    | -119   |

* Demand Margin is calculated as 10% of the total spaces.
Near-term parking balance (illustrated in Figure 9) shows that demand created by expected development on the western end of Downtown will leave several blocks with a parking deficit, with the assumption that private parking accommodations are not made for these developments. Block 5 (bounded by Main Street, Church Street, West Bank Street and West Fisher Street) will face the largest deficit with a deficit of 94 spaces even when accounting for 94 spaces that will be designated for the Empire Hotel development.

Long-term parking balance (illustrated in Figure 10) shows that demand created by expected development expects to deepen deficits already faced in the near-term projections for many blocks. Strategies for the next ten years should be emphasized in areas west of Innes Street.
Figure 9: Near-Term Demand Balance with Municipal Parking Supply

Future Demand Balance with Municipal Parking Supply

**Near-Term (1-5 years)**

The City of Salisbury
Downtown Parking Study

Parking Balance:
- Red: > (-75) parking spaces
- Orange: (-75) - (-50)
- Yellow: (-49) - 0
- Green: 1 - 25
- Light Green: 26 - 50 parking spaces

Parking Balance accounts for total off-street municipal parking spaces and on-street parking spaces bordering blocks.
Figure 10: Long-Term Demand Balance with Municipal Parking Supply

Future Demand Balance with Municipal Parking Supply

Long-Term (6-10 years)

Parking Balance

- > (-75) parking spaces
- (-75) - (-50)
- (-49) - 0
- 1 - 25
- 26 - 50 parking spaces

Parking Balance accounts for total off-street municipal parking spaces and on-street parking spaces bordering blocks.

The City of Salisbury
Downtown Parking Study
Recommendations-Future Parking Demand

The City of Salisbury is expected to have a future municipal parking supply shortage, especially on the western side of downtown, in the near-term (1-5 years) and in the longer term (6-10 year) timeframe, based on pending development. Based on this projected shortage of municipal parking, the following recommendations were identified:

- Expect certain blocks of high-demand to experience a shortage of parking during peak periods, and promote the availability of parking in low-demand areas through enhanced wayfinding signage, physical map kiosks and online parking maps.

- Improve bicycle and pedestrian access to downtown Salisbury through enhanced pedestrian crossings, addition of bicycle parking, and improved bicycle and pedestrian facilities on approach to and throughout downtown Salisbury.

- Investigate potential parking lot expansion south of Innes Street, with a special focus on the following site:

- Block 1-consider converting existing green space to a paved parking lot in the near term (this will add approximately 60-75 spaces to offset a portion of the projected long-term shortage of 214 parking spaces within two blocks (#2 and #5 on Figure 1) west of Main Street that are closest to Block #1).

- Consider opportunities for a public-private partnership that would support a future parking deck facility as part of a mixed use redevelopment project; avoid undertaking a structured parking (parking deck) facility in the absence of funding partners due to high costs, a long payback period and uncertainty associated with autonomous vehicles adoption and disruption to the parking patterns.

As the City of Salisbury continues to pursue future economic redevelopment opportunities for downtown Salisbury, it could be of benefit to reach out to the Development Finance Initiative (DFI) group with the UNC School of Governments that could help review potential sites and identify feasible strategies that could include structured parking. DFI has worked in 85 communities across the state since the start of the program 2011, including Kannapolis. For the City of Wilmington, DFI helped identify a redevelopment opportunity in place of an aging parking structure and attract multiple private development proposals for the City of Salisbury to consider.

River Place Development is planned in place of an aging municipal parking deck in downtown Wilmington. Structured parking (with 403 spaces) will be included as part of the development. Source: City of Wilmington.
Section V – Management of Parking Systems

Background

The study team was asked to review the current structure for management of parking resources in downtown Salisbury and identify opportunities for improvements as appropriate.

This task consisted of three basic elements:

- Examine current framework for management of downtown parking resources in light of frameworks used in other cities and professional parking management standards.
- Identify strengths and weaknesses of the current framework.
- Recommendations for more effective system management framework if appropriate.

Current Policies

The City of Salisbury provides complimentary parking spaces throughout the downtown, both on-street and off-street. Both the on-street and off-street locations offer a combination of all-day and two-hour time limited spaces. The two-hour limited parking is signed as 8:00 am to 7:00 pm, with no indication of which days the restrictions apply. The assumption is that the restrictions apply to all days, although parking is not uniformly enforced during all posted hours or every day of the week. The all-day spaces are located along the perimeter of downtown, with the two-hour spaces in the highest demand areas. During our stakeholder interviews, held on April 30 and May 1, 2019, we heard many comments about the two-hour limited spaces, indicting employees and business owners doing the “parking shuffle” to avoid receiving a parking ticket for staying over the time limit.

The City of Salisbury Police Department is responsible for enforcement efforts of the two-hour time limit and employs one (1) downtown patrol officer. The officer works part-time during the daytime business hours and occasionally for planned gatherings. The officer is a community-oriented liaison between the City, County, and business owners, and should be known by name by most of the business owners. The officer is equipped with a Segway, “a two-wheeled, self-balancing personal transporter” to efficiently move about the downtown area; however, this makes chalking and tracking of the vehicles tires a bit more difficult as the use of the Segway requires both hands on the handlebars.

Source: Walker Consulting
According to City Ordinance Section 13-171 Limited Parking Zones:

A. Generally; whenever a parking zone is designated in accord with section 13-96 of this code, limiting the time or conditions under which a vehicle may be parking, no person shall park any vehicle in such zone except in accord with the signs and marking erected therein.

B. Moving vehicle within same block. The changing of the position of a vehicle from one (1) point directly to another point within the same block shall not be deemed to interrupt the period of continuous parking within limited parking areas within the city.

The above section A clearly defines the parking time zone limits and that the limiting sign and/or erected marking must be followed. The above section B clearly defines that the aforementioned “Parking Shuffle” of business owners and employees is also in violation of the time-limited parking area per block.

<table>
<thead>
<tr>
<th>Offense</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking overtime</td>
<td>$5.00</td>
</tr>
<tr>
<td>Double parking</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking in safety zone</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking too close to fire hydrant</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking in corner clearance zone</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking against line of traffic</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking over lines designating lined parking space</td>
<td>$5.00</td>
</tr>
<tr>
<td>Parking too far from curb</td>
<td>$5.00</td>
</tr>
<tr>
<td>Blocking traffic</td>
<td>$5.00</td>
</tr>
<tr>
<td>Blocking alley</td>
<td>$5.00</td>
</tr>
<tr>
<td>Making U-turn where prohibited</td>
<td>$5.00</td>
</tr>
<tr>
<td>Turning around in middle of block</td>
<td>$5.00</td>
</tr>
<tr>
<td>Running against traffic signal</td>
<td>$5.00</td>
</tr>
</tbody>
</table>

The penalty or fine for parking and traffic violations are listed in City Ordinance Section 13-40 and are shown in the table to the right. Fines for parking are $5.00 per occurrence. Exceptions include parking in a space reserved by the Americans with Disabilities Act (ADA) and repeat offenders (more than four (4) tickets in a 30 day period).

When the officer finds a vehicle parked in violation of the parking ordinance; a parking violation is filled out by hand and issued to the vehicle. This parking violation has the top copy with “carbon paper” on the backside which imprints the handwriting onto an envelope which can be mailed in to make payment. The envelope requires proper postage be applied prior to mailing. The parking and traffic violation fees are $5.00 per occurrence.
City ordinance, Section 13-41 **Penalty for Late Payment of Parking Violation.** Parking violations must be paid within thirty (30) days from the date of violation notice or will be subject to an additional twenty-dollar late payment penalty.

City ordinance, Section 13-41 **Penalty for Repeat Offender of Parking Violations.** Offenders who receive a minimum of four (4) parking violations within a thirty-day period shall be subject to an additional fifty-dollar repeat offender penalty, which shall be issued with notification of the fourth and subsequent offenses. Repeat offender penalties shall be subject to the penalty for late payment in section 13-41.

Parking violations can be appealed. The process involves obtaining a **Parking Citation Appeal Form** from the Salisbury Police Department. The form includes the citation date, number, location, and name/address(phone of the appealer. The form also includes a field for the Reason for Appeal, as well as a section for officer/parking control comments. Finally, there is a section for supervisor comments.

The City of Salisbury also allows for temporary “Right-of-Way Use Permits” through application. Again, a form is filled out in advance with location of work, name/address(phone of applicant, and start/end date with an explanation of request. If approved, this permit allows for an unlimited amount of time per parking space approved.

**Recommendations**

The parking violation fees of $5.00 per occurrence is extremely low compared to North Carolina averages for Cities of similar size to Salisbury and does not properly convey the message that motorists should not park illegally and is not a deterrent to parking illegally. We recommend the parking violation fee be raised to a minimum of $15.00 per occurrence. The late payment fees should also have incremental raises built in as follows: $25 for over 30 days; additional $25 between 31 and 90 days; and an additional $50 if paid over 90 days past due. A parking violation which has not been paid after 90 days would total $115.00, which includes the original violation fee of $15.00 plus $100.00 in late payment fees.
Time-Limit Enforcement

Two-hour time-limited parking is designed to provide premium close-in parking spaces convenient to the patron’s shopping or dining destination. Therefore, the time-limited spaces are located along Main Street, Innes Street, and other high demand areas including the two-hour off-street lot located in the 100 block of E. Innes Street. The 24-hour complimentary parking spaces are designed to provide parking for the employees and business owners since they need to park for the whole day. The “Parking Shuffle” that is occurring is illegal as defined in City ordinance 13-171, but more importantly, these vehicles are occupying many of the premium spaces for the shopping and dining customers forcing them to circle the block looking for spaces. Proper enforcement of the time-limited parking spaces should free up available premium spaces for the customers of downtown establishments.

Physical chalking to determine whether a vehicle is parked beyond the posted time limit has been a staple of parking enforcement for decades for cities and towns across the nation. Recently a unanimous decision by a three-judge panel of the U.S. Court of Appeals for the 6th Circuit said chalking tires for purposes of parking enforcement – without warrant - violated the Fourth Amendment’s bar against unreasonable searches. Although the 6th Circuit U.S. Court of appeals does not cover the State of North Carolina, this court decision should be carefully monitored as it could impact physically chalking vehicles to determine the length of time a vehicle is parked. In addition to this potential legal argument, chalking alone is not sufficient to enforce parking on the same block throughout the day, as the chalk mark rubs off after the vehicle moves.

The process of electronic tire-chalking to monitor parked time can be implemented with either manual entry hand-held devices, or with License Plate Recognition Technology. These methods record the plate number and location of the parked vehicle. If a vehicle is recorded on a block and subsequently recorded again later in the day after moving to another block, the system will recognize the vehicle as already parked in the block and counted in violation. Increased enforcement is recommended to curb the Parking Shuffle and will generate additional revenues for the City.

Handheld Electronic Citation Issuance

Handheld ticketing is a software package to issue and track citations that enforcement officers create. The components include the software package on a hosted server (cloud based), the software application (App) on a smart-phone, and a Bluetooth ® printer.

When an enforcement officer encounters a violating vehicle, the officer can issue a violation citation. The phone app can capture photos, verbal comments, GPS coordinates and connect this data to the citation. The app is communicating in real-time to the server so repeat violators or “hot list” vehicles will be immediately identified for further action. This is manual real-time electronic “Tire Chalking” for time zone enforcement.
The enforcement software package will track the life of the violation from issuance to payment or adjudication. It is held on the manufacturer’s server and accessed through a web portal. The City can configure location names, fee structures, rate escalation rules, late fees, and access statistical reports. The enforcement software package also hosts a customer web portal which is a self-service ecommerce module that allows customers to make online payments and appeals. Monthly customers can access their account, apply for a permit, post payments, join wait lists, and view historical payments.

**Mobile License Plate Recognition (MLPR)**

The use of Mobile License Plate Recognition (MLPR) for enforcement can be implemented to enforce not only the time-limited parking, but also the block time-limited parking significantly reducing the “parking shuffle”. This is automatic real-time electronic “Tire Chalking” for time zone enforcement.

License Plate Recognition Cameras are mounted on a vehicle and as the vehicle drives around the on-street or off-street parking area, it scans the license plates. The license plate image is converted to a text file and is entered into a time-based database which is updated in real-time. If a license plate is scanned in the same space, or block zone after the time-limited session has expired, the enforcement officer is alerted by the MLPR software and a citation can be issued.

These systems can be mounted on an automobile for on-street enforcement, or an electric cart (golf cart) for ease of maneuverability in off-street parking lots and garages.

*Mobile License Plate Recognition Cameras and Software*

*Source: Walker Consulting*
During the stakeholder meeting and interviews performed on April 30th and May 1st, the subject of parking meters was a recurring theme. It was also discovered that the City of Salisbury did have parking meters in the 60’s, 70’s, and 80’s. The provision of parking meters is still in the City Code of Ordinances CHAPTER 13 – ARTICLE VI. – STOPPING, STANDING, AND PARKING: DIVISION 2. – PARKING METERS. If the City of Salisbury so chooses to install parking meters, no changes or limited changes to City Ordinance would be required. Following is a brief description of the technology available for paid parking in downtown Salisbury.

**Single-Space Meters (SSM)**

Carl Magee invented the parking meter in 1935. For decades the design remained the same, but in the 1980’s the 9V battery replaced the spring-loaded mechanism for accepting payment. This also allowed for an electronic time display which could be seen better in low-light conditions. Within the last few years, the meter technology has incorporated rechargeable batteries, solar panels for charging, and wireless communications; which allows for credit card acceptance and on-line report generation and alerts.

The Single-Space Meter (SSM) is the most convenient parking option for customers: pay where you park for the time you select. With the incorporation of credit card acceptance, the customer doesn’t need to have change (or run in to the store and ask for change). SSMs are easy to use: insert the coin and the time will appear. For credit card payment the card is inserted, there are plus (+) and minus (-) buttons to adjust the time requested, and the payment is processed. They are also easy to enforce: just walk or drive around and check the meters.

Issues with older style SSMs were that they did not offer the patron a receipt, and if time remained displayed on the meter when the patron left, the next customer would get free parking. Newer SSMs allow receipts to be generated on-line based on the customer’s credit card number. Some manufacturers also offer sensors which can detect when a vehicle is present in the parking stall. This allows for enforcement personnel to be alerted when a space is occupied but remains unpaid; and when the space becomes unoccupied, the meter will “zero out” any remaining paid time on the meter.


Multi-Space Meters (MSM)

Payment can be made via coin, bill, or credit card and the kiosk issues a receipt. MSMs have rechargeable batteries, solar panels or AC power for charging, and wireless communications which allows for credit card acceptance and on-line report generation and alerts.

The MSMs can be configured for use in one of three modes of operation: Pay and Display, Pay-By-Space, or Pay-By License Plate. Most MSM manufacturers make one meter capable of being programmed for all three payment modes by changing the front panel (including the written instructions) and the system software.

Pay and Display Mode

In Pay and Display (PND) mode, the patron parks the vehicle, walks to the parking meter, pays for an amount of time, and receives a receipt. The patron then returns to the vehicle to place the receipt on the dashboard. The receipt displays the transaction information but most importantly, the expiry date and time (in larger print) for the parking session.

Enforcement is performed by visually inspecting each vehicle for the receipt and checking the expiration date and time. This can be time consuming for the enforcement officer because the receipt may be not easily visible, upside down, or otherwise difficult to read.

Pay and display does not allow for adding additional time remotely from another MSM or pay-by-cell phone application. Installation of signage stating, “Pay here and display your ticket on dash” and “Have you paid and displayed your ticket?” are recommended with this system.
Pay by Space Mode

In Pay-By-Space (PBS) mode, the patron is not required to return to the vehicle with a receipt, but each space must be numbered, and the patron must remember what space number they are parked in. To make payment, the patron keys in the space number and then proceeds to make payment for their desired amount of time. A receipt is not required on the dashboard for enforcement but can be printed if requested by the customer.

Enforcement is performed by viewing a report of paid and/or unpaid spaces and checking each un-paid space for a vehicle. The report can be printed from the MSM or can be viewed on a web-based application on a hand-held enforcement device. The transactions are uploaded in real-time to avoid issuing a citation to a patron who “just paid” for their parking.

Installation of signage stating, “Remember your space number” and “Pay Here” are recommended with this system.

Pay-By-Plate (License) Mode

In Pay-By-Plate (PBP) mode, the patron is not required to remember their parking space number or return to the vehicle to display their receipt. Instead, the patron enters their vehicle’s license plate number and selects the amount of parking time. No receipt is required to be placed on the dashboard but can be printed if requested by the customer. Signage is required in the area, and Walker would recommend adding “HINT: Take a photo of your license tag” to the sign.

Enforcement can be performed in a similar manner to PBS mode by reviewing a report and comparing to the parked license plates, but this would prove to be extremely time consuming. Instead, the paid license plates are uploaded to an electronic handheld enforcement device or mobile unit (described earlier in this report).
Smartphone Parking App for Payment

A smartphone application works in tantum by integrating payment via the parking patron’s smartphone and the vehicle license plate. This convenient method of payment is offered by several vendors and considered standard convenience with little to no upfront costs to the City. Signage is typically provided and installed by the vendor indicating the pay-by-cell provider along with the location ID so that the patron can easily make payment using a downloaded App on their phone. The payment information is uploaded to the enforcement software in real-time, so no citations will be improperly written.

Parking apps allow users to establish an account and link a credit card and vehicle license plate number to the account. Once parked, the user selects their location (typically determined via GPS), their vehicle, and parking period. There is a small fee per use typically passed along to the user of about $0.35-$0.45. Benefits of using this convenient service include not needing to stop at a meter and receiving a text warning message when their parking time is about to expire with an option to extend the parking period. The parking vendors provide the signage and help to promote the use of the app.

Selecting an app vendor already in use in the surrounding communities provides a built-in customer base as anyone already using an app to pay for parking in one city can easily pay for parking using the same app in Salisbury. These apps can also be branded to the local city for an additional fee and not recommended for smaller parking systems.

Parking Approaches Used in Other Cities

Every city is unique in its history, identity, economic drivers, and its own set of goals for Downtown activity and development. It is generally not possible to simply adopt a model that works well in another city without fully considering the context of the community where it is applied. Looking at parking programs in other cities might provide examples of tools that may be applicable in Salisbury, but strategies and policies for the parking program in Salisbury must be tailored to the specific local conditions and plans for future growth.

This section reviews specific parking program elements from a variety of municipalities. In some cases, the cities are somewhat similar to Salisbury in size. However, some aspects of parking programs in larger cities will be cited as good examples of broadly applicable “best practices.”

Fayetteville, North Carolina

The City of Fayetteville, North Carolina has an active downtown including a new baseball stadium. It is also home to the Cumberland County offices. On-street parking is free, but with a mix of time-limits, predominantly 2-hour and 3-hour time limits, with a small number of 30-minute spaces. The City has one parking structure and several small surface lots in operations, with a new parking structure opening later this year in association with development adjacent to the new ballpark.
which includes the redevelopment of an historical hotel, restaurants, and residential units. Off-street parking is sold as a mix of transit, monthly permit parking, and event parking.

**Relevant Aspects of Parking System Management**

Parking falls under the Public Services Department, with direct oversight by the Traffic Services Division with oversight by a staff as needed. At this time the City does not have any dedicated staff responsible for public parking.

Day to day enforcement of the parking regulations is done by a private parking operator who tracks vehicle license plates by location and time of day for enforcement of time limits, manages permit sales, daily parking revenue collection and event parking. In addition to daily enforcement duties, the parking operator provides customer service and is the first step in the citation appeals process. The City relies on a private parking operator to ensure the parking assets are managed and controlled.

On-street enforcement hours and off-street paid parking recently changed to 9 am to 9 pm Monday through Friday. During non-events parking is free on the weekends. During events off-street parking is paid beginning two hours prior to the beginning of the event. At this time the County does not charge for parking, which has a large supply of parking that is just over 10-minutes from the new stadium.

The City has recently updated its website with Downtown Parking information, including maps for parking locations during events and non-events:

[https://fayettevillenc.gov/community/getting-around/downtown-parking](https://fayettevillenc.gov/community/getting-around/downtown-parking)

Revenues and expenses are reported by the City as a separate enterprise fund. As of 2018, expenses outpaced revenues requiring a contribution from the general fund for the previous five years (from $80,000-$112,000). Opening of the stadium and addition interest in downtown is projected to eliminate this deficit.

**The Town of Chapel Hill, North Carolina**

The Town of Chapel Hill operates three garages, eight surface lots, and has paid on-street parking. Parking falls under the Police Department as a shared responsibility by the Community Safety Planner, who has a dedicated parking staff of 21, which includes three enforcement officers, cashiers, maintenance, and supervisors. The downtown core is directly adjacent to the University of North Carolina, Chapel Hill campus, which has a direct impact on parking demand and polices. The parking system includes 200 metered on-street spaces and over 1,200 off-street spaces within a mix of parking structures and surface lots. Daily parking is paid at mult spacer meters located at both on-street and off-street spaces.
Relevant Aspects of Parking System Management

Parking is actively managed by the Community Safety Planner who works with the economic development and planning department for the benefit of the Town as a whole. The City has taken steps to track occupancy of a few of the more active parking areas to assist users in locating an available space as well as offering discounts to seniors through a special validation.

Users can access parking information on the parking options through the Park on the Hill website, which shows the location of parking locations for consideration.

https://www.parkonthehill.com/

Parking is free on Sundays and holidays as well as Saturdays in July and December. Parking rates are as follows:

- On-street $1.75 per hour for up to 3-hours
- Off-street lots $1.50 per hour 10-hour maximum
- Off-street garage $1.00 per hour 10-hour maximum

Parking is paid at a multi-space meter using the number space or by using the ParkMobile parking app with registered account. On-street spaces may be reserved for contractor parking for $15.00 per day, with a 10-day notice. Citations may be paid on-line with credit card and are subject to an additional $10.00 fine if not paid by the due date.

Burlington, North Carolina

All public parking in downtown Burlington, North Carolina is owned and managed by the City’s Public Works Department. As in Salisbury, on-street parking is controlled by time limit enforcement with no on-street parking meters. Like Salisbury, Burlington contends with constant abuse of on-street parking by downtown employees who park in on-street spaces and move their vehicles periodically to avoid ticketing.

Relevant Aspects of Parking System Management

The City of Burlington Public Works Director (Nolan Kirkman) has taken on the role of parking system manager in a more direct way than has been found in most cities of similar size and with a similar number of parking facilities. The Director is at the forefront of downtown parking system management, including policy recommendations and implementation related to parking space allocation, parking rates for off-street lots, and long-term planning. He has endeavored to learn essential parking management principles and apply those principles to policies and strategic parking planning in Downtown Burlington. In particular, he has gained an understanding of on-street and off-street parking as single, inseparable “system”, that must have compatible policies on both sides of the equation. As an example, additional “free” parking space was created in the City’s off-street lots in conjunction with an intensified enforcement effort to downtown employees from on-street spaces needed for customers. The new emphasis in the on-street enforcement program was supported by space allocation changes in the off-street lots.

The Burlington Downtown Corporation (BDC), a 501 C-3 non-profit organization, is the entity primarily tasked with downtown development efforts, but it is not directly responsible for parking system planning or management. The Public Works Director is an Ex Officio member of the BDC.
and serves as the direct link between development efforts and parking planning. The working relationship is very active and planning efforts involve broad participation by the City staff and BDC staff.

**Lynchburg, Virginia**

Lynchburg is located in the western part of Virginia along the James River. There are multiple employers in the greater Lynchburg area, with no reliance on a single industry. The downtown is fairly active although it suffers, as do many cities in the region, from the loss of retail business to nearby shopping centers.

**Relevant Aspects of Parking System Management**

**Well-Defined Structure**

Although downtown Lynchburg is larger than Salisbury, it serves as a good example of how a parking authority or commission can establish a fairly well-defined mission and objectives. The following text is taken from two locations within the City’s website. The first section describes the mission and principle tasks of the Authority. The second section is taken from the most current Work Plan that restates the mission (in modified form) and lays out goals and objectives for the year.

**Introduction**

The Lynchburg Parking Authority is responsible for the oversight and has the authority to set policy concerning all City of Lynchburg off-street parking facilities.

The purpose of the Parking Authority is to develop plans for and to coordinate the development and use of sufficient off-street, public-owned parking facilities in the City and as necessary to acquire, construct, reconstruct, equip, improve, extend, enlarge, maintain, repair and operate off-street parking facilities.

**Mission**

The mission of the Lynchburg Parking Authority is to recognize that it is a not-for-profit public service organization established under the Acts of Assembly of Virginia, to provide off-street parking within the commercial and residential districts of the municipality consistent with the plans and policies of the municipality.

- To operate and maintain the City of Lynchburg parking facilities in a professional manner so as to complement the community and to emphasize a high level of customer service.
- To receive revenues derived from the use of the parking facilities and to use those revenues to maintain, finance, and improve the public parking system and to provide improved amenities in the Central Business District.
- The Authority operates in a fiscally responsible manner, consistent with applicable accounting procedures, governing regulations, and contractual obligations.
• The Authority shall continually improve and increase parking opportunities to meet the unique challenges that are presented as the result of growth and development within the City.

• The parking authority can be contacted at parking.authority@lynchburgva.gov.

**Work Plan Statement:**

1. To increase communications between the public and private sectors regarding current parking policies and future parking needs.
2. To maximize off-street parking options for downtown visitors, businesses, and residents.
3. To maximize on-street parking options for downtown visitors, businesses, and residents.
4. To determine the most appropriate method of financing and location for a new parking facility.

**Mission (from the Work Plan)**

The mission of the Lynchburg Parking Authority is to support the development of adequate parking for commercial, retail, residential, and recreational use in the downtown area. Adequate parking will provide all downtown visitors and customers with a convenient, safe, secure, and aesthetically pleasing parking experience.

**Objectives**

Set policy that is an interrelated web of strategies and tactics that are formulated to meet certain goals for the parking system. The primary goal is to support the Mission Statement.

**Tasks**

Develop policies of operation, maintenance, and allocation of spaces for parking facilities (on-street and off-street).

- Increase communications with downtown stakeholders. Raise public awareness of parking availability and the location of parking facilities.
- Create a parking website to post all meeting schedules, minutes, and other parking related information.

**Goal 1:** Increase communications between the public and private sectors regarding current parking policies and future parking needs.

**Objectives:**

- Capture input from downtown stakeholders regarding current parking conditions and future parking needs.
- Encourage better utilization of existing parking spaces. Institute periodic forums to discuss parking concerns, expectations and needs.
- Enhance public relations by developing a parking information brochure that will contain public parking information, rates, and other parking related information.
Goal 2: Maximize off-street parking options for downtown visitors, businesses, and residents

Objectives

• Maximize the efficiency of existing parking facilities.
• Develop an off-street parking inventory and introduce new parking technological controls.
• Create mixed utilization of off-street parking spaces.
• Maximize the revenue stream.

Goal 3: Maximize on-street parking options for downtown visitors, businesses, and residents.

Objectives

• Evaluate current City ordinances and review current on-street enforcement policies/practices.
• Implement paid on-street parking.
• Utilize advanced parking strategies and install technologies to control on-street parking spaces.
• Make recommendations to the City Manager, Parking Authority, and City Council to amend the parking ordinance and approve the parking policy.

Goal 4: Determine the most appropriate method of financing and location for a new parking facility.

Objectives

• Create a financing model for the new parking facility.
• Analyze other localities’ revenue generation and financing methods.
• Determine the capital and operational costs of existing and new facilities.

Creative Involvement in Expanding Public Parking Options

At the time that a comprehensive parking study was performed in 2007, Lynchburg was facing significant challenges in managing its parking system. On-street parking was limited to 2-hour stays (no meters) and there was no public parking available in off-street facilities other than lots and decks dedicated to specific businesses or government offices. Public parking for periods longer than two hours, whether paid or free, was simply not available. Apart from parking in on-street spaces, employees had to park in facilities owned by business establishments (including their employers) or pay by the month for reserved parking. There were no options to pay by the day and a strong incentive for employees to park on the street.

The 2007 parking study recommended that the Authority hire a professional parking manager to operate existing city-owned facilities and to take advantage of the large amount of underutilized private parking capacity that was available throughout Downtown Lynchburg. The study proposed that the Parking Authority approach owners of underutilized parking capacity, offering
to establish public parking operations in the unused portion of those facilities. The Authority would provide the equipment, implement any lot modifications (numbered spaces, etc.) and administer both monthly permits and daily parking fees (where applicable). Revenues would be applied first to recovering the start-up and equipment costs. Once those costs were recovered, revenue would be split with the property owner in an agreed proportion.

The City followed that recommendation and hired an experienced parking manager who moved forward with the expansion of public parking in privately owned lots. That effort has included some more typical long-term leases but the program is continuing as a way to take advantage of all existing parking capacity within the downtown area, whether publicly owned or privately owned.

The 2007 study recommended the eventual implementation of paid on-street parking (parking meters) as a way to better manage that valuable resource. The implementation of paid on-street parking was intended to move downtown employees out of the on-street spaces and into the off-street parking options that were being created and expanded by the ongoing efforts of the Authority. Support for paid on-street parking among the downtown merchants has been growing, some recognizing it as a way to open more on-street parking for their customers and others wanting to create an additional revenue stream for the development of additional parking capacity.

**Rock Hill, South Carolina**

Rock Hill is a community located approximately 20 miles southwest of Downtown Charlotte. It has a downtown of similar size to Salisbury, but it is spread over a larger area. The activity level for downtown businesses is higher. The City owns one parking structure and a series of surface lots that provide the bulk of public parking in the downtown area.

**Relevant Aspects of Parking System Management**

**Downtown Parking Management Commission**

The City of Rock Hill has a Downtown Parking Management Commission that is responsible for management of the City’s downtown parking resources. The text from their website (below) reveals, their responsibilities are clearly defined.

The Commission works closely with the Rock Hill Economic Development Authority which, in reality, drives much of the planning activity related to parking because parking is used as a development incentive through creative public-private partnerships. The quarterly meeting schedule is evidence that the Commission is more involved in oversight and policies setting than day-to-day management. Day-to-day management is actually carried out by the Economic Development staff.

**Authority:**

The Downtown Parking Management Commission was created by City Council on November 9, 2009. The purpose of the Downtown Parking Management Commission is to oversee parking in the Downtown Parking Management System on a long-term basis. During the period 2001 to
2006, a Downtown Parking Commission, whose members were elected by property owners within the Downtown Parking Management System, functioned in a similar capacity.

Membership:
7 members appointed by City Council. Members are required to have a stakehold in Downtown Rock Hill. Members must reside within the Rock Hill City limits.

Responsibilities:
- To oversee parking in the Downtown Parking Management System on a long-term basis.
- To hear appeals and grievances on a regular basis.
- To review the availability of adequate parking and its allocation between long and short term uses.
- To make recommendations to the City Manager and City Council on such areas as the fee structure and methods used to assess fees for the Downtown Parking Management System.
- The Commission is authorized to adjust fees in the event of an undue hardship if an unjust result will occur unless such adjustment is made.

Meeting Schedule:
The Commission meets on an “as called” basis as determined by the Commission members and the Downtown Parking Administrator in Room 371 at Rock Hill City Hall. Meetings are not expected to exceed four (4) per year.

Parking System Funding
Rock Hill created an elementary funding mechanism several years ago that was designed to offset some of the cost of operating the City’s downtown parking lots. The system rests on minimum parking requirements that are set for the downtown rather than exempting Downtown as most cities of that size do. The parking requirements are much lower than those applied to the suburban areas and more appropriate for the actual parking needs of Downtown businesses and residences. Businesses can provide for all or part of their parking needs on their own property. If more parking is needed to meet the City’s minimum requirements for that land use, the business is obligated to pay the City a very modest annual fee to support the parking that is provided by the City. The assumption is that parking in City-owned facilities makes up the shortfall.

In 2012 the City engaged a parking consultant to analyze the actual cost of acquiring, maintaining and operating its parking facilities, with an objective of laying out reasonable options for a fee structure that would recapture more of those costs. The study was prompted, in part, by the prospective construction of the second parking deck and the higher costs associated with developing structured parking.

The City’s plan is to increase business parking fees over time to progressively narrow the gap between what the City expects to invest in new parking development and the revenues coming in from the parking system. The overall program and the current focus on balancing revenues and
costs is a good example of far-sighted planning and a funding mechanism that can sustain long-term parking infrastructure and downtown development.

**Danville, Virginia**

Danville is in the western part of Virginia along the Dan River. It is a city of similar size to Salisbury. A large portion of building square footage is in former tobacco warehouses located in the Tobacco Warehouse District adjacent to the downtown core. Some warehouse structures in this district have already been converted to office or residential space and interest in further development of these buildings seems to be gaining momentum. Parking has been recognized as a major planning component of the City’s downtown development effort, including the recent completion of a Parking Master Plan.

The City provides free public parking in its public surface lots but paid monthly contract parking appears to be coming a larger factor in the parking market.

Like Salisbury, there is no paid public parking in Danville, and there is no established parking revenue stream to support expansion or operation of new parking lots or structures. Based on the projections of new parking demand that will be created by “probable” both near-term and long-term development activity, the City will be facing a challenge in funding the parking capacity needed to support that development.

**Relevant Aspects of Parking System Management**

City owned parking lots are managed by the city, but that management effort is limited to signage and maintenance since all city-owned parking is free to the public.

**Planning**

The City and its Economic Development Authority have been working closely together as a well-integrated team in doing the necessary strategic planning for parking that will support anticipated growth. That process included their in-depth involvement in a recent parking study that provided a detailed analysis of parking needs related to future development opportunities. The study provided multiple options for the strategic placement of parking supplies to support potential development, helping ensure that sufficient parking would be available. It also identified sites that would allow efficient facility design (reducing the overall cost per space) and maximize opportunities for shared parking.

**Property Acquisition**

As the Danville Economic Development Authority and the City look forward for ways to support the growing interest in new development, particularly in the Tobacco Warehouse District, they are relying to a great extent on the funding and purchase power of the Danville Industrial Development Authority to acquire both buildings and potential parking sites. This places the financial burden outside of the City budget and allows acquisition decisions to be made on the basis of a development plan that is not encumbered by normal purchase processes and changes in the political landscape.
Traverse City, Michigan

Traverse City is a community about one-half the size of Salisbury located in the northern portion of the Michigan peninsula on Lake Michigan. The parking system consists of one parking structure and approximately 25 City-owned surface lots. On-street parking is controlled by parking meters.

Relevant Aspects of Parking System Management

Although the Parking Department is a formal City department, its staff consists of employees of the Traverse City Downtown Development Authority (DDA) contracted by the City to manage the parking system. Part of the reason for that structure is to provide continuity of the parking operation in the event that the DDA is dissolved.

The Parking Department operates as a self-funding enterprise fund. It collects all on-street and off-street parking revenues, paying all operating and capital expenses out of those revenues.

As a City Department, the Parking Department is still subject to oversight by the City Administration but acts with virtual autonomy in terms of setting parking system policies and rates. It works closely with the DDA in planning for future parking needs and that relationship is strengthened by the fact that Parking Department staff is comprised of DDA employees.

The Parking Department has the authority to acquire or enter into lease agreements with property owners for property developed for use as City parking facilities.

Management of the parking system is the sole responsibility of the Department Manager who is qualified as a parking professional.

Summary Comments

The approaches used in other cities illustrate a variety of structures for parking system planning and management, but the most consistent contrast between these structures and conditions in Salisbury are the degree to which responsibilities are defined and the degree to which the various entities with a stake in parking cooperate on a regular basis in planning and policy-making decisions. In all cases cited, the structure of responsibilities is more clearly defined and joint planning activity is more consistent than in Salisbury. The difference may be a function of what is happening in those other cities, with parking rising to a higher level of importance on everyone’s agenda.
Section VI – Implementation Plan Recommendations for Salisbury

Background

Under this task the study team was asked to identify near-term and long-term parking infrastructure and parking management recommendations that will allow the City of Salisbury to better manage its parking system over time, in a cost-effective way. An additional section addresses the parking administrative changes recommendations.

Implementation Plan Recommendations

Specific recommendations for improving parking in downtown Salisbury that have been identified during the parking study and highlighted in the previous sections are consolidated and organized into near-term (1-5 years) and long-term (5-10 years).

Near-term Recommendations

These recommendations provide an initial set of strategies and goals to provide a positive impact on parking in the downtown. The recommendations should be phased in over time and evaluated for their impact on the parking system to ensure the intended outcome is achieved. As with any plan, some flexibility and monitoring is needed to ensure success.

Addition of Parking Infrastructure

• Proceed with planned addition of new parking spaces on City Hall block (block #4 in Figure 1), expected to add approximately 32 new spaces

• In the light of expected increase in demand for parking on the western end of downtown, evaluate the 1.57 acre site on block #1, just south and across East Bank Street from the City Hall block, for conversion to a paved parking lot for full-day use by employees, residents and visitors (see the parcel highlighted in Figure 11 below); this future lot would be approximately 150’ x 198’ and wide enough for two bays of parking; allowing for two ADA spaces, this lot is expected to generate an additional 60-75 parking spaces with an entrance from Bank Street

• This potential future site in block #1 appears to be fairly flat with a few trees but some potential sloping along Lee Street—some site civil design and grading would be recommended prior to adding gravel to the site
• Not accounting for grading, the addition of a paved parking lot in block #1 is expected to cost approximately $425,000 plus contingency as a planning-level cost estimate.

• Make sure that additional wayfinding signage directs visitors to the newly-added parking spaces.

• Add downtown bicycle parking through City and developer-provided bicycle parking infrastructure:
  o Program funding in the annual Capital Improvement Program to add a few city-funded bicycle parking racks per year at select key downtown civic locations such as at the Town Hall, at the Courthouse, at the Library, future Bell Tower Green Park, at the Amtrak Station and others (a

*Bicycle Parking in Downtown Asheville (Top) and Greensboro (Bottom)*
2013 report from UNC Highway Safety Research Center cited median cost of $640 per bicycle rack¹)

- As part of City-funded bicycle parking, consider adding covered and/or long term bicycle parking options (such as bicycle lockers or bicycle lids) at one or two locations where visitors might keep their bike for longer periods of time in a space protected from the elements, theft and vandalism (median cost of $2140 per bicycle locker cited in the 2013 UNC Highway Safety Research Center report²)

- Ensure that as downtown properties redevelop, they are following the bicycle parking requirements that are already in place: the City of Salisbury development ordinances currently require that bicycle parking be provided for most uses except residential uses with less than four units per building at a rate of 5% of vehicular parking spaces required (with a minimum of two spaces, or one rack per development requiring parking)—see Table 13 below

- The City may specify a standard design template for bicycle parking racks in Downtown Business District to add to the aesthetic feel of new street furniture complementing existing street furniture and lighting; APBP Bicycle Parking Guidelines, 2nd Edition (2010) may be referenced for appropriate design features

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Table 14: Vehicular and Bicycle Parking Requirements in the City of Salisbury. Source: Salisbury Land Development Ordinance, Chapter 10.

<table>
<thead>
<tr>
<th>Use Type</th>
<th>Vehicle Parking Spaces</th>
<th>Bicycle Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Required(a)</td>
<td>Maximum Permitted(a)</td>
</tr>
<tr>
<td>Residential</td>
<td>1 per bedroom up to 2 per unit</td>
<td></td>
</tr>
<tr>
<td>Lodging</td>
<td>1 per room or suite</td>
<td></td>
</tr>
<tr>
<td>General Office / Business or Personal Service</td>
<td>2 per 1000 ft²</td>
<td>5 per 1000 ft²</td>
</tr>
<tr>
<td>Medical/Dental Office</td>
<td>3 per 1000 ft²</td>
<td>5 per 1000 ft²</td>
</tr>
<tr>
<td>Retail</td>
<td>2 per 1000 ft²</td>
<td>5 per 1000 ft²</td>
</tr>
<tr>
<td>Restaurant/Bar</td>
<td>2 per 1000 ft²</td>
<td>20 per 1000 ft² of dining area</td>
</tr>
<tr>
<td>Entertainment / Recreation / Fitness</td>
<td>2 per 1000 ft²</td>
<td>6 per 1000 ft²</td>
</tr>
<tr>
<td>Theater</td>
<td>1 per 3 seats</td>
<td></td>
</tr>
<tr>
<td>Manufacturing / Wholesale / Storage</td>
<td>2 per 1000 ft²</td>
<td></td>
</tr>
<tr>
<td>Civic / Institutional</td>
<td>2 per 1000 ft²</td>
<td></td>
</tr>
</tbody>
</table>

(a) All square footage calculations are gross interior floor area with the exception of a Restaurant/Bar use which can include both interior and exterior gross dining floor area for square footage calculations.

(b) Required bicycle parking spaces are based on the indicated minimum percentage of vehicle parking spaces provided. A single “inverted U” bicycle parking rack will count as two (2) bicycle parking spaces. The minimum number of bicycle parking spaces per use, when required, is two (2) or one rack and the maximum number of required bicycle spaces shall be 20 or 10 racks.

(c) Bicycle parking is required for multi-family dwellings of only more than 4 units per building.
Parking Management

- Embrace parking management strategies that allow the best use of the limited number of parking spaces. To this end, encourage long-term parking to off-street parking lots and encourage turnover on the on-street parking areas, especially in the most utilized areas.
- Manage the parking as a system to meet this objective, by enforcement, rates, and fines.
- Commit the resources necessary to actively enforce the current time limits for on-street and off-street areas (two-hour limit) during posted hours.
- Increase the current parking fine of $5.00 to $15.00 and commit to reviewing on an annual basis.
- Ensure code is enforced and communicated which states the time limit applies to each block; meaning, once a vehicle parks on a block, it is in violation to park again in the block after the posted time limit.
- Invest in enforcement technology, including electronic handheld citation units to eliminate potential errors, improve tracking, and improve efficiency. Consider including the integration of mobile LPR enforcement to track time limit parking safely and efficiently, eliminating the need to physically chalk tires.
- Consider updating the repeat offender violation of $50.00 if more than four violations are issued in 30-days, to a longer period, such as 60 or 90 days.
- Implement an Ambassador approach to parking enforcement with the goal of educating both visitors and employees parking in downtown of the many parking options.
- Conduct a detailed inventory of all curb activities within the main downtown streets to document the location of signage, loading zones, ADA spaces, and any other restrictions.
Wayfinding

- Add to or enhance parking wayfinding in downtown to direct users to publicly available parking.
- Enhance the current parking signs by naming the lots and clearly communicating the parameters for use. The signs call out Visitor Parking with a prominent “P”, but do not currently indicate that this is free public parking.
- Continue the common “P” and branding for all public parking and include the information on the public parking map.
- Update the publicly available parking map and enhance with parking regulations, lot naming, and branding.
- Add a webpage dedicated to parking on the City Website to inform users where they can park and state the parking regulations (or an easy-to-find link to Downtown Salisbury, Inc. parking map).

Maintenance, Lighting and Safety

- Evaluate each off-street public parking facility using a Maintenance responsibilities standard checklist to track maintenance issues, landscaping, lighting, signage, trash, and access; conduct an audit a minimum of twice per year to identify issues and track improvements.
- Ensure off-street and on-street parking areas have sufficient lighting for evening use. This can include conducting an audit for broken lights and using a light meter to ensure sufficient lighting.
- Review intersections and mid-block crossing locations to address priority pedestrian safety and ADA upgrades.
• Improve and add sidewalks, bicycle lanes and enhanced pedestrian crossings on approach to downtown to encourage people to walk and bicycle to downtown Salisbury
• Install wayfinding signage with walking times (i.e. “five-minute walk to the Courthouse” with a directional arrow), to encourage people to walk for some of their short trips and to normalize parking and walking more than a block away
• Review on-street parking assets to provide a minimum of one or more ADA spaces based on the total number of on-street spaces along the perimeter of block (4% of total perimeter spaces is recommended). Include appropriate on-street loading area adjacent to the space.

Additional Near-Term Recommendations

Additional parking recommendations focus on strategies that might not be specific to improving parking, but would also address overall economic vitality of downtown Salisbury, attract more businesses, residents and visitors and increase the likelihood of people accessing downtown Salisbury on foot and by bike and being willing to walk longer distances from their parking location to their destination.

• Partner with RowanEDC and other local and regional economic development agencies to advertise Salisbury as a desirable home location for professionals and families with young children, with all the amenities of downtown Salisbury and a relatively low housing costs, accessible via a sub-hour commute to multiple major employment centers (Charlotte, Winston-Salem, High Point, Greensboro)
• To enhance viability Salisbury as a residential location for people employed in Charlotte, partner with Rowan County, Cabarrus-Rowan MPO, CRTPO and local transit agencies on a study to consider an Express bus route from Salisbury to Charlotte
• Partner with RowanEDC, UNC School of Governments Development Finance Initiative (DFI) Program and other local and regional economic development partners to research target industries and potential sites to encourage more businesses including restaurants to open in downtown Salisbury, to support a greater variety of activities happening in the evenings and on the weekends
• Continue to work with developers on identifying potential sites for future residential and hotel infill in downtown Salisbury, to bring more residents and visitors and 18 hours/day activity patterns to downtown, which would enhance the vibrancy and feel of safety for all users of downtown
• In partnership with local non-profits and social services and Downtown Salisbury, Inc. consider the need for additional homeless population housing and shelters; set up a downtown ambassador program to add more “eyes on the street” and contribute to the general feeling of safety

Existing Public Parking on Depot Street
Features EV Charging Stations
• Seek partners to add active programming to the downtown parks and streets through pop-up markets and smaller festivals and music events, to make downtown feel safer and more welcoming for residents and visitors including families with young children
• Track grant opportunities available to help support the cost of adding Direct Current (DC) Electric Vehicle charging infrastructure to Downtown Salisbury and consider applying for grant funding to install at least one DC EV charging station in downtown area

Long-Term Recommendations

Long-term recommendations are intended to continue the efforts of the short-term recommendations in creating a positive parking experience. These recommendations are predicated on continued growth and development activity outlined within this report. As with the short-term recommendations, continued monitoring and evaluation is an important step, as some adjustments will likely be necessary.

Addition of Parking Infrastructure

• Pursue public private development opportunities to add public parking to the downtown, including potential structured parking
• Due to the high costs of construction, long payback period associated with structured parking (parking decks) and some uncertainty around driving and parking behavior associated with the adoption of autonomous vehicles by 2050 (see potential adoption timelines table below), it is not currently recommended that the City of Salisbury pursue the construction of a parking deck in Downtown without a good private partner or another public agency willing to share in the cost burden of a parking deck

<table>
<thead>
<tr>
<th>Stage</th>
<th>Decade</th>
<th>Vehicle Sales</th>
<th>Veh. Fleet</th>
<th>Veh. Travel</th>
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<tr>
<td>Available with large price premium</td>
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<td>2-5%</td>
<td>1-2%</td>
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<tr>
<td>Available with moderate price premium</td>
<td>2030s</td>
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<td>10-20%</td>
<td>10-30%</td>
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<td>20-40%</td>
<td>30-50%</td>
</tr>
<tr>
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<td>40-60%</td>
<td>50-80%</td>
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<tr>
<td>Saturation (everybody who wants it has it)</td>
<td>2060s</td>
<td>?</td>
<td>?</td>
<td>?</td>
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<td>100%</td>
<td>100%</td>
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</tr>
</tbody>
</table>

*Autonomous Vehicle Implementation Projections. AVs are Expected to Account for 50-80% of Vehicular Travel by 2050s. Source: Todd Littman, 2019.*

Parking Management

• Monitor parking occupancy to evaluate the overall parking system, including occupancy of on-street parking, with the goal of encouraging turnover and always having one or two available spaces per block-face – generally 85% occupancy.
• Solidify parking duties within the City to allow uniform oversight of the operations. This includes management, enforcement, and maintenance.
• Evaluate the potential to add paid parking within the most convenient and heavily used spaces. Paid parking would only be recommended as a management tool if the enforcement of time limits were ineffective or demand warranted.

• Re-evaluate parking related citation fees and adjust as needed.

• Monitor curb activity patterns over time to consider whether partial re-allocation of curb space away from two-hour parking might be needed in the future to accommodate additional loading/unloading zones, rideshare passenger pick-up and drop-offs (Uber/Lyft) or for other emerging new mobility and micro-mobility uses (such as e-scooters).

Assumed Construction Costs for New Parking Infrastructure

The approximate construction cost for a gravel parking lot will average around $800-1,500 per space, not accounting for grading and drainage improvements costs.

The approximate construction cost (materials and labor only) of a paved surface parking lot will average between $3,500 and $5,000 per parking space. This can vary geographically with the availability of materials and construction labor. 25% can be added for soft costs including drainage, paving, curbs, lighting and basic landscaping.

The approximate construction cost of a surface parking deck will vary between $18,000 and $22,000 per parking space. Those costs can vary tremendously based on site conditions, design, lighting, materials, and other factors.

This planning-level parking analysis will use the following assumed costs for future construction:

$1,000 per parking space within a gravel parking lot, plus 25% of total costs for soft costs including drainage, curbs, lighting

$4,500 per parking space within a surface parking lot, plus 25% of total cost for soft costs including drainage, curbs, lighting and basic landscaping

$20,000 per parking space within a structured parking deck

Using these cost assumptions, the potential gain of 60-75 additional surface parking spaces identified as part of this study in block #1 would cost around $425,000 to construct as a paved parking lot. Those same additional parking spaces would cost closer to $1.5 million to construct within a parking deck, plus interest over a 30-year period.

A 75-space structured parking deck would fall short of the preferred parking deck size and could result in higher average costs per spot due to “dead spaces” within corners and under ramps and stairwells; seeking a public-private partnership to build and share in the cost of a larger parking deck (preferably 400 spaces or more) would result in greater efficiency, lower average cost per parking space and much lower overall costs to the taxpayers.

Case Study: Asheville, North Carolina Parking Deck Public-Private Partnership

When Aloft Hotel opened in Asheville in 2012, a 404-space parking garage underneath the hotel became the fourth downtown deck operated by the City of Asheville. This parking garage was
built at considerable savings to the City thanks to a partnership with hotel developers McKibbon Group. According to information provided by City of Asheville, this public-private partnership resulted in parking deck construction savings to the city of $2.66 million; design collaboration also meant that storefronts along Biltmore Avenue were incorporated to the greatest extent possible. This new garage addressed a need for additional parking identified in a 2008 parking study³. Due to the joint venture with the hotel, out of 404 total parking spaces, the number of spaces available to the public can fluctuate and be as low as 289, depending on the hotel occupancy⁴. The average hourly rate at City-operated parking decks is currently $1.25 per hour, with the first hour being free and the second hour costing $2.50 to bring the average back to $1.25 hourly rate for those patrons staying longer than an hour⁵. Monthly parking rates are also available. Electronic signs outside the municipal parking decks inform patrons of the number of parking spaces remaining. After the Aloft Hotel opened, multi-family residential units were added to the back side of the block (off Church Street) and several restaurants and shops operate on ground floor level.

⁵ https://www.ashevillenc.gov/service/park-in-a-parking-garage/
Parking Administrative Changes/Recommendations

This section addresses potential changes to the administrative structure of parking enforcement and oversight for Downtown Salisbury.

Enforcement Technology and Enforcement Officer Mobility Options

As reviewed earlier in Section V, there are multiple technologies available that would make it much more efficient to track parking violators and to enforce the parking rules and regulations. Those additional technology tools include but are not limited to the following:

- Electronic tire-chalking to monitor parked time (can be implemented with either manual entry hand-held devices, or with License Plate Recognition Technology)
- Electronic ticketing and parking ticket-tracking software
- Providing the parking enforcement officer (or multiple staff) with a small electric vehicle in lieu of Segway to enable ease of data collection and entry (since Segways require both hands).
- When the City of Salisbury is ready to consider metered on-street parking in high-demand locations, ensuring the parking technology that is selected allows for a variety of payment methods (cash, credit card, pay by phone) is essential

Consider Hosting Parking Enforcement Group within a Different Department

The City of Salisbury has the option of keeping parking enforcement function within the Police Department, or this function could be moved to be housed under the City of Salisbury Engineering Department, to better coordinate with other physical infrastructure improvements planned for downtown Salisbury. Alternatively, the City of Salisbury could contract with Downtown Salisbury, Inc. to house the parking enforcement function and to hire parking enforcement agents. If parking enforcement was housed with an outside agency, a transparent and clear appeals process would need to be created that allowed members of the public to question a parking ticket if not warranted or written in error.

Expansion of Parking Enforcement Team

In the short term, it is not expected that parking enforcement staffing levels would increase rather drawing on additional parking enforcement technology to derive greater efficiency. Over time, as the pace of development in Downtown Salisbury increases and the need for enhanced enforcement becomes more prominent, hiring additional part-time or full-time parking enforcement staff might become necessary.

At that time, it would be worth considering the addition of parking meters in Downtown Salisbury to help offset the cost of increased staff to monitory parking use and availability.