

**Parking Study Update**

**City of Beaufort**

Beaufort, South Carolina

**Final Report**  
**July 18, 2007**



**TimHaahs**  
ENGINEERS ARCHITECTS

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July 18, 2007

Ms. Joy Locke  
Executive Director  
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RE: City of Beaufort, SC  
Parking Study Update - FINAL REPORT

Dear Ms. Locke:

Timothy Haahs & Associates, Inc. (TimHaahs) is pleased to present you with our Final Report of the Parking Study Update we have prepared for the City of Beaufort.

As we discussed at our presentation on June 21<sup>st</sup>, we recommend the construction of a parking structure containing up to 350 spaces on the parking lot bounded by Port Republic and Scott Streets. The parking structure could be financed using a variety of initiatives, including tax increment financing, ad valorem taxes, sales taxes, special purpose taxes and so on. The financing will need further study.

We look forward to continuing our relationship with the City of Beaufort and helping you make improvements to your parking system.

Very truly yours,



Vicky Gagliano, MBA  
Parking Specialist



Michael D. Martindill  
Vice President

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## Introduction

Main Street Beaufort has retained Timothy Haahs and Associates, Inc. (TimHaahs) to review and update a previous parking study conducted for the City. The City of Beaufort is located along the coast in the southeastern corner of South Carolina. Over the past several years, downtown Beaufort has grown and changed and as a result, the parking conditions have also changed. As mentioned, a parking study was conducted in 1998 which determined that there was sufficient parking to support the downtown needs at that time. However, representatives from Main Street Beaufort feel that the growth may have surpassed the parking supply and that there may be a need for additional parking in downtown.

The purpose of this study is as follows:

1. Determine whether or not the existing parking supply is sufficient to support the downtown businesses, and
2. If not, estimate how many additional parking spaces are needed.
3. Determine what locations would be most suitable for an expansion of the parking supply.

## *Market Analysis*

We have collected the following market related information during the study through discussions, interviews, and observations. Although a market analysis is not a formal part of this study, we feel that it is important to include this background information as a basis for our analysis and recommendations.

- There is a big influx of development outside of downtown, however there is still some opportunity for development downtown. Some merchants feel that the scarcity of parking may restrict development. In addition, some businesses are considering moving due to the parking conditions.
- There are some private parking lots downtown which are needed for the success of the area.
- There would be a tax benefit to the City if they could bring in new businesses and/or expand existing space in downtown. For this reason, the incremental taxes may offset some of the capital costs to build additional parking.
- By increasing the parking supply, downtown Beaufort could support higher density. In addition, some of the businesses in downtown may see additional parking as a form of revitalization and as a result, may improve the existing buildings.
- If the City chooses to build a parking garage, there would be some support. We understand that any parking structures are expected to meet historical guidelines and height restrictions.
- Additional parking would allow downtown employees to park in an off-street area, leaving more of the on-street spaces available for customers and visitors. Some merchants feel that a parking garage could be easily filled by employees.

## *Methodology*

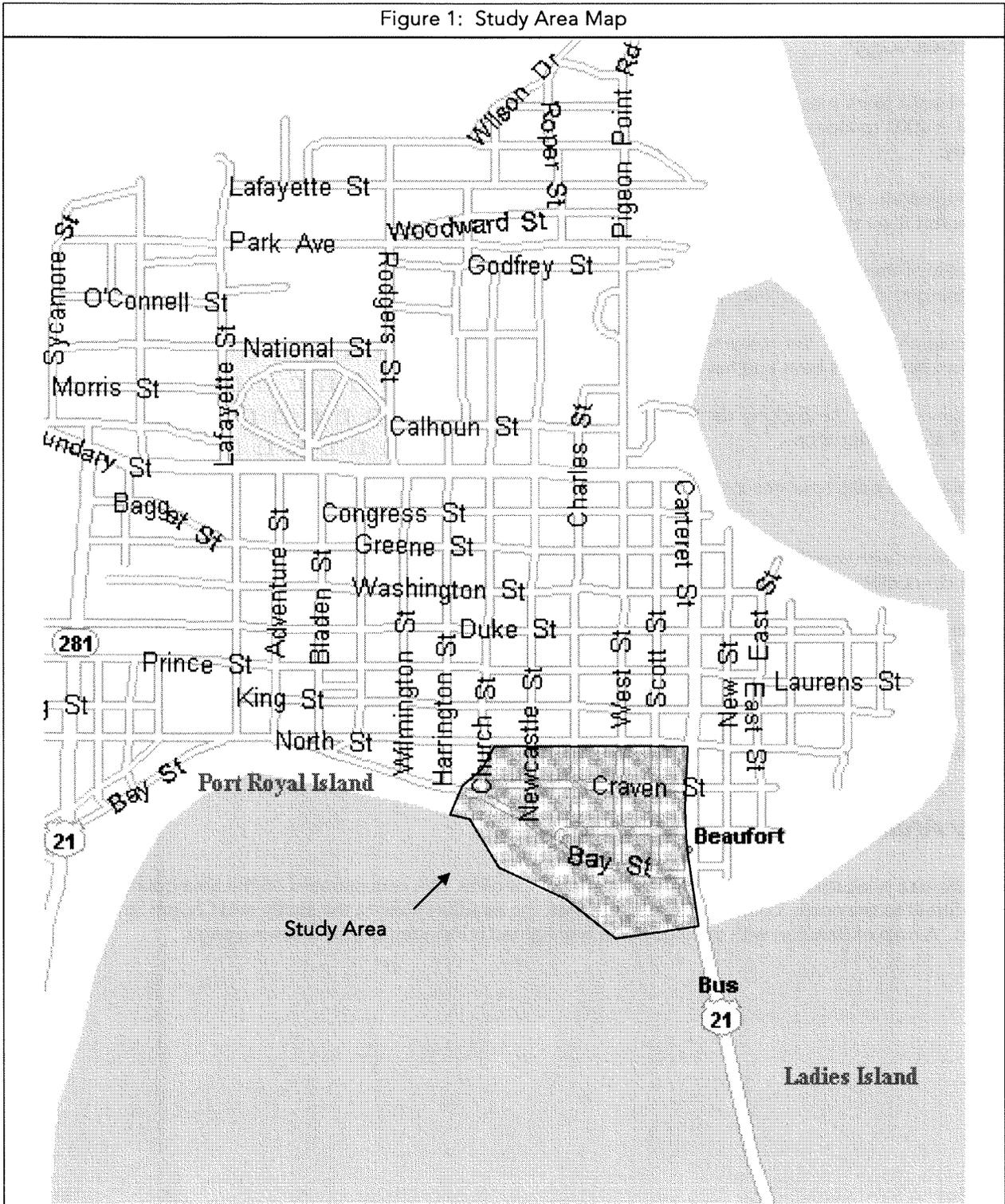
The TimHaahs team met with representatives from the City, Main Street Beaufort, merchants, and residents on April 5, 2007 to kick-off the parking study update project. The following tasks were completed as part of this study:

1. Identification of the study boundaries as Craven Street to the north, Carteret Street to the east, the Beaufort River to the south, and Church Street to the west.
2. Review of the previous parking study prepared in 1998 for downtown Beaufort during the project kickoff meeting as described previously.
3. Discussion about the previous parking study with the appropriate parties to determine which recommendations have and have not been made. Any
4. Observation of the parking demand during the peak hour(s) which was recorded on Thursday, April 5, 2007 at mid-afternoon.
5. Analyze the peak hour occupancy to determine whether or not it has changed since the previous parking study.
6. Discussion with merchants, developers, and City officials about future developments within the CBD. This was conducted as part of our kickoff meeting described in item #2.
7. Analyze the need for building a new parking structure by comparing the current peak hour parking demand with the current parking supply.
8. Summarize the findings of the above into a draft report and issue to Main Street Beaufort for comments.
9. Incorporate draft report comments into a final report and present to City officials and stakeholders.

## *Study Area*

The study area is located in downtown Beaufort, South Carolina. We concentrated on the area bounded by Craven Street to the north, Carteret Street to the east, the Beaufort River to the south, and Church Street to the west. A map of Beaufort with the study area highlighted is included on the following page.

Figure 1: Study Area Map



Source: TimHaahs and Microsoft Streets & Trips, 2006

## Existing Conditions

In order to determine the future parking needs in downtown Beaufort it is necessary to first analyze the existing parking conditions. As part of this study, we compared April 2007 conditions with those in the study conducted by Walker Parking Consultants in 1998. The following sections describe any changes observed between the 1998 study and the observations made in April 2007. Figure 2, below, is a great depiction of the congestion one sees on Bay Street during peak hours of activity (12:00 to 2:00 pm).

Figure 2: Bay Street



Source: TimHaahs, 2007

### *Current Parking Supply*

The base of the parking study is the inventory of the parking supply. TimHaahs compared the 1998 parking supply with the 2007 parking supply. In 1998, approximately 1,043 parking spaces were available within the study area. The overall number of parking spaces slightly decreased by 12 spaces to 1,031 spaces in 2007.

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Table 1 outlines the adjustments. Please note, for ease of reference, the parking area descriptions listed in the following table are identical to those listed in the 1998 parking study.

Table 1: Parking Supply Adjustments

Parking Area	1998 Supply	2007 Supply	Change
Lot 15	24	58	34
Lot 17	20	17	-3
Lot 20	39	18	-21
Lot 20a	59	42	-17
OS - Craven St.	43	36	-7
OS - Newcastle St.	6	8	2
Total Change			-12
Total Parking Supply	1,043	1,031	-12

Source: TimHaahs, 2007

Although there were some changes to the parking supply over the past 10 years, the net difference is only a twelve space reduction. We did not feel that the parking supply was significantly different to affect the parking occupancy counts.

### ***Current Parking Demand***

As part of this study, we compared the parking occupancy counts in 1998 with the parking occupancy in April 2007. According to the 1998 study, the peak study area parking demand was estimated at 835 vehicles (after an adjustment from August to April). During our observations in April (considered a peak month), we observed approximately 955 vehicles in the study area. This represents an increase of approximately 120 vehicles.

### ***Current Parking Adequacy***

It is important to note that all parking systems contain a certain level of inefficiency. This may include spaces that are unavailable due to construction, debris, misparked vehicles taking up more than one space, etc. When taking this into consideration, we typically reduce the parking supply by 5% to 15%, or assume that the parking system is full when it reaches 85% to 90% occupancy. For this study, the downtown Beaufort parking system will be considered full once the parking system has reached 90% occupancy (a 10% cushion).

Parking adequacy is measured in terms of supply versus demand, resulting in either a surplus or deficit. However, rather than compare the demand to the actual supply, it is compared to the adjusted effective supply (90% full). The following table compares the 1998 parking adequacy with the estimated 2007 parking adequacy for the study area.

Table 2: Parking Adequacy

	1998	2007
Total Parking Supply	1,043	1,031
Total Effective Supply	939	928
Total Parking Demand	835	955
Total Parking Adequacy	104	-27

Source: TimHaahs, 2007

As illustrated in Table 2, there is an existing overall parking shortage of approximately 27 spaces (as observed in April 2007). There was a small surplus in 1998, however due to the growth and minor changes in the parking supply, there now exists a parking shortage and congested parking conditions.

## Future Parking Conditions

There are three primary variables which will impact the future parking conditions. The first variable includes normal area growth. The second variable encompasses changes to the existing parking supply, in particular displaced parking areas. Finally the third variable includes new businesses and land uses (higher density) which may further amplify the first two variables and displace additional parking.



According to population estimates from the U.S. Census Bureau, Beaufort county population has grown approximately 17.4% between April 2000 and July 2006, only a 6 year period. This equates to an annual population growth of 3 percent per year. When comparing the parking demand in 1998 to the parking demand in 2007, we found the parking demand increased by approximately 2 percent each year, slightly lower than the population growth for Beaufort county. For the purpose of this analysis, we have used a normal growth rate of 2.5 percent (average between parking demand and population growth). We feel that this estimate will not overstate the parking needs and if anything, it may be slightly conservative.

In order to estimate the parking conditions which may be caused by higher density, we have estimated the parking demand using a 15 percent increase in downtown density. This density reflects the potential expansions of existing businesses or new business that may happen in downtown Beaufort. We selected 15 percent based on our conversations with various merchants and building owners on their plans if more parking became available to support their respective businesses. Using this analysis, we can estimate the impact a relatively small change in density can and will have on downtown parking conditions.

### *Future Parking Supply*

At the time of this study, there were not any documented parking areas to be removed or added within the study area. However, it should be noted that there are several private parking lots in the area which may be closed without notice. Should any of these private parking lots cease to operate, the parking conditions in downtown would worsen.

### *Future Parking Demand*

Utilizing the projected growth rates described previously, the parking demand is projected to increase from 955 spaces in 2007 to 1,080 spaces by 2012. This does not include additional demand generated from new buildings, businesses, etc. It also does not reflect the parking demand during special events in downtown Beaufort. Scenario A reflects normal growth (2.5%) plus a 15% increase in the overall density in downtown Beaufort. Scenario A assumes the increase in density occurs over a five year period from 2008 to 2012.

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Table 3 on the following page summarizes the estimated future parking demand through 2012.

Table 3: Estimated Future Parking Demand through 2012

Year	2007	2008	2009	2010	2011	2012
2.5% Growth Only	955	979	1,003	1,028	1,054	1,080
Scenario A	955	1008	1064	1124	1186	1253

Source: TimHaahs, 2007

### Future Parking Adequacy

We have assumed that the parking supply will neither increase nor decrease over the next five years. Using the parking demand estimates previously calculated, we estimated the future parking adequacy in downtown. Based on both estimated population growth and increased downtown density, we estimate a future parking shortage of approximately 325 spaces by 2012. This type of deficit suggests and improvement of approximately 350 spaces. The following table summarizes the estimated future parking shortages.

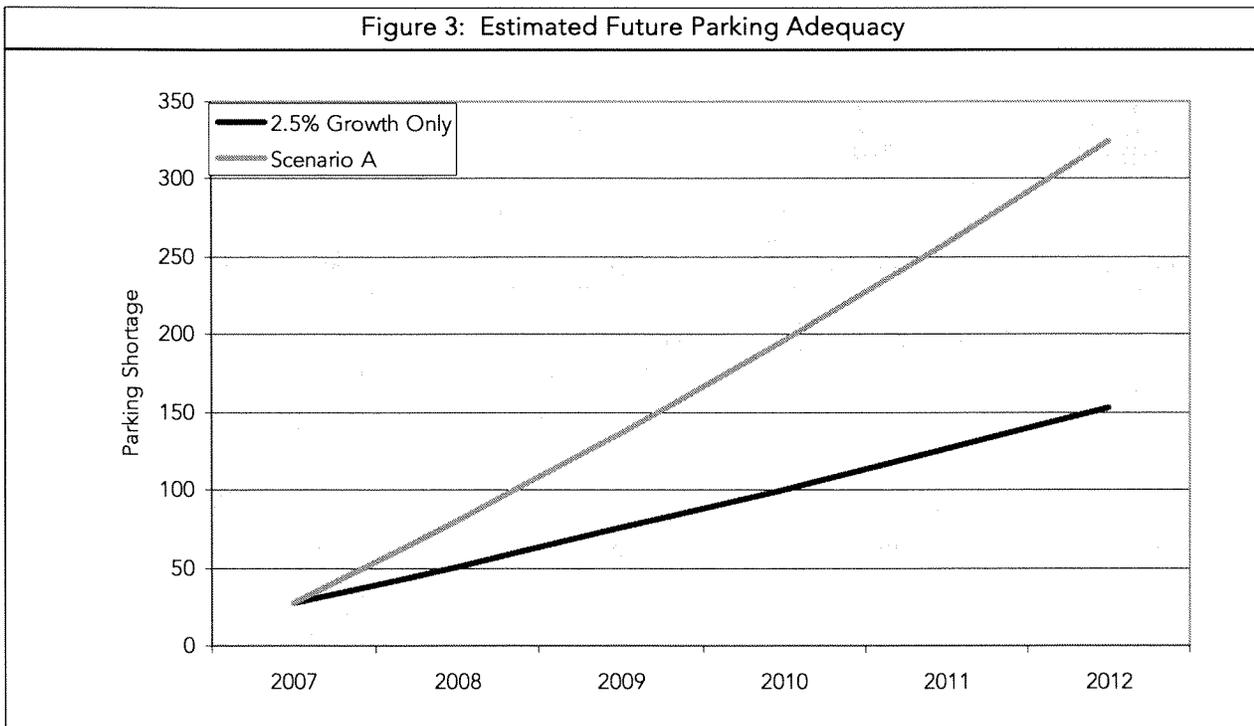
Table 4: Estimated Future Parking Adequacy through 2012

Year	2007	2008	2009	2010	2011	2012
2.5% Growth Only	-27	-51	-75	-101	-126	-153
Scenario A	-27	-80	-137	-196	-259	-325

Source: TimHaahs, 2007

As seen above, downtown Beaufort currently has a parking shortage and it will continue to worsen. To illustrate the speed at which the parking conditions may worsen, a graph is included below.

Figure 3: Estimated Future Parking Adequacy



## Future Parking Changes

As long as downtown continues to operate and grow the need for parking will always exist. Further, if downtown business is intended to thrive, some could say that additional parking is a key component. As noted in the market analysis, the financial gains from additional tax revenue could help offset the capital investment of additional parking.

Based on our analysis and the growth rates we have studied, we believe that approximately 350 new parking spaces will be needed by 2012. One way to increase parking is to build a parking structure – something the City has been contemplating for several years.



During our kickoff meeting in April, one site was discussed and closely reviewed as a potential location for a future parking expansion. There is an existing 50+ space parking lot located in the southwest corner of Scott Street and Port Republic Street. A four story parking garage on this site can provide up to 350 spaces. Figure 4 illustrates a parking concept that could work on the proposed site. A map of the referenced lot is included on Page 11 in Figure 5.

Figure 4: Functional Layout

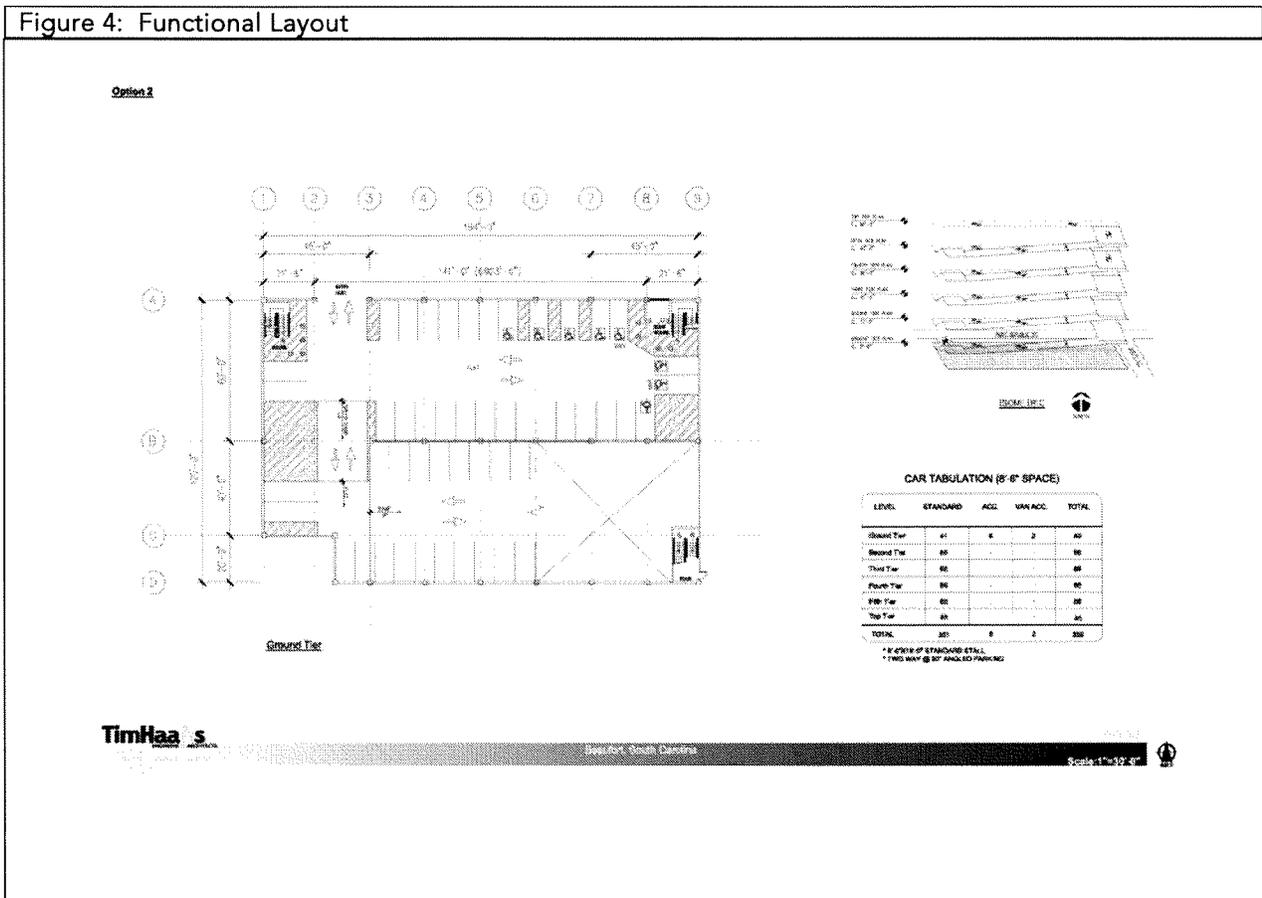


Figure 5: Potential Site for Parking Expansion

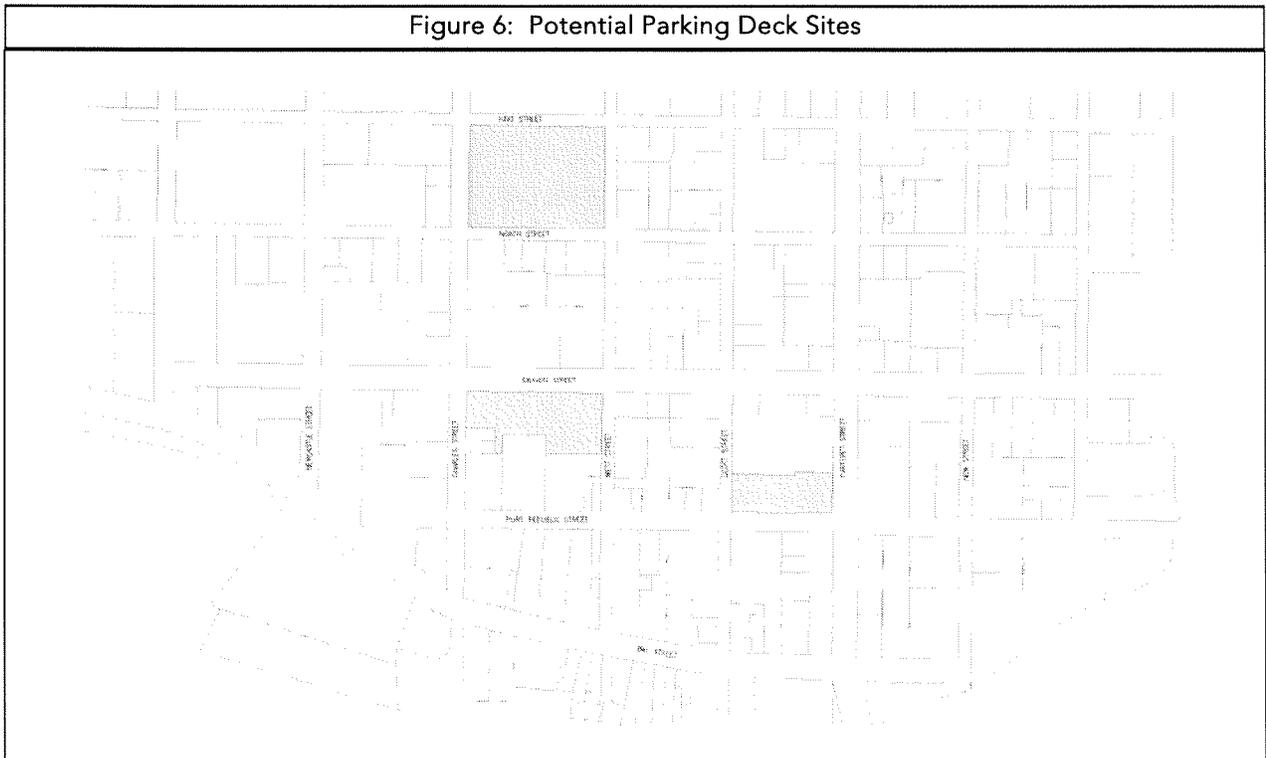


## Parking Alternatives Analysis

This site was chosen over several others for various reasons. Previous discussions with the City had us look at three other sites for a potential parking structure. These three sites included City Hall, the Trask/Tucker Lot and the Post Office site. These sites are illustrated in Figure 6 on Page 12. The following is an overview of the pros and cons for each of these sites.

<u>Site</u>	<u>Pros</u>	<u>Cons</u>
City Hall area	City-owned Good location to downtown core Good visibility	Inadequate dimensions for a parking deck Very inefficient, costly parking deck 6+ stories needed to yield 350 spaces Requires demo of City – time sensitive Architectural needs \$24,000+/space
Trask/Tucker Lot	Decent location 4 story parking deck Less architectural needs	Privately-owned Visibility Inefficient footprint Acquisition costs \$22,000+/space
Post Office	Efficient footprint for a deck Economical construction 3 story parking deck	Location to business district Visibility Residential proximity Long, potentially tedious acquisition Accessibility

Figure 6: Potential Parking Deck Sites



Based on the previous analysis, we discussed other options for the City to explore. From these conversations, we learned of another potential site for a proposed parking structure. The privately-owned parking lot is bounded by Port Republic and Scott Streets. The following is an overview of the pros and cons we developed for this site.

<u>Site</u>	<u>Pros</u>	<u>Cons</u>
Port Republic Lot	Good footprint Great location Good visibility Appears readily available \$20,000+/space	Privately-owned Architectural needs 4 stories – 5 parking levels

## Summary and Recommendations

Downtown Beaufort is currently experiencing a parking shortage which is anticipated to worsen in the future. Unless there is a reduction in the parking demand or an increase in the parking supply, parking conditions will continue to worsen. We recommend that the City consider building a 350-space parking structure on the lot bounded by Port Republic and Scott Streets. Furthermore, we recommend the following tasks to be completed if the City is interested in increasing the parking supply:

1. Determine and evaluate methods to finance a parking expansion such as:
  - a. pledging funds from parking tickets,
  - b. pledging and utilizing on-street parking meter revenue,
  - c. utilizing revenues generated from the proposed expansion to offset any debt service,
  - d. utilizing tax increases due to higher downtown density to offset any debt service
2. If a new parking garage is deemed feasible, complete conceptual site plans and cost estimates for a parking garage.
3. Set aside parking revenues and ticket fines in a separate parking fund to be used for operating and financing the referenced parking expansion.

