

**Downtown Quincy  
Parking Study  
Quincy, Massachusetts**

**Submitted to:  
Department of Planning  
and Community  
Development**

**October 18, 2005**

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Mr. Dennis E. Harrington  
Department of Planning and Community Development  
City of Quincy  
1305 Hancock Street  
Quincy, MA 02169

**Re: Downtown Quincy Parking Study  
Quincy, Massachusetts**

Dear Mr. Harrington:

Attached, please find the Downtown Quincy Parking Study. The information in this study is provided to support your preparation of a District Improvement Financing application.

Per our scope, we have inventoried parking demand in Downtown Quincy, quantified parking demand during weekday midday conditions, conducted a user survey at public off-street parking facilities, interviewed operational staff at the Traffic and Parking Division of Quincy Public Works Department, and evaluated the parking implications of potential redevelopment plans. We also conducted Friday night and Saturday afternoon data collection at the direction of Mayor Phelan and researched the use of parking authorities at several other municipalities.

The study concludes that the parking supply is adequate to meet existing demands, with the exception of pockets of high demand at Quincy College and Quincy High School. Roadway capacity will constrain access to additional parking as part of the downtown redevelopment. We have recommended guidelines for development review and new public garage facilities.

Very truly yours,

Richard S. Bryant, P.E.  
Vice President

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## Summary of Findings

Rizzo Associates, Inc./Tetra Tech conducted a detailed parking study of Downtown Quincy to assist in the planning of future economic development. Key information collected in the conduct of this study is summarized in Table ES-1. Based on an evaluation of existing parking conditions the following conclusions were reached.

- There are approximately 8,000 parking spaces in the study area. Approximately 90 percent of the spaces support land uses in the downtown; the other ten percent are for commuters at the MBTA Quincy Center garage.
- Overall, the total parking supply in Downtown Quincy is adequate to serve existing daytime peak parking demands.
- The distribution of parking in the downtown area indicates a shortage of supply in certain pockets, particularly the area around Quincy College.
- There is a limited amount of excess parking supply in the areas targeted for future growth with the exception of the retail parking lots in Sub-district SR.
- There is more than adequate parking supply to support increased activity levels on weekday evenings and on weekends associated with dining and cultural events.

Future economic development in Downtown Quincy is expected to include a mix of office, retail and residential uses centered along the proposed Phase II of the Quincy Concourse and the existing Hancock surface parking lot. During the evaluation of the downtown parking supply, it was noted that the existing roadway system providing access to downtown operates at or near capacity during commuter peak hours and will act as a constraint for the amount of new parking that can be accessed during these hours. Within this context, Rizzo Associates/Tetra Tech recommends the following to support the projected future growth patterns.

- Construction of new municipal parking facilities on the Hancock Lot with 500 to 800 public spaces and refurbishment or replacement of the Ross Garage with 1,000 to 1,500 public spaces. Design and operational considerations at these facilities include:
  - Providing new access to the Ross Garage at Cottage Avenue to increase its coverage area and visibility

- Constructing a new facility or renovating the Ross Garage to a more secure and safe environment for uses.
- Providing rate structures for short-term parking that do not increase on-street parking demands and long-term rate structures that meet employee demands, but do not encourage high levels of auto use for commuting.
- Development of development review guideline that would provide a framework to review specific projects as they come on line. Examples of potential guidelines include:
  - Parking ratios of 2.6 spaces per 1000 square feet of floor space for new office development, with 75-90 percent of demand accommodated on site.
  - Parking ratios of 1.0 space per apartment/loft unit and 2.0 spaces per townhouse with all spaces accommodated on site for projects with ten units or more.
  - Parking ratios of 2.0 spaces per 1000 square feet of floor space for new office retail development with all spaces accommodated on site for projects exceeding 15,000 square feet.
- Encouraging mixed-use development to allow for shared parking and encourage shared parking in privately owned and managed facilities.
- Promoting residential development and working with the MBTA to enhance local bus services as ways to support new downtown parking without placing excessive traffic demands on the roadway system.
- Encouraging Transportation Demand Management programs for employees and car-sharing programs for employees and residents to reduce traffic and parking demands.

Implementation of the above recommendations is part of continuous process of redevelopment in the downtown area. DIF funds could be used to initiate the process of constructing new parking facilities and making renovations to existing City-owned parking structures.

**Table ES-1 Summary of Findings**

<b>Topic</b>	<b>Category</b>	<b>Characteristics</b>
Parking Supply	Number of spaces	<ul style="list-style-type: none"> <li>• 7,979 total spaces</li> <li>• By location:               <ul style="list-style-type: none"> <li>- 3,977 in the CCIO Sub-district</li> <li>- 3,292 in the TR Sub-district</li> <li>- 710 in the SR Sub-district</li> </ul> </li> <li>• By use:               <ul style="list-style-type: none"> <li>- 4,315 in Restricted Off-street (Private Ownership)</li> <li>- 681 in Public Off-street (Private Ownership)</li> <li>- 872 in Public Off-street (MBTA)</li> <li>- 1,394 in Public Off-street (City Ownership)</li> <li>- 717 in On-Street</li> </ul> </li> </ul>
	Lots and Garages	<ul style="list-style-type: none"> <li>• Sixty-four off-street facilities.</li> <li>• Five major off-street parking facilities account for 55 percent of the parking supply.               <ul style="list-style-type: none"> <li>- President's Place garage (1,087 spaces)</li> <li>- MBTA's Quincy Center garage (872 spaces)</li> <li>- Ross Garage (841 spaces)</li> <li>- Stop &amp; Shop garage (615 spaces)</li> <li>- Hancock Lot (551 spaces)</li> </ul> </li> </ul>
Parking Demand	Study Area	<ul style="list-style-type: none"> <li>• 73% occupied on weekday (11:00 a.m.)</li> <li>• 26% occupied on Friday Night</li> <li>• 26% occupied on Saturday afternoon</li> </ul>
	Off Street Parking	<ul style="list-style-type: none"> <li>• 72% occupied on weekday (11:00 a.m.)</li> <li>• 23% occupied on Friday Night</li> <li>• 23% occupied on Saturday afternoon</li> </ul>
	On Street Parking	<ul style="list-style-type: none"> <li>• 88% occupied on weekday (11:00 a.m.)</li> <li>• 58% occupied on Friday Night</li> <li>• 63% occupied on Saturday afternoon</li> </ul>
User Profile: City-Owned Parking Facilities	Ross Garage	<ul style="list-style-type: none"> <li>• 64% of daily parkers park for one hour or less</li> <li>• 742 monthly parking permits. Stop &amp; Shop (25% of monthly parkers) is the largest group of monthly parking permit holders.</li> </ul>
	Hancock Lot	<ul style="list-style-type: none"> <li>• 60% of daily parkers park for one hour or less</li> <li>• 263 monthly parking permits</li> </ul>
Parking User Survey	President's Place garage	<ul style="list-style-type: none"> <li>• 86% of respondents walked less than five minutes to their destination</li> <li>• Primarily long-term parking (i.e., four or more hours) by area workers (82%)</li> </ul>
	Ross Garage	<ul style="list-style-type: none"> <li>• More than 90% of respondents walked less than five minutes to their destination</li> <li>• Primarily short-term parking (i.e. one hour or less) for non-work trips</li> </ul>
	Hancock Lot	<ul style="list-style-type: none"> <li>• More than 70% of respondents walked less than five minutes to their destination</li> <li>• Primarily short-term parking (i.e. one hour or less) for non-work trips</li> </ul>
	On-Street Parking	<ul style="list-style-type: none"> <li>• 79% of respondents walked less than five minutes to their destination</li> <li>• Primarily short-term parking (i.e., two hours or less) for non-work trips (57%)</li> </ul>

## 1.0 Introduction

The City of Quincy Department of Planning and Community Development retained Rizzo Associates, Inc. to conduct a parking study of Downtown Quincy. The purpose of this study is to inventory the existing parking supply in Downtown Quincy, describe the existing use of this parking supply, and evaluate plans to redevelop the downtown. In addition, the information in this study will be used in the preparation of a District Improvement Financing application. The study seeks to:

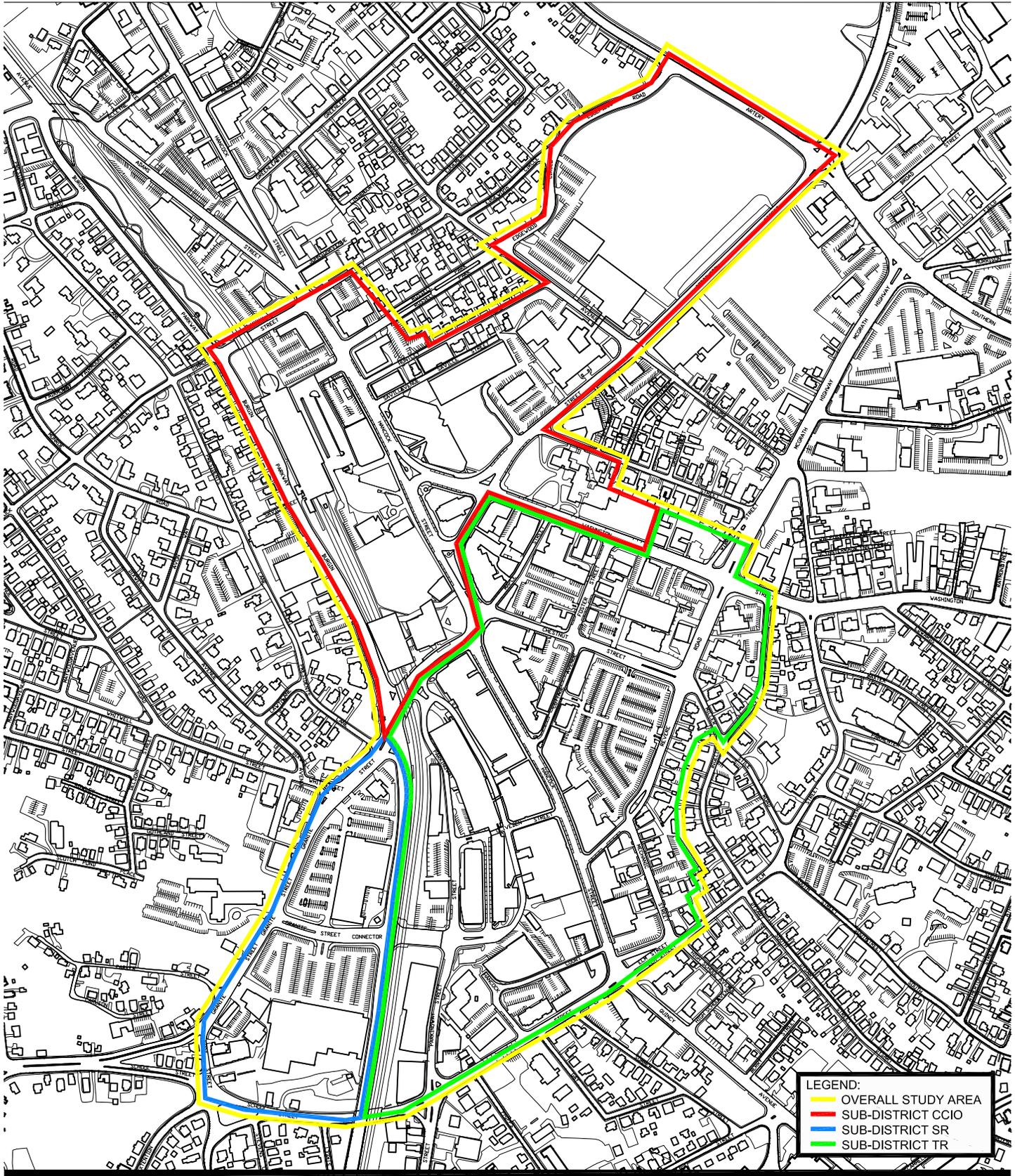
- Determine the peak use by time of day.
- Identify shortfalls in the supply and establish areas served by the off-street parking supply with particular focus on the Hancock Lot and Ross Garage, which are owned by the City of Quincy.
- Project the future demand associated with the range of development that may occur in the downtown.
- Identify the locations for new public parking facilities.
- Identify pedestrian and vehicular access considerations and financing alternatives for new parking facilities.

Future planning includes the accommodation of existing demands that are served by the Ross Garage and Hancock Lot, which are both in areas that would be redeveloped, and any demand from new development that would not be accommodated within new development sites.

Figure 1 shows the study area, which extends from Dimmock Street and Quincy High School on Coddington Street on the north to School Street on the south and from Washington Street and the proposed Quincy Concourse on the east to Granite Street and the Burgin Parkway on the west. Land uses are primarily commercial and institutional (e.g., Quincy High School and Quincy College) with some residential along the edges of the study area. The study area includes a mix of public on-street parking, public lots and garages, and private lots and garages.

## 2.0 Parking Inventory and Surveys

The existing on-street and off-street parking supply was inventoried in August 2005. Parking demand data were collected in September at the on-street and off-street parking spaces for midday conditions during a weekday and on a Friday night and Saturday afternoon. Mail-in surveys were distributed in September and October at the on-street spaces, the



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Ross Garage, the Hancock Lot and President's Place garage to ascertain information about users of these facilities that could also be used to estimate potential future demand for public parking in the downtown.

### **3.0 Existing Conditions**

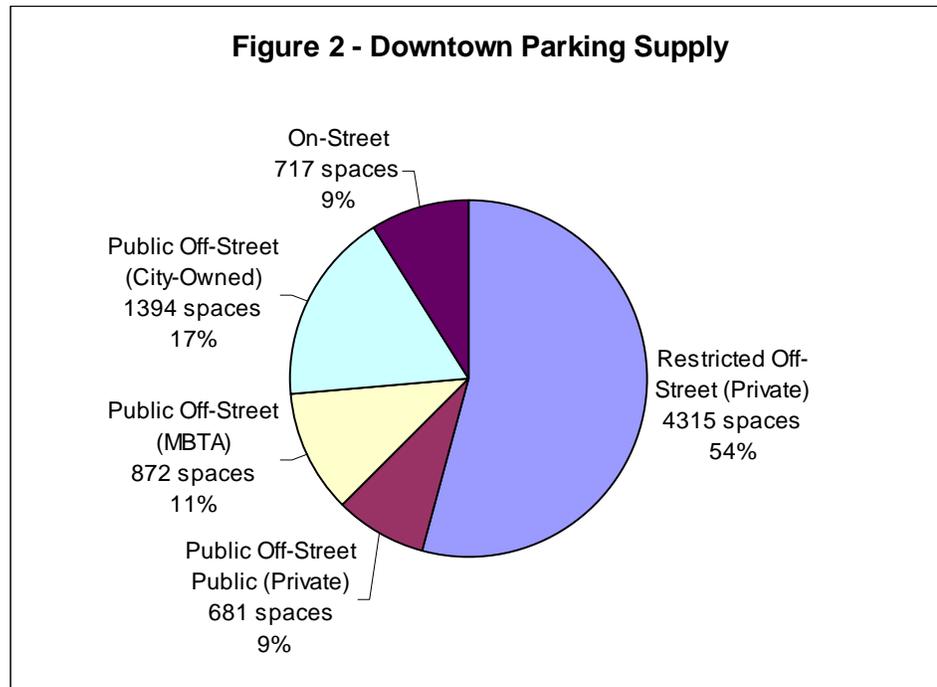
Existing conditions were based on the above surveys. The survey data are presented below.

#### **3.1 Parking Supply**

On-street parking regulations were identified for each block and included unregulated spaces, 10-minute parking, 15-minute parking, 30-minute parking, one-hour parking, two-hour parking, handicapped parking, and any legal curb use (e.g., trolley stops, loading zones, etc.). The inventory of off-street parking facilities identified the number of spaces in lots and garages and whether spaces were publicly or privately owned. Restrictions were identified for each lot and garage such as employee-only, visitor or customer parking. Rate structures were noted for lots or garages that were open to the general public. The off-street parking supply data is included in Appendix A and the on-street data in Appendix B.

##### **3.1.1 Parking Supply by Use**

As Figure 2 indicates, approximately 90 percent of the nearly 8,000 parking spaces in the study area support land uses in the downtown; the other ten percent are for commuters at the MBTA Quincy Center garage. Restricted off-street spaces account for 54 percent of the parking supply in the study area, making them the largest single category of parking. These spaces, which are not available for use by the general public, include designated parking for employees, residents, visitors and customers in private lots and garages.



The 3,664 spaces available to the general public fall into the following categories:

- Nineteen percent are in the privately-owned President’s Place garage (681 of 1,087 spaces).
- Twenty-four percent are in the MBTA’s Quincy Center garage (872 spaces).
- Thirty-eight percent in City-owned off-street facilities that include the Ross Garage (843 parking spaces<sup>1</sup>) and the Hancock Lot (551 spaces).
- Nineteen percent are on-street spaces.

### 3.1.2 Parking Supply by Location

Table 1 presents the breakdown of use by location. One-half of the total parking supply is located in Sub-district CCIO, which is the government services and institutional core of the downtown. These facilities include President’s Place, Quincy College, Quincy High School, City Hall, Stop & Shop’s headquarters and the MBTA Quincy Center station. Forty-one percent of the total parking supply is located in Sub-district TR, which includes Hancock Street retail, office, the Norfolk County Courthouse, and

<sup>1</sup> Includes 824 spaces in the garage and 19 spaces in a surface lot in front of the Ross Garage.

some residential. Nine percent is located in Sub-district SR, which is to the west of Burgin Parkway and is dominated by two shopping centers.

**Table I Parking Supply (Spaces) by Location**

	<b>Zoning Sub-district CCIO</b>	<b>Zoning Sub-district TR</b>	<b>Zoning Sub-district SR</b>	<b>Total</b>
Restricted Off-street (Private Ownership)	2,119	1,490	706	4,315
Public Off-street (Private Ownership)	681	-	-	681
Public Off-street (MBTA)	872	-	-	872
Public Off-street (City Ownership)	-	1,394	-	1,394
<b>Sub-total Off-street Parking Supply</b>	<b>3,672</b>	<b>2,884</b>	<b>706</b>	<b>7,262</b>
On-Street	305	408	4	717
<b>Total Parking Supply</b>	<b>3,977</b>	<b>3,292</b>	<b>710</b>	<b>7,979</b>

All of the City-owned off-street parking supply and fifty-seven percent of the on-street parking supply is located in Sub-district TR. This is also the location of various redevelopment plans along the Quincy Concourse. Off-street public parking in Sub-district CCIO is provided by the President’s Place garage and the MBTA Quincy Center garage for commuters. Most of the remainder of the on-street parking supply is also in this sub-district. Off-street parking in Sub-district SR serves the shopping centers.

### **3.1.3 Ownership and Type of Facility**

The off-street parking supply is spread over 64 different lots or garages. However, most of the spaces are concentrated in large garages or lots with more than 500 parking spaces. Five off-street facilities account for 55 percent of the off-street parking supply: the President’s Place garage, the MBTA’s Quincy Center garage, the Ross Garage, the Stop & Shop garage and the Hancock Lot.

The inventory indicates that the City of Quincy owns and maintains approximately 26 percent of the parking supply (on-street and off-street)<sup>2</sup>. These spaces accommodate demand that is generated by businesses with insufficient parking and include shoppers and restaurant customers, students at Quincy College, downtown workers, customers of the Registry of Motor Vehicles, and people with business at the Norfolk Court. President’s Place is the largest garage with nearly 1,100 spaces. Other large owners include Stop & Shop with over 600 spaces, Quincy High School with nearly 400 spaces and Norfolk Court with over 200 spaces.

<sup>2</sup> Does not include Quincy High School or Quincy College parking spaces.

The number of small lots also consumes a significant amount of land area in the downtown. Approximately 45 percent of the off-street spaces are in 58 lots. The Hancock Lot with 551 parking spaces is the largest lot in the study area. In total, parking lots account for 25 to 27 acres of the 170 acres of land in the study area.

### 3.1.4 Rates

Table 2 presents the parking rates for the four major off-street parking facilities in the study area. The two City facilities provide parking for the first hour and have a maximum daily rate that is less than the privately-owned President’s Place garage. Free parking is available on weekends at each facility except the MBTA garage, which charges a flat fee.

**Table 2 Parking Rates**

	Weekday			Weekend Rates
	First Hour	Additional Hours	Maximum Daily	
Ross Garage (City of Quincy) <sup>1</sup>	Free	\$1.00/hour	\$7.00	Free
Hancock Lot (City of Quincy) <sup>1</sup>	Free	\$1.00/hour	\$7.00	Free
President’s Place garage	\$1.50	\$1.00/hour	\$11.00	Free
Quincy Center MBTA garage	NA	NA	\$3.50	\$3.50

Note: 1. Monthly parking is available for \$40 per month or \$120 per quarter.

### 3.2 Parking Accumulation

The parking demand was measured for the entire study area through a series of counts in September. According to the Urban Land Institute (ULI), this month represents peak demand for office, 75 percent of the peak parking demand for retail and 80 percent for restaurant.<sup>3</sup> ULI data also indicates that office parking demand peaks in the late weekday morning, residential in the late night, retail on Saturdays and restaurant in the evening. The ULI data is provided in Appendix C.

The count program included weekday midday, Friday night and Saturday afternoon counts. A midday accumulation count was conducted from 11:00 a.m. to 2:00 on Thursday, September 15. Each off-street parking facility and on-street parking space was counted once during this preliminary survey. Field observations were also made during this study to identify locations where demand was did not vary significantly throughout the day, such as the MBTA Quincy Center garage or the Stop & Shop garage. These facilities were counted once during the weekday midday.

<sup>3</sup> Urban Land Institute, *Shared Parking*, 1983

A more extensive accumulation study was conducted on Wednesday, September 28. The second September study provided a midday count of all study area parking spaces and hourly counts from 10:00 a.m. to 4:00 p.m. for all on-street parking spaces, public off-street spaces (excluding the MBTA Quincy Center garage) and 46 percent of the restricted parking spaces in the study area. This information was used to identify the peak parking demand for each facility and the peak parking demand for the study area.

Additional counts of all the on-street and off-street parking spaces were conducted on Friday, September 23 from 7:00 to 9:00 p.m. and on Saturday, September 24 from 12:00 to 2:00 p.m. Each off-street parking facility and on-street parking space was counted once during these two time periods to provide a comparison with the weekday daytime counts. Of particular interest was the level of parking associated with restaurants and entertainment facilities in the study area. Off-street parking demand data is included in Appendix B and on-street data in Appendix C.

### 3.2.1 Entire Study Area

Table 3 presents the parking accumulation data for the study area. The daytime counts were significantly higher than the Friday or Saturday counts. The most significant drop-off from the daytime to Friday night or Saturday afternoon occurred in the Public Off-street Parking category, which includes the MBTA Quincy Center garage and the President’s Place garage. The reduction reflects the high use of these facilities by commuters, office employees and visitors and their location in the downtown relative to retail and non-office uses.

**Table 3 Parking Accumulation**

	Supply	Peak Weekday (Daytime) Demand		Friday Night	Saturday Afternoon
		Facility <sup>1</sup>	Study Area <sup>2</sup>		
Restricted Off-street (Private Ownership)	4,315	3,004	2,876	975	1,113
Public Off-street (Private Ownership)	681	560	560	19	14
Public Off-street (MBTA)	872	789	789	146	89
Public Off-street (City Ownership)	1,394	1,071	985	555	445
<b>Sub-total (Off-street)</b>	<b>7,262</b>	<b>5,424</b>	<b>5,210</b>	<b>1,695</b>	<b>1,661</b>
<b>Percent of Off-street Supply</b>		<b>75%</b>	<b>72%</b>	<b>23%</b>	<b>23%</b>
On-Street	717	634	611	404	439
Percent of On-street Supply		92%	88%	58%	63%
<b>Total</b>	<b>7,979</b>	<b>6,058</b>	<b>5,821</b>	<b>2,099</b>	<b>2,100</b>
<b>Percent of Total Supply</b>		<b>76%</b>	<b>73%</b>	<b>26%</b>	<b>26%</b>

Note: 1. Peak demand for each individual facility summed for each category.  
2. Peak demand for entire study area, which occurred at approximately 11:00 a.m.

The next most significant drop-off occurred in the Restricted Off-street Parking category, which is primarily used for office employee and visitor parking, but also includes some residential parking that has higher demand at night time and weekends. On-street and off-street public parking levels dropped from midday weekday to Friday night and Saturday afternoon. However, the relatively higher use of this category on Friday and Saturday illustrate the importance of the public parking supply to serve downtown demands.

Effective parking capacity is typically considered to be 85 to 90 percent. At 85 to 90 percent it is generally easy to find parking without continued searching. For the entire downtown parking supply, only the on-street parking category exceeded what could be considered its effective parking capacity. However, the level of parking utilization varies by location and facility as discussed below.

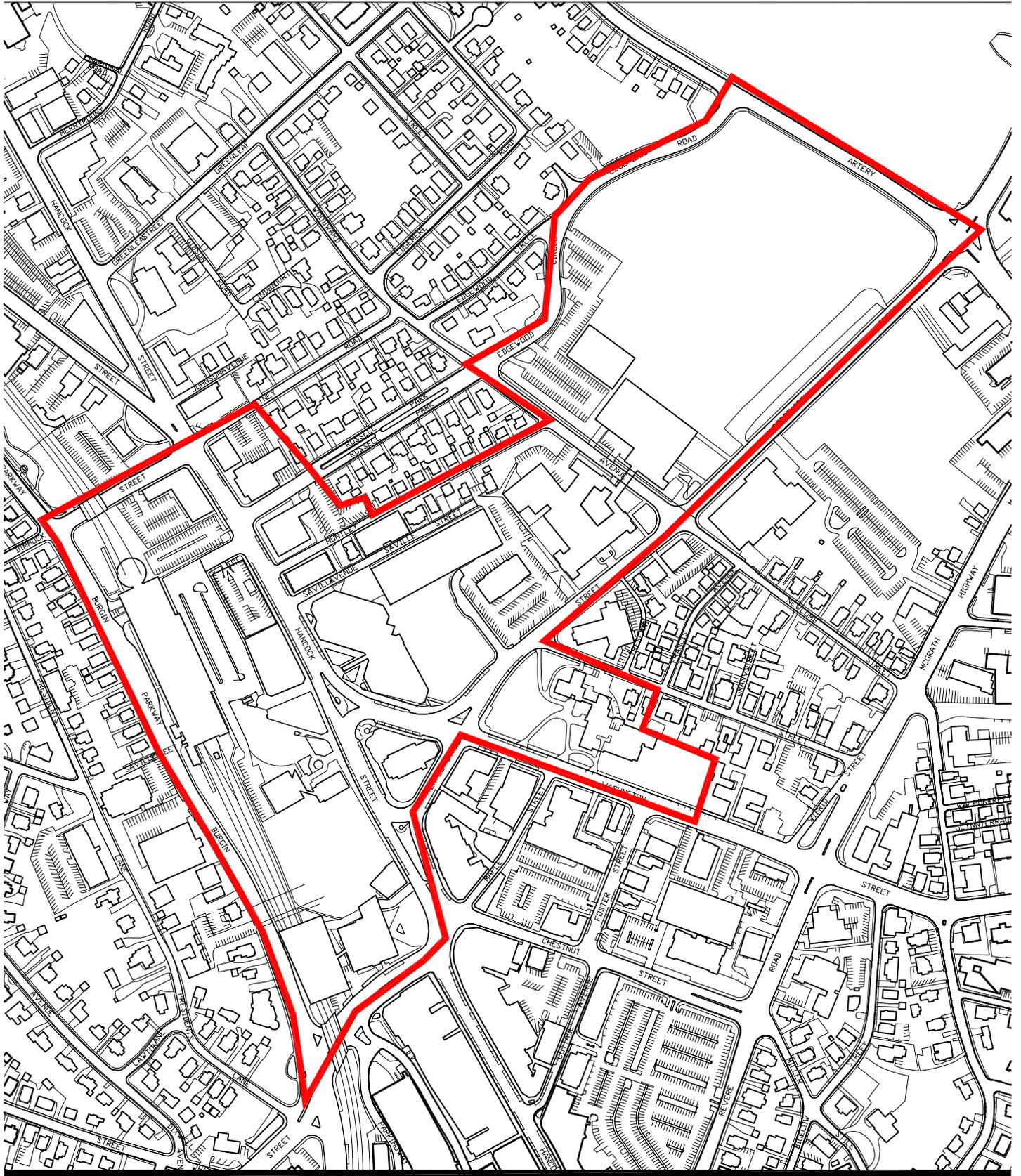
### 3.2.2 Sub-District CCIO

Figure 3 illustrates Sub-district CCIO. This area includes one-half of the total parking supply in the study area and the two largest parking garages: President’s Place and the MBTA Quincy Center station. There are 20 other off-street parking facilities in this area. These facilities have restricted uses including five lots for Quincy High School. Table 3 summarizes the results of the accumulation counts.

**Table 4 Parking Accumulation in Sub-district CCIO**

	Supply	Peak Weekday (Daytime) Demand		Friday Night	Saturday Afternoon
		Facility <sup>1</sup>	Study Area <sup>2</sup>		
Restricted Off-street (Private Ownership)	2,119	1,722	1,688	237	317
Public Off-street (Private Ownership)	681	560	560	19	14
Public Off-street (MBTA)	872	789	789	146	89
Public Off-street (City Ownership)	-	-	-	-	-
<b>Sub-total (Off-street)</b>	<b>3,672</b>	<b>3,071</b>	<b>3,037</b>	<b>402</b>	<b>420</b>
<b>Percent of Off-street Supply</b>		<b>84%</b>	<b>83%</b>	<b>11%</b>	<b>11%</b>
On-Street	305	277	262	94	109
Percent of On-street Supply		91%	86%	31%	36%
<b>Total</b>	<b>3,977</b>	<b>3,348</b>	<b>3,299</b>	<b>496</b>	<b>529</b>
<b>Percent of Total Supply</b>		<b>84%</b>	<b>83%</b>	<b>12%</b>	<b>13%</b>

Note: 1. Peak demand for each individual facility summed for each category.  
2. Peak demand for entire study area, which occurred at approximately 11:00 a.m.



Approximate Scale

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The demand in this sub-district is primarily driven by commuters, employees and students/staff at the college and high school. Off-street parking capacity was near its practical capacity on the weekday that was surveyed. However, there was significant excess off-street parking capacity on Friday night and Saturday afternoon, particularly in the two large garages. There is also variation among the major off-street parking facilities. These include the following:

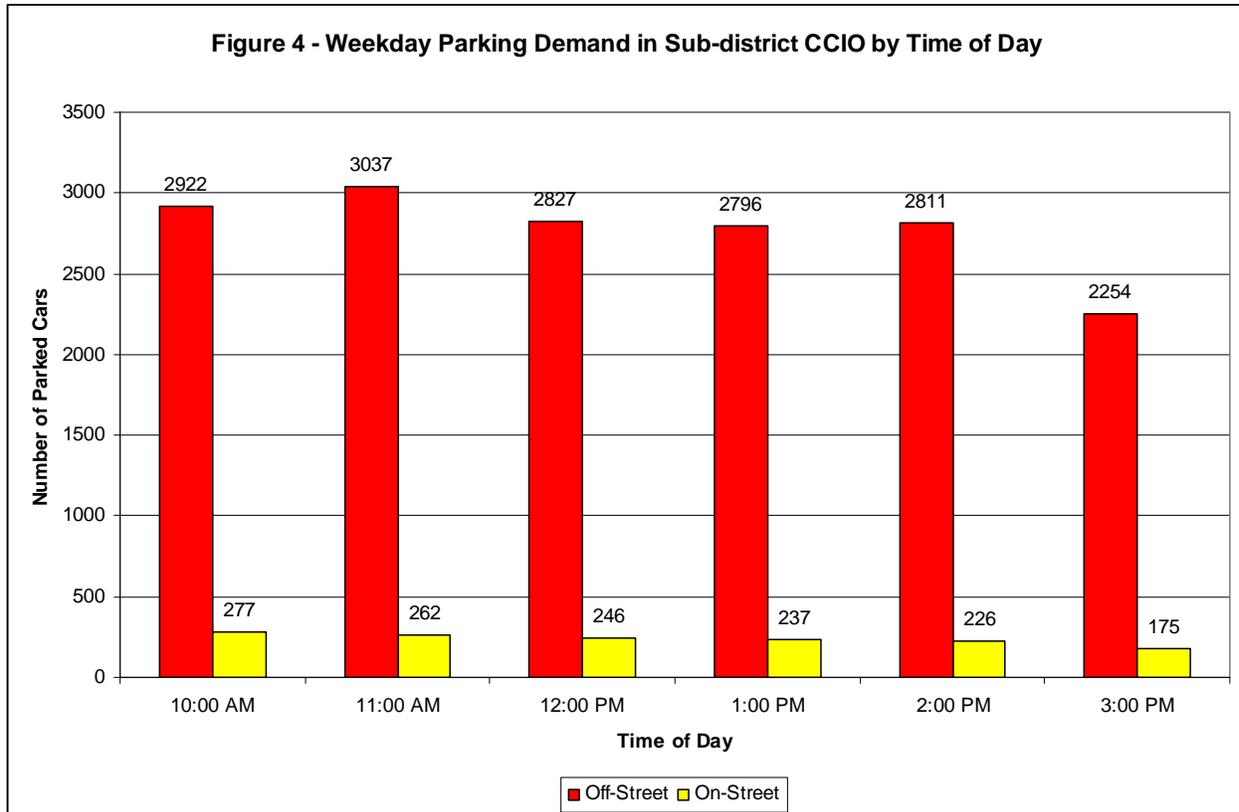
- Approximately 90 percent of the spaces at the **MBTA Quincy Center garage** were used on a weekday and ten to seventeen percent full on Friday night and Saturday afternoon due to commuting patterns. The MBTA garage is also the only off-street facility that charges a fee on weekends.
- Public parking at **President's Place** peaked at 82 percent at 11:00 a.m. on a weekday, below its practical capacity, and was three and two percent full on Friday night and Saturday afternoon respectively.
- Parking demand at the five **Quincy High School** lots peaked at 91 percent during school hours and was eleven percent and three percent full on Friday night and Saturday afternoon respectively.
- Parking demand at the three **Quincy College** facilities exceeded its supply by ten to fifteen percent before noon and was at 75 to 97 percent full after noon on a weekday. On Friday night and Saturday afternoon the parking facilities were twelve percent and three percent full respectively.
- The **Stop & Shop garage** was 85 percent full on weekdays<sup>4</sup> and four percent and three percent full on Friday night and Saturday afternoon respectively.
- Other restricted off-street parking facilities, which include some residential and retail uses, were 67 percent full on the weekday that was surveyed and 18 percent and 31 percent full on Friday night and Saturday afternoon.

On-street parking was more heavily utilized on the weekday that was surveyed and also had excess capacity on Friday night and Saturday afternoon. Forty-three percent of the City's on-street parking supply in the study area is located in Sub-district CCIO.

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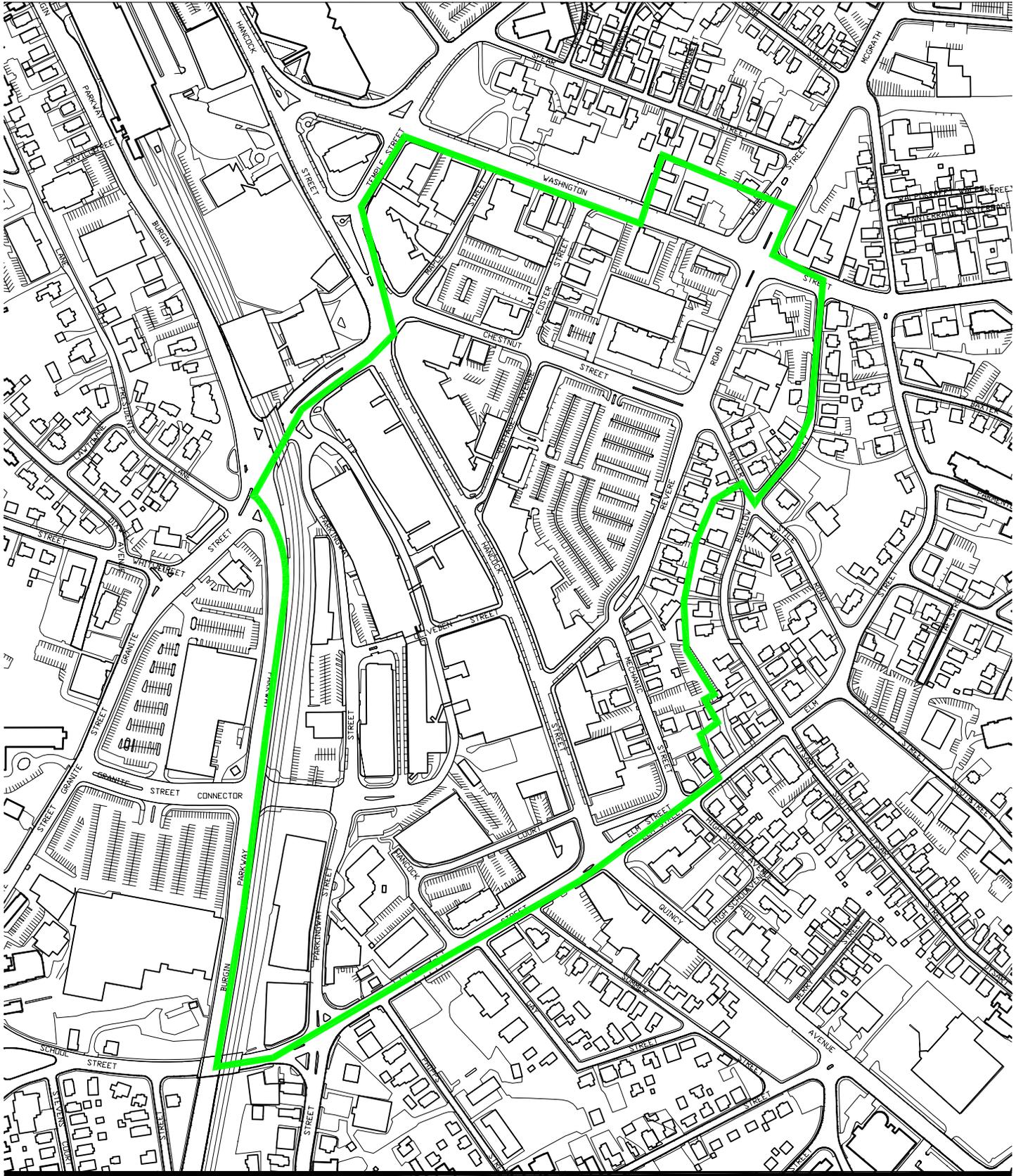
<sup>4</sup> Observations on September 15 at 2:00 p.m. indicate a 92-percent utilization.

Figure 4 presents the midday (weekday) parking accumulation by time of day. The parking demand peaked early in the morning and dropped at the end of the day. This change was related to a reduction in demand in the Quincy College and Quincy High School parking lots and the streets near these facilities (i.e., Coddington Street between Southern Artery and Woodward Avenue). Other streets were generally full throughout the weekday. Hancock Street between Russell Park and Temple Street was full on weekdays and Saturday and well utilized on Friday night.



### 3.2.3 Sub-District TR

Figure 5 illustrates Sub-district TR. This area includes approximately 40 percent of the total parking supply in the study area and the two City-owned off-street parking facilities: Ross Garage and the Hancock Lot. Forty-one percent of the total parking supply including fifty-seven percent of the study area’s on-street parking supply is located in Sub-district TR. There are 33 other off-street parking facilities in this area. These facilities have restricted uses including 229 spaces for the Norfolk County Court House. Table 5 summarizes the results of the accumulation counts.



Downtown Quincy Parking Study  
Quincy, Massachusetts

**Table 5 Parking Accumulation in Sub-district TR**

	Supply	Peak Weekday (Daytime) Demand		Friday Night	Saturday Afternoon
		Facility <sup>1</sup>	Study Area <sup>2</sup>		
Restricted Off-street (Private Ownership)	1,490	1,082	966	481	511
Public Off-street (Private Ownership)	-	-	-	-	-
Public Off-street (MBTA)	-	-	-	-	-
Public Off-street (City Ownership)					
Ross Garage	843	641	636	175	181
Hancock Lot	551	422	349	380	262
<b>Sub-total (Off-street)</b>	<b>2,884</b>	<b>2,145</b>	<b>1,951</b>	<b>1,036</b>	<b>956</b>
<b>Percent of Off-street Supply</b>		<b>74%</b>	<b>68%</b>	<b>36%</b>	<b>33%</b>
On-Street	408	357	349	310	328
Percent of On-street Supply		88%	86%	76%	80%
<b>Total</b>	<b>3,292</b>	<b>2,502</b>	<b>2,300</b>	<b>1,346</b>	<b>1,284</b>
<b>Percent of Total Supply</b>		<b>76%</b>	<b>70%</b>	<b>41%</b>	<b>39%</b>

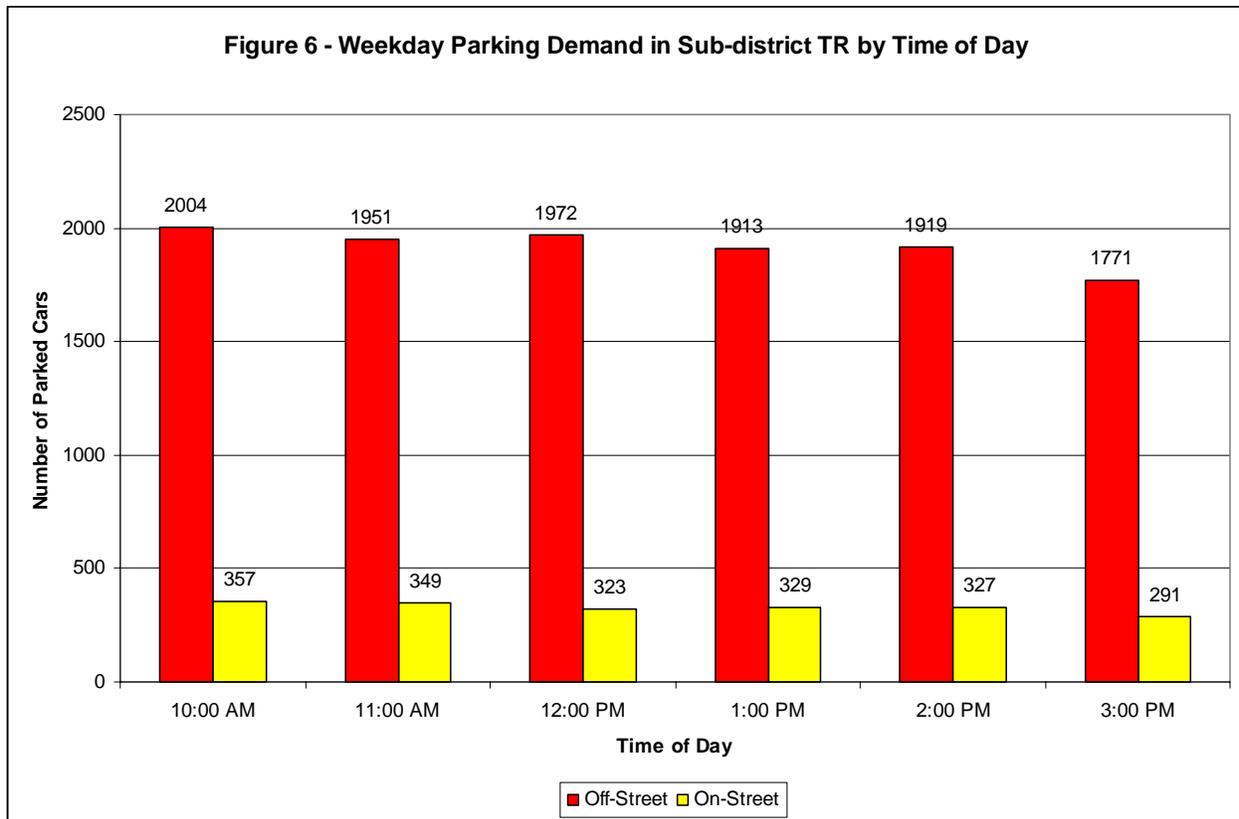
Note: 1. Peak demand for each individual facility summed for each category.  
2. Peak demand for entire study area, which occurred at approximately 11:00 a.m.

The demand in this sub-district includes employees, shoppers, restaurant patrons, and persons with business at the Registry of Motor Vehicles and the Norfolk Courthouse. There was a high level of on-street parking in this sub-district. While the overall off-street parking capacity was not near its practical capacity, there was variation among the major off-street parking facilities. These include the following:

- Parking at the **Ross Garage** peaked at 76 percent, below its practical capacity, between 11:00 a.m. and 1:00 noon and did not drop below 70 percent. On Friday night and Saturday afternoon the parking garage was 21 percent and 22 percent full.
- Parking at the **Hancock Lot** peaked at 77 percent, below its practical capacity, between 10:00 and 11:00 a.m. and dropped to 60 percent by 4:00 p.m. On Friday night and Saturday afternoon the parking lot was 69 percent and 48 percent full.
- Parking at the **Norfolk Court House** peaks at 94 percent at 10:00 a.m. on a weekday, above its practical capacity, and was seven and six percent full on Friday night and Saturday afternoon respectively.
- Other restricted off-street parking facilities, which include residential, retail uses and restaurant uses, were 64 percent full on the weekday that was surveyed and 37 percent and 39 percent full on Friday night and Saturday afternoon respectfully.

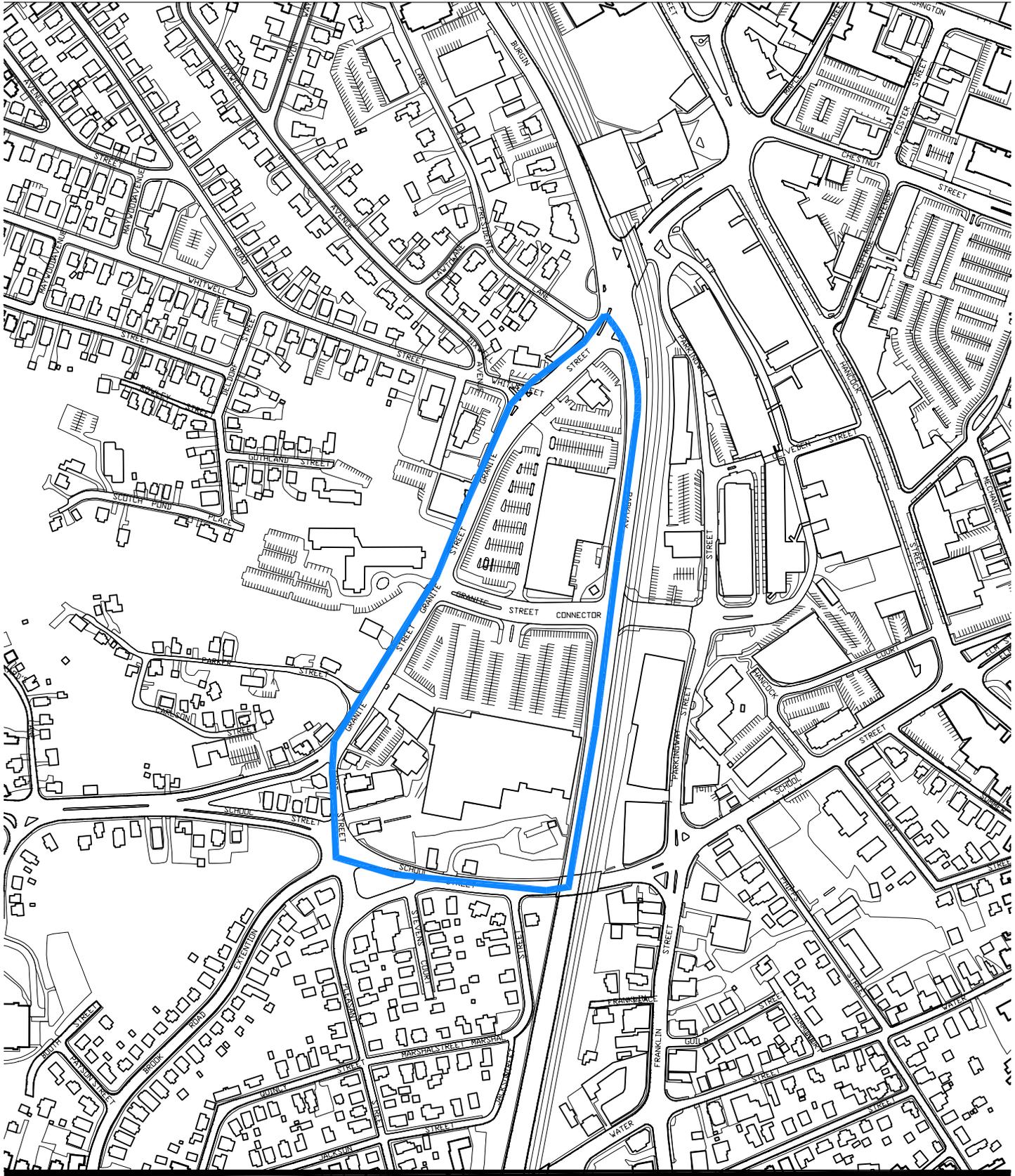
More than half of the on-street parking supply in the study area is located in Sub-district TR. The on-street parking utilization on Friday night and Saturday afternoon was the highest in the study area.

Similar to Sub-district CCIO, weekday parking demand peaked before noon, as illustrated in Figure 6. However, unlike Sub-district CCIO, parking demand remains fairly consistent throughout the day. This reflects the diversity of uses in the sub-district that have different peaking characteristics. This includes the Norfolk County Courthouse, which had its peak weekday peak early in the morning, but also a secondary peak in the early afternoon. Observations indicate Restaurant uses also generated peak parking demands around noontime and were busy on Friday night and Saturday afternoon.



### 3.2.4 Sub-District SR

Figure 7 illustrates Sub-district SR. This area includes approximately nine percent of the total parking supply in the study area. All the off-street parking is privately owned and restricted. There is a minimal amount (four spaces) of on-street parking. Eighty-seven percent of the off-street parking spaces are related to retail uses. Table 6 summarizes the results of the accumulation counts.



Downtown Quincy Parking Study  
Quincy, Massachusetts

**Table 6 Parking Accumulation in Sub-district SR**

	Supply	Peak Weekday (Daytime) Demand		Friday Night	Saturday Afternoon
		Facility <sup>1</sup>	Study Area <sup>2</sup>		
Restricted Off-street (Private Ownership)	706	316	234	257	285
Public Off-street (Private Ownership)	-	-	-	-	-
Public Off-street (MBTA)	-	-	-	-	-
Public Off-street (City Ownership)	-	-	-	-	-
<b>Sub-total (Off-street)</b>	<b>706</b>	<b>316</b>	<b>234</b>	<b>257</b>	<b>285</b>
<b>Percent of Off-street Supply</b>		<b>45%</b>	<b>33%</b>	<b>36%</b>	<b>40%</b>
On-Street	4	1	-	-	2
Percent of On-street Supply		25%	0%	0%	50%
<b>Total</b>	<b>710</b>	<b>317</b>	<b>234</b>	<b>257</b>	<b>287</b>
<b>Percent of Total Supply</b>		<b>45%</b>	<b>33%</b>	<b>36%</b>	<b>40%</b>

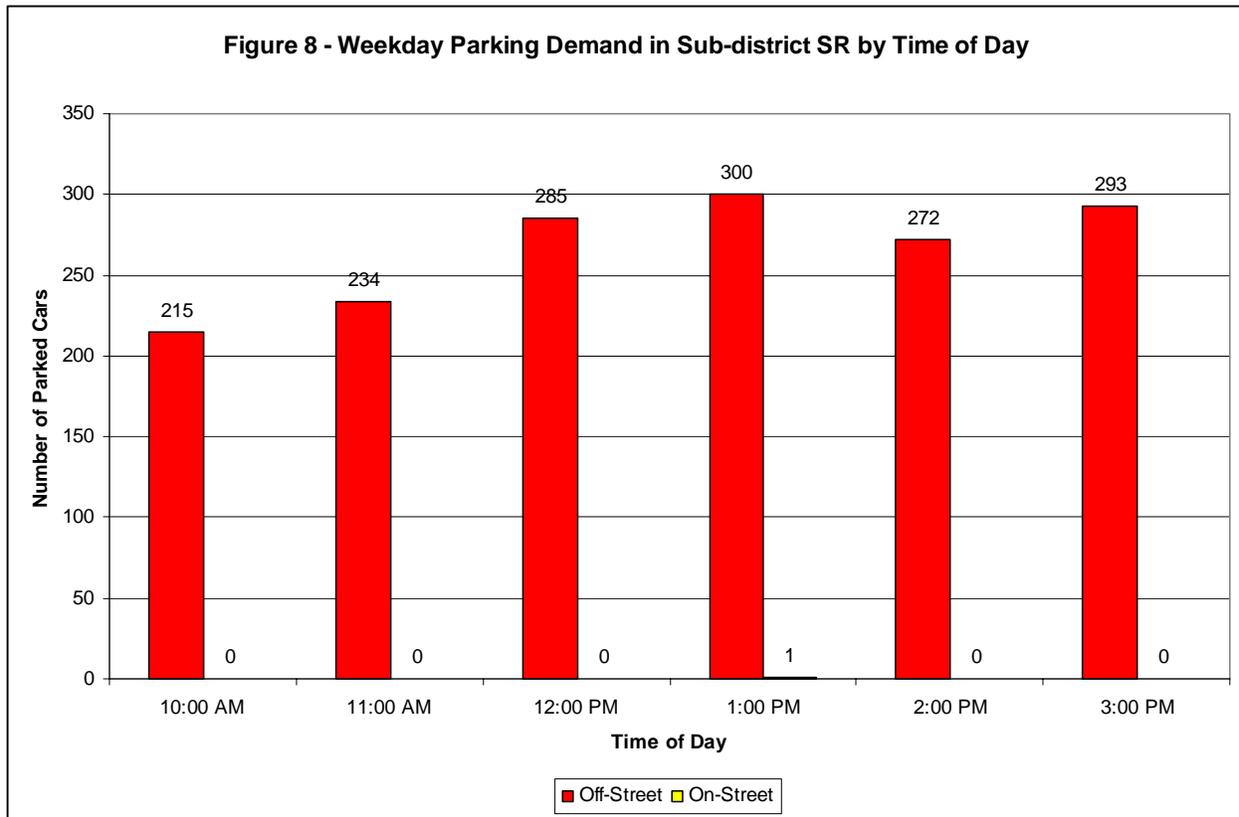
Note: 1. Peak demand for each individual facility summed for each category.  
2. Peak demand for entire study area, which occurred at approximately 11:00 a.m.

The overall off-street parking capacity is not near its practical capacity, even accounting for seasonal demand in retail use.<sup>5</sup> The following demand characteristics were identified among the various off-street parking lots:

- Parking at the **shopping malls** peaked at 42 percent, below its practical capacity, between 3:00 and 4:00 p.m. On Friday night and Saturday afternoon the parking demand was 40 percent and 43 percent full.
- Other restricted off-street parking facilities, which include residential, restaurant and small offices, were up to 46 percent full on the weekday that was surveyed and 19 percent and 27 percent full on Friday night and Saturday afternoon.

As illustrated in Figure 8, weekday parking demand was lowest early in the morning (in contrast to the other sub-districts) and remained relatively constant between 1:00 and 4:00 p.m.

<sup>5</sup> ULI *Shared Parking* indicates that retail demand in September is 75 percent of peak demand. Peak demand occurs during the Christmas shopping season.



### 3.3 User Profile at City-owned Parking Facilities

Data from the City of Quincy provided information about daily parkers and monthly pass holders at the Ross Garage and the Hancock Lot. This information indicates that 64 percent of daily parkers in the Ross Garage stay for one hour or less and that vehicles park for an average of just under two hours per vehicle on a weekday. There are 742 monthly passes at the garage. Stop & Shop employees and vendors are the largest single group, accounting for 25 percent of the total monthly passes. Monthly groups include the Registry of Motor Vehicles, City employees and employees at 68 different businesses.

Sixty percent of daily parkers in the Hancock Lot stay for one hour or less, slightly lower than the Ross Garage. Vehicles park for an average of just under one and three-quarter hours per vehicle on a weekday. There are 263 monthly passes at the lot including a small number of City employees and employees from 68 different businesses.

### 3.4 User Survey

A parking survey was conducted to determine the characteristics of the users at the major public parking facilities in the downtown. Questionnaires were through a mail-in survey that was either placed on vehicles' windshields or handed to drivers at the Ross Garage and Hancock Lot. The first set of surveys was distributed on Wednesday, September 28 at the President's Place garage, the on-street spaces, and the monthly parkers at the Hancock Lot. The second round of surveys was distributed on Wednesday, October 12 at the Ross Garage and the Hancock Lot. The surveys asked the following five questions:

1. How long did you park at this location?
2. Why did you park here?
3. How long did you walk to your main destination?
4. How often do you park in downtown Quincy?
5. Where do you live?

In addition, parkers at the Ross Garage and Hancock Lot were asked whether they were monthly (permitted) or daily parkers. For analytical purposes, categories of responses were combined in the reported data that is presented below to provide more meaningful results. Examples of surveys are presented in Appendix D. Survey results are presented in Appendix E and summarized below.

#### 3.4.1 Ross Garage

There were 43 responses to the parking survey at the Ross Garage for daily parkers and 27 responses for monthly parkers. The data from the surveys indicate that the garage provides both an important resource for short-term and employee parking. Table 7 summarizes the results of the survey, which indicates the following:

- The majority of respondents parked for less than one hour and parked one or fewer times per week in the downtown. This is consistent with the high percentage of respondents that indicated their purpose for parking at the garage was related to non-work trips, particularly RMV trips, which typically have short duration.
- The majority of short-term parkers (less than one hour) listed the Registry of Motor Vehicles (RMV) as their trip purpose.

- Twenty-six percent of the monthly respondents listed work at Stop & Shop as their trip purpose.
- The majority of destinations are within five minutes of the garage.

**Table 7 Ross Garage Parking User Survey Received through 10/17/05**

Duration	Total Sample	Trip Purpose				Walking Distance to Destination		Frequency Parked in Downtown Quincy		
		Work/School	RMV	Meeting/Medical	Shop/Dine/Other	Five Minute or Less	More Than Five Minutes	One or Fewer Times	Two to Three Times	Four or More Times
<b>Dailies<sup>1</sup></b>										
Less than One Hour	56%	7%	55%	21%	17%	96%	4%	91%	4%	4%
More than One Hour	44%	45%	0%	45%	10%	89%	11%	32%	32%	37%
<b>Total Dailies</b>	<b>100%</b>	<b>22%</b>	<b>33%</b>	<b>31%</b>	<b>14%</b>	<b>93%</b>	<b>7%</b>	<b>64%</b>	<b>17%</b>	<b>19%</b>
<b>Weighted Sample<sup>2</sup></b>		<b>20%</b>	<b>35%</b>	<b>29%</b>	<b>15%</b>	<b>93%</b>	<b>7%</b>	<b>70%</b>	<b>14%</b>	<b>16%</b>
<b>Monthlies<sup>3</sup></b>	<b>100%</b>	<b>90%</b>	<b>0%</b>	<b>7%</b>	<b>3%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

Note: 1. Includes responses with no answer to monthly passholder question.  
 2. Adjusts survey results to account for 64 percent of vehicles parked for less than one hour per City data.  
 3. 96 percent of monthlies were parked for four hours or more.

### 3.4.2 Hancock Lot

There were 58 responses to the parking survey at the Hancock Lot for daily parkers and 35 responses for monthly parkers. These data indicate that the lot provides both an important resource for short-term and employee parking. Key destinations include the Norfolk Court and the restaurants and retail businesses adjacent to the lot. Table 8 summarizes the results of the survey, which indicates the following:

- The respondents split evenly into three groups based on the amount of time parked at the lot: approximately one-third parked for less than one hour, one-third for one to four hours, and one third for more than eight hours. The amount of one hour or less parkers is less than 60 percent, which was determined by data from the City. This difference is reflected in the weighted daily percentages.
- Non-work trips had the highest percent for vehicles parked less than four hours. Work trips for vehicles parked for more than four hours.
- Approximately 30 percent of trips for meeting/medical appointment purposes (weighted sample) were made for court-related activities.

- The majority of destinations are within five minutes of the lot. However, this percentage is the lowest of the four surveys, indicating that users of the Hancock Lot have a slightly higher willingness to walk more than five minutes.

**Table 8 Hancock Lot Parking User Survey Received through 10/17/05**

Duration	Total Sample	Trip Purpose			Walking Distance to Destination		Frequency Parked in Downtown Quincy		
		Work	Meeting/ Medical	Shop/ Dine/ Other	Five Minute or Less	More Than Five Minutes	One or Fewer Times	Two to Three Times	Four or More Times
<b>Dailies<sup>1</sup></b>									
Less than One Hour	34%	23%	25%	52%	90%	10%	60%	20%	20%
One to Four Hour	33%	35%	27%	38%	58%	42%	58%	26%	16%
More than Four Hours	33%	90%	5%	5%	67%	33%	0%	11%	89%
<b>Total Dailies</b>	<b>100%</b>	<b>44%</b>	<b>20%</b>	<b>35%</b>	<b>72%</b>	<b>28%</b>	<b>40%</b>	<b>19%</b>	<b>41%</b>
<b>Weighted Sample<sup>2</sup></b>		<b>37%</b>	<b>22%</b>	<b>41%</b>	<b>79%</b>	<b>21%</b>	<b>48%</b>	<b>19%</b>	<b>33%</b>
<b>Monthlies<sup>3</sup></b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>71%</b>	<b>29%</b>	<b>0%</b>	<b>17%</b>	<b>83%</b>

Note: 1. Includes responses with no answer to monthly passholder question.  
 2. Adjusts survey results to account for 60 percent of vehicles parked for less than one hour per City data.  
 3. 916 percent of monthlies were parked for four hours or more.

### 3.4.3 President’s Place Garage

There were 157 responses to the parking survey at the President’s Place garage. These results indicate that the garage is primarily used for parking by employees in President’s Place and other nearby locations. Table 9 summarizes the results of the survey, which indicates the following:

- The majority of respondents parked for four or more hours and parked four or more times per week in the downtown. This is consistent with the high percentage of respondents that indicated their purpose for parking at the garage was related to work.
- Seven respondents with a four to eight hour duration indicated that they parked at the garage to commute by the MBTA. Otherwise the shopping/dining category was evenly distributed over the three time categories.
- The majority of destinations are within five minutes of the garage.

**Table 9 President’s Place Garage Parking User Survey**

Duration	Total Sample	Trip Purpose			Walking Distance to Destination		Frequency Parked in Downtown Quincy	
		Work/School <sup>1</sup>	Meeting/Medical	Shop/Dine/Other <sup>1</sup>	Five Minute or Less	More Than Five Minutes	Two to Three Times per Week	Four or More Times
Four Hours or Less	8%	50%	29%	21%	69%	31%	64%	36%
Four to Eight Hours	36%	87%	7%	7%	82%	18%	17%	83%
More Than Eight Hours	56%	84%	4%	11%	91%	9%	6%	94%
<b>Total</b>	<b>100%</b>	<b>82%</b>	<b>7%</b>	<b>11%</b>	<b>86%</b>	<b>14%</b>	<b>14%</b>	<b>86%</b>

Note: 1. Only one respondent indicated student.  
2. Includes MBTA commuters.

### 3.4.4 On-Street Parking

The survey had 24 respondents that provide general information about the use of on-street parking for short-term parking (i.e., two hours or less). The majority of respondents to the survey parked for two hours or less, which is consistent with studies in Boston that also found that approximately 70 percent of on-street parking in commercial districts occurs for two hours or less. Table 10 summarizes other results from the survey. The results for short-term parkers indicate the following:

- Most trips were for non-work purposes.
- The majority of respondents walked to destinations within five minutes of their parking space.
- There was no clear pattern for the frequency of visits to the downtown.

**Table 10 On-street Parking User Survey**

Duration	Total Sample	Trip Purpose			Walking Distance to Destination		Frequency Parked in Downtown Quincy		
		Work/School	Meeting/Medical	Shop/Dine/Other	Five Minute or Less	More than 5 Minutes	Once per Week or Less	Two to Three Times per Week	Four or More Times
Two Hours or Less	71%	36%	41%	23%	94%	6%	35%	41%	24%
More Than Two Hours	29%	63%	13%	25%	43%	57%	-	29%	71%
<b>Total</b>	<b>100%</b>	<b>43%</b>	<b>33%</b>	<b>23%</b>	<b>79%</b>	<b>21%</b>	<b>25%</b>	<b>38%</b>	<b>38%</b>

### 3.5 Adequacy of Existing Supply

In general, the off-street parking supply in the study area is adequate to meet current demands in Downtown Quincy with the exception of off-street parking at Quincy College, which exceeded its supply by 24 spaces. There are available off-street public parking spaces that could accommodate that demand in the short-term such as the President’s Place garage. The lack of use of these facilities would indicate the cost sensitivity of students.

Table 11 presents the estimated excess public parking supply. The amount of excess capacity was higher on Friday night and Saturday afternoon than the weekday daytime hours. Approximately three-quarters of the available off-street public parking spaces are in City-owned facilities during weekday daytime hours and slightly more than one-third on Friday night and Saturday afternoon due to the low demand at the MBTA Quincy Center garage and the President’s Place garage

**Table 11 Excess Parking Capacity**

	Supply	Practical Capacity <sup>1</sup>	Available Parking Spaces		
			Weekday (Daytime)	Friday Night	Saturday Afternoon
MBTA Quincy Center garage	872	785	-	640	700
President’s Place garage	681	613	50	590	600
Ross Garage <sup>2</sup>	842	758	120	580	580
Hancock Lot	551	496	50	120	230
<b>Total Public Off-street Spaces</b>	<b>2,946</b>	<b>2,652</b>	<b>220</b>	<b>1,930</b>	<b>2,110</b>
<b>On-street Parking</b>	<b>717</b>	<b>681</b>	<b>47</b>	<b>277</b>	<b>242</b>

Note: 1. Assumes 90 percent practical capacity for off-street parking and 95 percent for on-street parking.  
 2. Includes 19 space parking lot in front of garage.

The Ross Garage and Hancock Lot provide free one-hour parking, which reduces demand for on-street parking on the streets around these facilities. As a result, the on-street supply is adequate to meet current short-term parking demands during the weekday daytime hours.

### 3.6 Ross Garage Access Issues

The Ross Garage has the most confusing motor vehicle and pedestrian connections of the four public off-street public parking facilities. These issues are related to the location of the garage behind buildings on Hancock Street. These issues include:

- Poor visibility of the facility from adjacent streets that contribute to concerns about safety.

- Poor street circulation and integration of the garage entrances/exits with local streets.
- Pedestrian desire line from the garage to Stop & Shop that results in pedestrians crossing Granite Street mid-block.
- Connections via public ways to Hancock Street that are limited to Granite Street and Cliveden Street, which are 800 feet apart.

## 4.0 Future Downtown Redevelopment

While specific plans have not been determined, the current planning for the redevelopment of downtown focuses on the area around the proposed Quincy Concourse on the southern end of the Study Area. The plans seek to develop Transit Oriented Development (TOD) with strong pedestrian connections that will encourage and support ground-floor retail. The area around the Hancock Lot and the Ross Garage are potential locations for large portions of this redevelopment with additional in-fill development in other sites near these facilities.

The future build-out program, which is under development, envisions a mix of uses for the downtown. Goody Clancy & Associates has been assisting the City of Quincy in developing and evaluating potential redevelopment plans. In general, these plans include the following:

- Approximately 1.4 to 1.8 million gross square feet (GSF) of office
- Approximately 200,000 GSF of retail space
- Approximately 360 to 750 residential units
- Approximately 15,000 GSF of civic space.

The additional development will increase traffic and parking demands in the downtown. Some of this increase will be offset by the demolition of existing uses and elimination of the associated demands as part of the redevelopment plans. Some existing parking spaces will also be lost, increasing demand at the existing off-street facilities or requiring the construction of new spaces as part of the redevelopment plans.

This section examines the broad implications of the redevelopment plan on the parking supply with particular attention to the need to provide public off-street parking facilities.

## 4.1 Parking Space Ratios

The Master Plan seeks to encourage TOD and take advantage of Quincy Center station as a transit resource and parking ratios used for this planning were developed accordingly. The ratios for the as-of-right zoning minimums are 1.66 space per 1,000 GSF of office and 0.0 spaces per 1,000 GSF of retail. Table 12 presents the parking ratio assumptions of the Master Plan, which are evaluated in the sections that follow.

**Table 12 Master Plan Parking Ratio Assumptions**

Use	Ratio
Office <sup>1</sup>	2.0 spaces per 1,000 GSF
Residential	
Townhouse	2.0 spaces per unit
Loft-style	1.0 spaces per unit
Retail	2.0 spaces per 1,000 GSF
Civic	0.5 spaces per 1,000 GSF

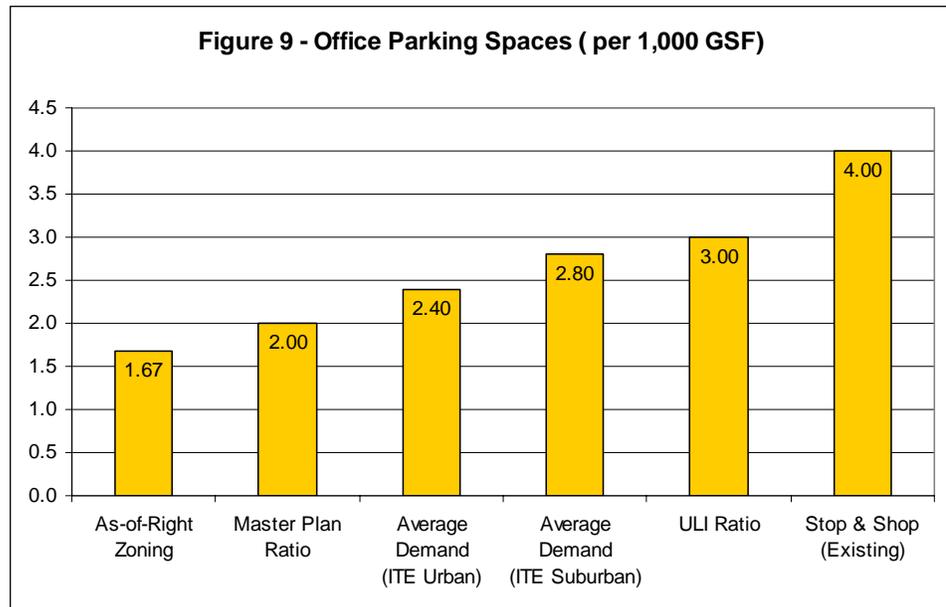
Note: 1. Office uses were described as “market friendly” in the Master Plan parking analysis.

### 4.1.1 Office Parking Ratios

Figure 9 illustrates office parking space ratios from the Master plan along with data from several other sources including the Institute of Transportation Engineers (ITE). ITE also provides a formula to estimate demand.<sup>6</sup> This rate indicates that a 200,000 square foot suburban office building will have a peak weekday parking demand of 529 spaces. Accounting for a 95-percent practical capacity, this translates to a ratio of 2.8 spaces per 1,000 GSF. However, it should be noted that the ITE studies had an 85<sup>th</sup> percentile demand of 3.44 spaces per 1,000 GSF, indicating the potential variability among different types of users and locations.

As illustrated, as-of-right and Master Plan parking ratios are below the ITE average demand estimates, the ULI ratios that assumes 100 percent auto use, and the inventoried on-site and off-site parking for the existing Stop & Shop office use. Consideration of an appropriate ratio for office must be reasonable based on available research and reflect the desired outcome for a downtown that encourages non-auto use and avoids auto-oriented development that could overwhelm the adjacent roadway network.

<sup>6</sup> Institute of Transportation Engineers, *Parking Generation*, 3<sup>rd</sup> Edition, 2004



A reasonable approach for planning purposes would use an office rate of 2.6 spaces per 1,000 GSF. This is the average of the ITE Urban and ITE Suburban rate. It reflects a non auto mode-share (i.e., transit, walk, bike, carpool passenger) of thirteen percent.<sup>7</sup> Based on 2000 U.S. Census data, the Central Transportation Planning Staff (CTPS)<sup>8</sup> estimates that Downtown Quincy has a \_\_\_ percent non-auto mode share.

Downtown Quincy is served by the Red Line and commuter rail at Quincy Center station. Quincy Center is near the end of the Red Line, making it difficult to attract significant transit ridership for downtown office workers on these services. The potential to reduce the office parking ratio below observed ratios or the ITE recommended parking ratios for suburban locations hinges on the ability to achieve a non-auto mode share through the following:

- Transit on local surface buses
- Walking from residential uses

Surface buses provide the best opportunity to increase transit use, particularly if local buses could be routed through the Quincy Concourse area. This will broaden the role of MBTA buses that today are primarily oriented toward serving Quincy Center as a transit hub to add emphasis to

<sup>7</sup> The 2.6 ratio is 87 percent of 3.0 spaces per 1,000 GSF, which is the ULI recommended ratio for offices with 100 percent auto use.

<sup>8</sup> CTPS is Massachusetts transportation planning agency that supports state transportation agencies and the Boston Metropolitan Planning Organization.

serving Downtown Quincy as a destination for trips originating along those routes.

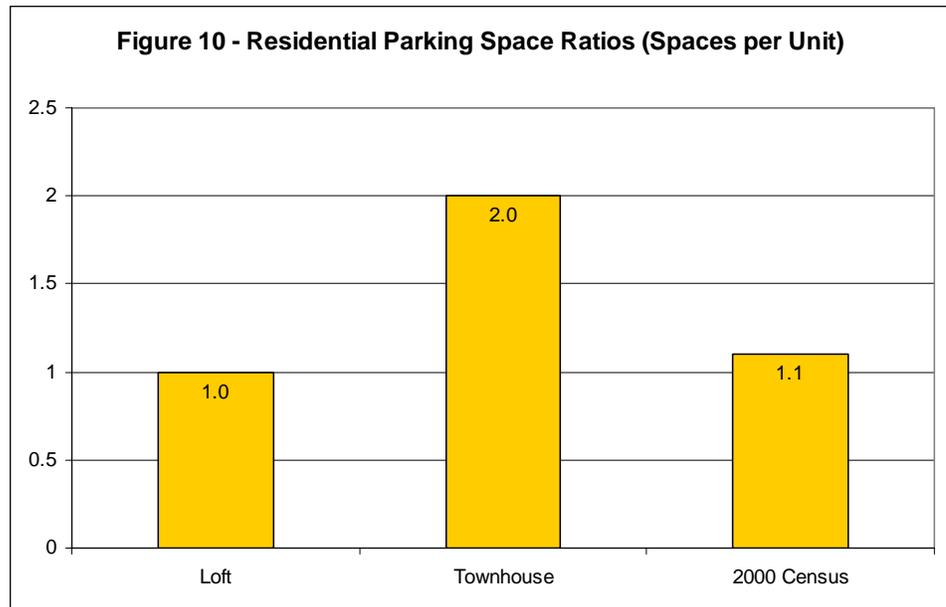
In addition, the City should give consideration to the means that each individual development proposals to accommodate parking needs, including the number of spaces and the use of Transportation Demand Management (TDM) programs to support and encourage non-auto use. Ideally, each project should have a plan to accommodate its own demand on site. The plans should use shared parking wherever possible and define the potential role and use of public parking. For example, it would be possible to reduce parking ratios for some office sites to 2.0 spaces per 1,000 GSF, which represents approximately 75 percent of the office ratio of 2.6 spaces per 1,000 GSF if the additional parking demand were accommodated in off-site public parking.

In the near-term, this approach would afford the opportunity to provide shared parking in a public garage between daytime, weekday office parkers and nighttime and weekend parkers for retail or restaurant uses. In the long-term, this would provide the City with the flexibility to pursue policies to reduce the overall parking supply used by office workers, assuming the full build-out of residential uses in the downtown and the implementation of transit improvements.

#### **4.1.2 Residential Parking Ratios**

U.S. Census data were reviewed for Downtown Quincy to provide a comparison with the Master Plan Ratios. As Figure 10 illustrates, there are 1.1 vehicles available per household in this section of Quincy. This rate is in large part due to the fact that 24 percent of the households had zero-auto availability. The census rate for houses with one or more vehicles was 1.45 vehicles per household.

The ratio of 1.0 space per unit for “loft-style” units is reasonable if approximately 25 percent of the new units do not own vehicles. However, this level of auto ownership may vary depending on future conditions. A safety net is provided by the availability of on-street and off-street parking that will be available at night and on weekends when office workers leave the downtown. This available parking supply could accommodate residential demands in excess of one space per unit. This implies that planning for the residential parking supply associated with the ratio of one space per unit should consider these spaces as exclusively used for residential parking purposes (i.e., no shared parking) until detailed plans are developed.



In light of the Census data, this evaluation also indicates that townhouse ratios of 2.0 spaces per unit are reasonable. Townhouses typically have two or more bedrooms and generate a higher parking demand due to the higher number of occupants per unit as compared to apartments. It should also be noted that the amount of parking for these types of uses is more likely to be sensitive to market demands and the size of the units.

#### 4.1.3 Ratios for Other Uses

In general, the plan envisions residential as part of mixed use development on many sites. Several sites are likely to include larger retail components. ULI peak parking ratios are 3.8 spaces per 1,000 GSF on weekdays, 4.0 spaces per 1,000 GSF on Saturdays and 5.0 spaces per 1,000 GSF on Sundays. These rates assume 100 percent auto use. The 85<sup>th</sup> percentile ITE peak rates for a Friday in December is 5.24 spaces per 1,000 GSF

The peak weekday demand is of concern, because there is sufficient off-street parking available on Saturdays and Sundays in the study area. A key mitigating factor is the size of the retail envisioned in the Master Plan. Ninety percent of the retail development would be 15,000 square feet or less. This type of retail would be oriented toward walk-in customers.

The amount of parking generated by these retail uses would benefit from a district approach that relies on public parking supply for customer parking and minimal on-site employee parking. The exception would be retail uses larger than 15,000 square feet. The small amount of civic space also lends itself to the use of public parking, making the 0.5 space per 1,000 GSF a reasonable estimate.

## 4.2 Future Parking Conditions

The potential build-out program was evaluated to determine the adequacy of the proposed parking supply and to identify potential access issues.

### 4.2.1 Future Parking Demand

The potential parking demand was estimated for two scenarios: Scenario 1 has the least office and most residential; Scenario 2 has the most office and least residential development. The differences in these uses likely occur at the Hancock Lot site. The parking ratios in Table 13 use the Master Plan ratios for retail, residential and civic. Two different office parking ratios were used for each scenario: Option A uses a ratio of 2.6 spaces per GSF, which is the average of ITE Urban and Suburban ratios; Option B uses a conservative 3.0 spaces per 1,000 GSF.

The analysis indicates that the new development will need 4,900 to 6,200 parking spaces depending on the mix of office and residential and the amount of non-auto use by office workers. Approximately 1,800 spaces are located within redevelopment sites that are identified in the Master Plan, including a portion (approximately 24 percent) of the Ross Garage and all of the Hancock Lot. Approximately 1,000 of the 1,800 spaces are associated with existing uses that would be eliminated in the Master Plan (i.e., redeveloped to a higher use). Therefore, the range of potential new parking that will be needed for the Master Plan is 3,900 to 5,200 spaces.

**Table 13 Parking Demand Estimates**

	Parking Ratio	Scenario 1	Parking Demand		Scenario 2	Parking Demand	
			A	B		A	B
Office	2.6 spaces per 1,000 GSF (Option B) 3.0 spaces per 1,000 GSF (Option B)	1.4 million GSF	3,640	4,200	1.8 million GSF	4,680	5,400
Retail	3.0 spaces per 1,000 GSF	200,000 GSF	400	400	200,000 GSF	400	400
Residential	1.0 spaces per “loft- style” unit 2.0 spaces per townhouse unit	750 units <sup>1</sup>	825	825	360 units <sup>1</sup>	396	396
Civic	0.5 spaces per 1,000 GSF	15,000 GSF	8	8	15,000 GSF	8	8
<b>Total Demand</b>			<b>4,873</b>	<b>5,433</b>		<b>5,484</b>	<b>6,204</b>
<b>Parking Supply</b>							
Proposed Spaces			4,650	4,650		4,650	4,650
Existing Excess Capacity			170	170		170	170
<b>Total Supply</b>			<b>4,820</b>	<b>4,820</b>		<b>4,820</b>	<b>4,820</b>
<b>Surplus/(Deficit)</b>			(53)	(613)		(664)	(1,384)

- Note: 1. Assumes approximately 95 percent “loft style” and approximately five percent townhouse.  
2. Proposed spaces from Master Plan analysis by Goody Clancy & Associates. The existing excess capacity does not include President’s Place (50 spaces), which is more than five minutes from the development corridor. This also assumes that the number of spaces in the Ross Garage and Hancock Lot are retained in some form.

The parking deficit will vary by location:

- In Sub-district SR, the Master Plan would have approximately 120 unused spaces for Scenario 2B to 180 unused spaces for Scenario 1-A. This is in addition to the excess capacity of approximately 300-350 parking spaces that exists today in the shopping centers.<sup>9</sup>
- The area around the Ross Garage would have parking deficits between 900 spaces for Scenario 1-A to 1,340 spaces for Scenario 2B.
- The range for the area around the Hancock Lot would have a surplus of 650 for Scenario 1A to a deficit of 200 spaces for Scenario 2B.

#### 4.2.2 Shared Parking Opportunities

Shared parking is an option to reduce potential parking demand. Table 13 illustrates the distribution of parking demand for weekdays and weekends for uses that are found in the study area. Residential uses are often seen as opportunities for sharing parking supply with other uses that generate midday weekday demand. However, two factors may limit the ability to leverage significant amounts of shared parking with residential uses:

1. As discussed above, unless 25 percent of new units have zero autos owned, it is likely that “loft style” residences will generate parking demand in excess of 1.0 space per unit. For example, assuming a demand of 1.45 spaces per unit, the minimum demand generated per unit will be 0.85 spaces per unit (i.e., 1.45 times 59 percent, which is the minimum weekday percentage in Table 10).
2. If the TOD approach is successful, residential uses will tend to behave more like Central Business District (CBD) residential uses and have higher percent utilization during the day as people walk or take transit to work. For example, while the non-CBD demand is 59 percent on a weekday, it is 85 percent for CBD locations. Under these conditions, auto ownership levels will be lower, but parking demand will not decrease proportionally as people use the spaces to store vehicles.

It should be noted that 85 percent utilization is comparable to the practical capacity of off-street parking. It is likely, therefore, that shared parking in a large garage for residential uses may only accommodate a small amount of additional parking demand such as the employee demand generated by first floor retail uses that might accompany the residential uses as part of a mixed use plan. Other complementary uses could include office uses with

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<sup>9</sup> Assumes current demand is 75 percent of peak seasonal demand per ULI and accounts for a 90 percent practical capacity.

restaurant uses or retail uses that have night-time or weekend demands.  
These patterns could be well served by a public garage.

**Table 14 Hourly Distribution of Parking Demand**

Hour of Day	Office		Retail		Restaurant		Residential		
	Week-day	Sat.	Week-day	Sat.	Week-day	Sat.	Weekday (Non-CBD)	Saturday (Non-CBD)	CBD Daily
6:00 a.m.	3%	0%	0%	0%	0%	0%	100%	100%	100%
7:00 a.m.	20%	20%	8%	3%	3%	3%	87%	95%	95%
8:00 a.m.	63%	60%	18%	10%	5%	3%	79%	88%	90%
9:00 a.m.	77%	80%	42%	30%	10%	5%	73%	81%	87%
10:00 a.m.	100%	80%	68%	45%	20%	8%	68%	74%	85%
11:00 a.m.	100%	100%	87%	73%	30%	10%	59%	71%	85%
Noon	90%	100%	97%	85%	50%	30%	60%	71%	85%
1:00 p.m.	90%	80%	100%	95%	70%	45%	59%	70%	85%
2:00 p.m.	97%	60%	97%	100%	60%	45%	60%	71%	85%
3:00 p.m.	77%	40%	95%	100%	60%	45%	61%	73%	85%
4:00 p.m.	77%	40%	87%	90%	50%	45%	66%	75%	87%
5:00 p.m.	47%	20%	79%	75%	70%	60%	77%	81%	90%
6:00 p.m.	23%	20%	82%	65%	90%	90%	85%	85%	92%
7:00 p.m.	7%	20%	89%	60%	100%	95%	94%	87%	94%
8:00 p.m.	7%	20%	87%	55%	100%	100%	96%	92%	96%
9:00 p.m.	3%	0%	61%	40%	100%	100%	98%	95%	98%
10:00 p.m.	3%	0%	32%	38%	90%	95%	99%	96%	99%
11:00 p.m.	0%	0%	13%	13%	70%	85%	100%	98%	100%
Midnight	0%	0%	0%	0%	50%	70%	100%	100%	100%

Source: ULI, Shared Parking, 1983

### 4.2.3 Vehicular Access

Vehicular access is an important consideration for the new parking. Major roadway access is provided by the following corridors:

- **Burgin Parkway**, a two-way four- to five-lane roadway providing connections to and from I-93/Route 3/Route 128.
- **Hancock Street**, a two-way four- to five-lane local arterial with on-street parking that also includes a short one-way (southbound) section in front of City Hall.
- **Coddington Street**, a two-way four-lane local arterial with on-street parking that provides connections to Houghs Neck and the Southern Artery.

- **Washington Street**, a two-way four- to five-lane local arterial with on-street parking that provides connections to Weymouth and Hingham.
- **Revere Road**, a two-way four- to five-lane local arterial that will become part of the Quincy Concourse linking the Southern Artery with the Burgin Parkway.

These corridors provide direct access to major off-street parking facilities such as the MBTA Quincy Center garage, the Stop & Shop garage, and the Hancock Lot and to local streets such as Saville Avenue that connects to the President's Place garage or Parkingway Street that connects to the Ross Garage. Observations indicate that capacity on these corridors is limited and will constrain access to new parking facilities.

### 4.3 New Public Facilities

The potential build-out of the downtown will impact the Ross Garage and Hancock Lot. Each of these facilities accommodates significant parking demand that is generated by downtown users. In addition, new development will generate demands that could be accommodated by the public off-street parking facilities.

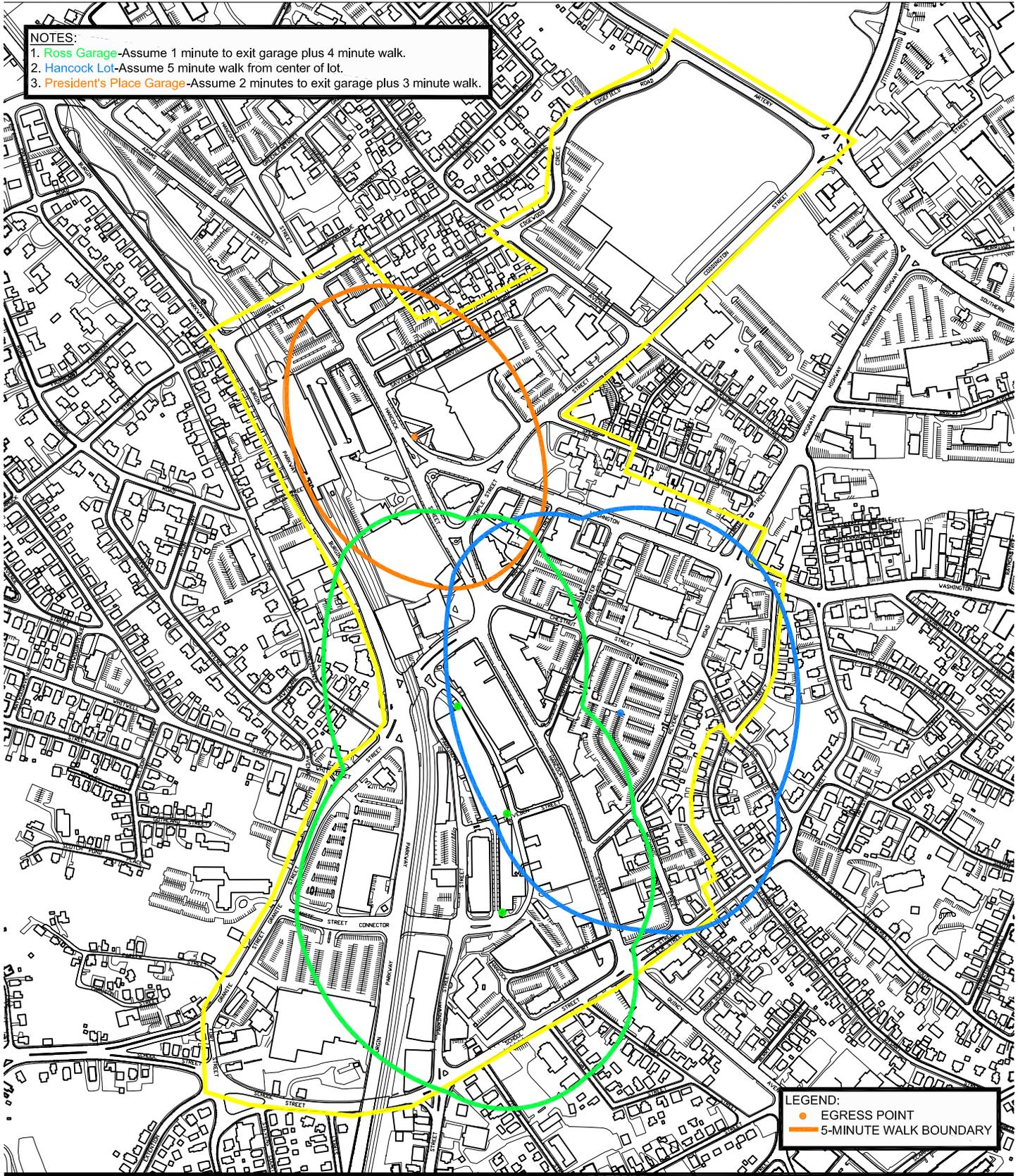
#### 4.3.1 Coverage Areas of Existing Off-Street Public Facilities

Figure 11 illustrates the area of coverage of the three main off-street parking facilities. These areas are defined by a five-minute walk time that was determined by user surveys of the facilities. Eighty-six percent of the President's Place garage respondents, 90 to 100 percent of the Ross Garage respondents, and 70 to 80 percent of respondents from the Hancock Lot walked to destinations within five minutes

In general, the coverage area for President's Place garage does not overlap the other two facilities. However, there is some overlap on Hancock Street between the two City-owned facilities. Table 15 presents the parking supply and demand that exists within these coverage areas.

NOTES:

- 1. **Ross Garage**-Assume 1 minute to exit garage plus 4 minute walk.
- 2. **Hancock Lot**-Assume 5 minute walk from center of lot.
- 3. **President's Place Garage**-Assume 2 minutes to exit garage plus 3 minute walk.



LEGEND:  
 ● EGRESS POINT  
 — 5-MINUTE WALK BOUNDARY



Downtown Quincy Parking Study  
 Quincy, Massachusetts

Coverage Areas of  
 Public Parking Facilities

**Table 15 Parking Accumulation in Coverage Areas for Public Off-street Facilities**

	Supply	Peak Weekday (Daytime) Demand		Friday Night	Saturday Afternoon
		Facility <sup>1</sup>	Study Area <sup>2</sup>		
<b>President's Place Garage</b>					
Off-street Parking Facilities	2,446	1,995	1,947	333	319
On-street Parking Spaces	101	100	90	68	86
<b>Total</b>	<b>2,547</b>	<b>2,095</b>	<b>2,037</b>	<b>401</b>	<b>405</b>
<b>Percent</b>		<b>82%</b>	<b>80%</b>	<b>16%</b>	<b>16%</b>
<b>Ross Garage</b>					
Off-street Parking Facilities	2,861	2,000	1,850	784	834
On-street Parking Spaces	287	291	250	233	265
<b>Total</b>	<b>3,148</b>	<b>2,291</b>	<b>2,100</b>	<b>1,017</b>	<b>1,099</b>
<b>Percent</b>		<b>73%</b>	<b>67%</b>	<b>32%</b>	<b>35%</b>
<b>Hancock Lot</b>					
Off-street Parking Facilities	2,273	1,752	1,614	685	660
On-street Parking Spaces	295	338	298	218	251
<b>Total</b>	<b>2,568</b>	<b>2,090</b>	<b>1,912</b>	<b>903</b>	<b>911</b>
<b>Percent</b>		<b>81%</b>	<b>74%</b>	<b>35%</b>	<b>35%</b>

Note: 1. Peak demand for each individual facility summed for each category.  
2. Peak demand for entire study area, which occurred at approximately 11:00 a.m.

### 4.3.2 Coverage Areas of Existing Off-Street Public Facilities

Two new or modified off-street parking facilities are envisioned as part of the redevelopment of the downtown:

1. A refurbished Ross Garage or a new facility on air rights adjacent to the Ross Garage, which could then be demolished
2. A new parking garage on the Hancock Lot.

The Master Plan includes the demolition of the southern end of the Ross Garage. However, most of the uses that are served by the Ross Garage (e.g., Hancock Street businesses, the RMV, Stop & Shop) will remain and require 720 parking spaces. However, this demand could be 10 to 20 percent lower depending on the future intensity of use at the Stop & Shop building and the location of the RMV, which generates significant short-term parking demand.

The Master Plan includes a complete redevelopment of the Hancock Lot, as well as the demolition of many adjacent structures to create development parcels. The Master Plan also seeks to add parking to the Norfolk Courthouse site that would alleviate demand at the Hancock Lot.

As a result, the existing parking demand could be 25 to 50 percent lower than existing conditions.

Table 16 describes three potential scenarios for the two sites to identify a potential range of parking that will need to be accommodated in the garages. This analysis indicates that it would be beneficial to maintain 1,000 to 1,500 space garage at or near the Ross Garage and 500 to 800 space garage at the Hancock Lot. The high end of the estimate for the Ross Garage is 80 percent larger than the current facility and 40 percent larger than the President’s Place Garage. The lower end of the estimate is comparable in size to the President’s Place Garage and may reflect a more reasonable approach.

**Table 16 Public Parking Supply (Spaces) for Future Ross Garage and Hancock Lot Sites**

Facility	Scenario Description	Range of Parking Supply			Total
		Existing Parking	Future Retail Demand	Future Office Demand	
<b>Ross Garage</b>	Accommodate the following demands:	660	130	740	1,520
	1. All existing demand				
	2. All future retail for 15,000 GSF or less				
	3. 25 percent of office				
	Accommodate the following demands:	660	130	300	1,090
	1. All existing demand				
	2. All future retail for 15,000 GSF or less				
	3. 10 percent of office				
	Accommodate the following demands:	560	130	300	990
1. 85 percent of existing demand					
2. All future retail for 15,000 GSF or less					
3. 10 percent of office					
<b>Hancock Lot</b>	Accommodate the following demands:	375	80	360	815
	1. 75 percent of existing demand				
	2. All future retail for 15,000 GSF or less				
	3. 25 percent of office				
	Accommodate the following demands:	375	80	150	605
	1. 75 percent of existing demand				
	2. All future retail for 15,000 GSF or less				
	3. 10 percent of office				
	Accommodate the following demands:	250	80	150	480
1. 50 percent of existing demand					
2. All future retail for 15,000 GSF or less					
3. 10 percent of office					

### 4.3.3 Accommodation of Hospital Parking Demand

Another consideration is whether these facilities would be used for remote parking by the hospital. Information from hospital representatives indicates that they are seeking to accommodate their demand on their campus. However, it would be possible to accommodate 100 vehicles in the existing Ross Garage if it becomes impractical to meet the demand on the hospital's campus. In the long-term, any additional parking for remote users such as the hospital would have to be added to the estimates identified in Table 16.

### 4.3.4 Design Considerations

The type of facility and user that will be served by the facility will affect design considerations such as the width of stalls and ramps. ULI recommends stall widths of eight to eight and one-half feet. Ramp configurations similar to the Ross Garage and President's Place Garage (i.e., sloping internal ramp with parking) are appropriate for turnover parking. The helix used in the MBTA Quincy Center garage is appropriate for use in commuter facilities that need to move high volumes quickly during peak hours.

Payment systems have evolved in complexity.

- Prepayment systems are used when a flat fee is used for parking. This system is used in the MBTA Quincy Center garage.
- Exit cashiering is a common approach that is currently used in the Ross Garage and the Hancock Lot.
- Precashiering systems are also commonly used. This system lends itself to automation and facilitates credit card payment.

The more sophisticated systems improve revenue control. However, these systems involve additional considerations such as equipment maintenance and system auditing that may require consideration of a third party operator by the City of Quincy. In addition, the design of the facility, particularly the layout of exits and entrances and the lobby area will need to be carefully planned in the design process.

Security is another important issue. In particular, security considerations have been cited as one reason that the Ross Garage is not well used. Access control is an issue at the facility, since there are multiple pedestrian entrances and exits that are uncontrolled by City staff. Other potential security design issues for consideration include:

- Adequate lighting
- Clear sightlines within the facility
- Regular and visible presence by security staff
- Visibility from the street
- Appropriately located elevators and lobby areas that provide good visibility from the street
- Use of close circuit television

The design of the facility will likely include first floor retail as part of Master Plan efforts to enliven streets and sidewalks. This will become an important consideration for the internal ramping system and the location of entrances and exits. Other important design considerations include ventilation, drainage, and signage and the relationship between the entrances and exits to ensure that vehicle queuing does not adversely affect local streets. In addition, the use of “green technologies” has emerged as another design technique that is considered as part of garage construction.

#### **4.3.5 Operational Considerations**

Parking authorities, which are created and approved at the municipal level and by the Massachusetts General Court, have the capability to float bonds to finance capital improvement, own and maintain property, exercise the power of eminent domain, and issue parking tickets for violations. Examples of parking authorities in Massachusetts include the Springfield Parking Authority, which operates 4,660 parking spaces in ten facilities, and the Brockton Parking Authority.

## **5.0 Conclusions and Recommendations**

The analysis indicates that the total parking supply in Downtown Quincy is adequate to serve existing daytime peak parking demands. However, there was a shortage of supply in certain pockets, particularly the area around Quincy College. There is a limited amount of excess parking supply in the areas targeted for future growth with the exception of the retail parking lots in Sub-district SR. There is more than adequate parking supply to support increased activity levels on weekday evenings and on weekends associated with dining and cultural events.

Future economic development in Downtown Quincy is expected include a mix of office, retail and residential uses centered along the proposed Phase II of the Quincy Concourse and the existing Hancock surface parking lot. During the evaluation of the downtown parking supply, it was noted that the existing roadway system providing access to downtown operates at or near capacity during commuter peak hours and will act as a constraint for the amount of new parking that can be accessed during these hours. Within this context, Rizzo Associates/Tetra Tech recommends the following to support the projected future growth patterns.

- Construction of new municipal parking facilities on the Hancock Lot with 500 to 800 public spaces and refurbishment or replacement of the Ross Garage with 1,000 to 1,500 public spaces. Design and operational considerations at these facilities include:
  - Providing new access to the Ross Garage at Cottage Avenue to increase its coverage area and visibility.
  - Constructing a new facility or renovating the Ross Garage to a more secure and safe environment for uses.
  - Providing rate structures for short-term parking that do not increase on-street parking demands and long-term rate structures that meet employee demands, but do not encourage high levels of auto use for commuting.
- Development of development review guideline that would provide a framework to review specific projects as they come on line. Examples of potential guidelines include:
  - Parking ratios of 2.6 spaces per 1000 square feet of floor space for new office development, with 75-90 percent of demand accommodated on site.
  - Parking ratios of 1.0 space per apartment/loft unit and 2.0 spaces per townhouse with all spaces accommodated on site for projects with ten units or more.
  - Parking ratios of 2.0 spaces per 1000 square feet of floor space for new office retail development with all spaces accommodated on site for projects exceeding 15,000 square feet.
- Encouraging mixed-use development to allow for shared parking and encourage shared parking in privately owned and managed facilities.

The redeployment of transit resources in combination with increased residential development in the downtown, which will make walking a

convenient option for people choosing to live and work in Downtown Quincy, provides the best opportunity to reduce parking demand and non-auto mode share for office trips. The use of TDM programs will support the non-auto use through promotions and incentives that encourage people to walk, bike, carpool or take transit.

Auto sharing is another useful technique that has grown in popularity. Subscription services like ZipCar allow their members to rent vehicles on a short-term basis. The vehicles are parked in designated on-street and off-street locations. This makes transit commuting easier for employees by providing a cost-effective option to access a vehicle on demand for short midday trips. It also allows provides an access option for residents that reduce their auto ownership needs.

Implementation of the above recommendations is part of continuous process of redevelopment in the downtown area. DIF funds could be used to initiate the process of constructing new parking facilities and making renovations to existing City-owned parking structures.