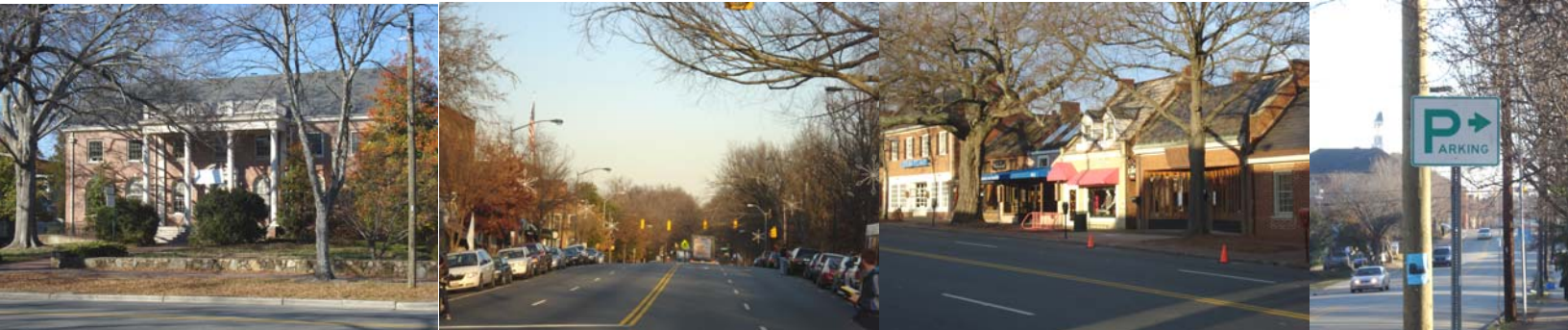# Town of Chapel Hill
North Carolina

Parking Study

Final Report

December, 2008

Rich and Associates, Inc.
Parking Consultants - Planners

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SECTION 1 PARKING STUDY OVERVIEW

1.1 Background

This parking study, prepared for the Town of Chapel Hill, serves to examine the Downtown's existing parking system from both a qualitative and quantitative standpoint. The Chapel Hill Downtown Partnership contracted Rich and Associates to prepare a parking study which would inventory and review the existing parking and make recommendations regarding issues such as the development of potential future parking, operations, management, and enforcement.

1.2 Scope of Services

Phase One of developing the Downtown Parking Study is a process of quantifying and qualifying the parking needs in the study to determine the parking demand for the study area. This was done through field work, utilization studies, surveys and a series of public and stakeholder meetings. The flow chart below details the process.

Phase One
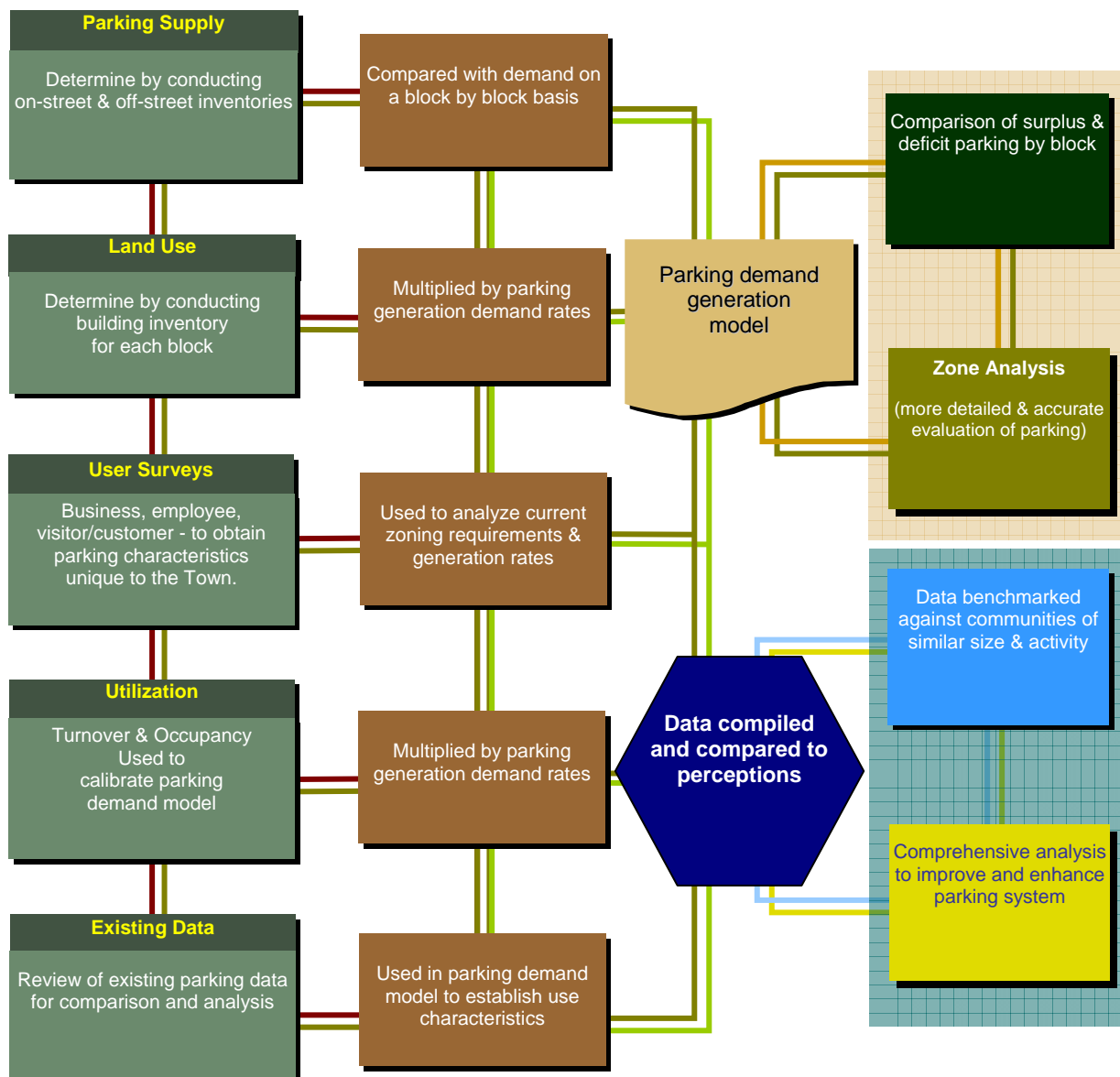
Phase Two of the Downtown Parking Study involves reviewing the current parking system, the existing facilities, parking policy, parking signage and wayfinding, and enforcement. Rich and Associates then developed recommendations for short and long term parking improvements that combine the parking system and management improvements, with capital improvements as needed. The flow chart below details the process.

Phase Two

Preliminary Program

Consensus of user requirements, amenities, level of service, traffic, structured vs surface

Site Analysis

Proximity to generators ped/veh traffic flow, limitations, efficiency, revenue maximization, mixed-use, etc.

Interactive Planning Sessions in Chapel Hill

Walk the downtown
Observe potential sites
Discuss needs & wants
Discuss concerns
Review options

Design Analysis

Determine design efficiency, traffic flow, dimensions, scale & massing

Results

System Recommendations
(*Policies, Technology, Pricing, Allocation*)

Site Selection New Parking
(*Surface or Structured, Cost, Feasibility, Timing*)

Consensus on Solutions

System Analysis

Review policies, procedures, enforcement, marketing, maintenance, technology, space allocation

1.3 Study Area

The study area, as determined by the Town of Chapel Hill, is illustrated in **Map #1**, **"Town of Chapel Hill – Study Area Map"** located on page 4.   Rich and Associates evaluated the parking conditions, supply and activity of the 25 block study area.   Rich and Associates focused on the downtown core area basically two blocks north along Franklin Street and one block south of Franklin Street from Raleigh Street to Merritt Mill Road.

Chapel Hill consists of a mix of land uses including residential, retail, restaurants, offices, as well as University of North Carolina Chapel Hill.   Within the study area, the parking supply consists of a mix of on-street and off-street parking. The on-street spaces are a combination of metered two hour spaces, four hour free spaces, and loading zones. There are several handicapped stalls interspersed throughout the downtown on-street.

The off-street parking supply consists of public and private surface lots and parking structures. The majority of the parking supply within this area is privately owned and controlled by individual businesses or property owners. The Town is in control of only 25 percent of the off and on-street parking in the downtown.

Map 1

PARKING STUDY
FOR THE TOWN OF
CHAPEL HILL

CHAPEL HILL , NORTH CAROLINA

Parking Consultants
Architects · Engineers
Planners

RICH
& ASSOCIATES
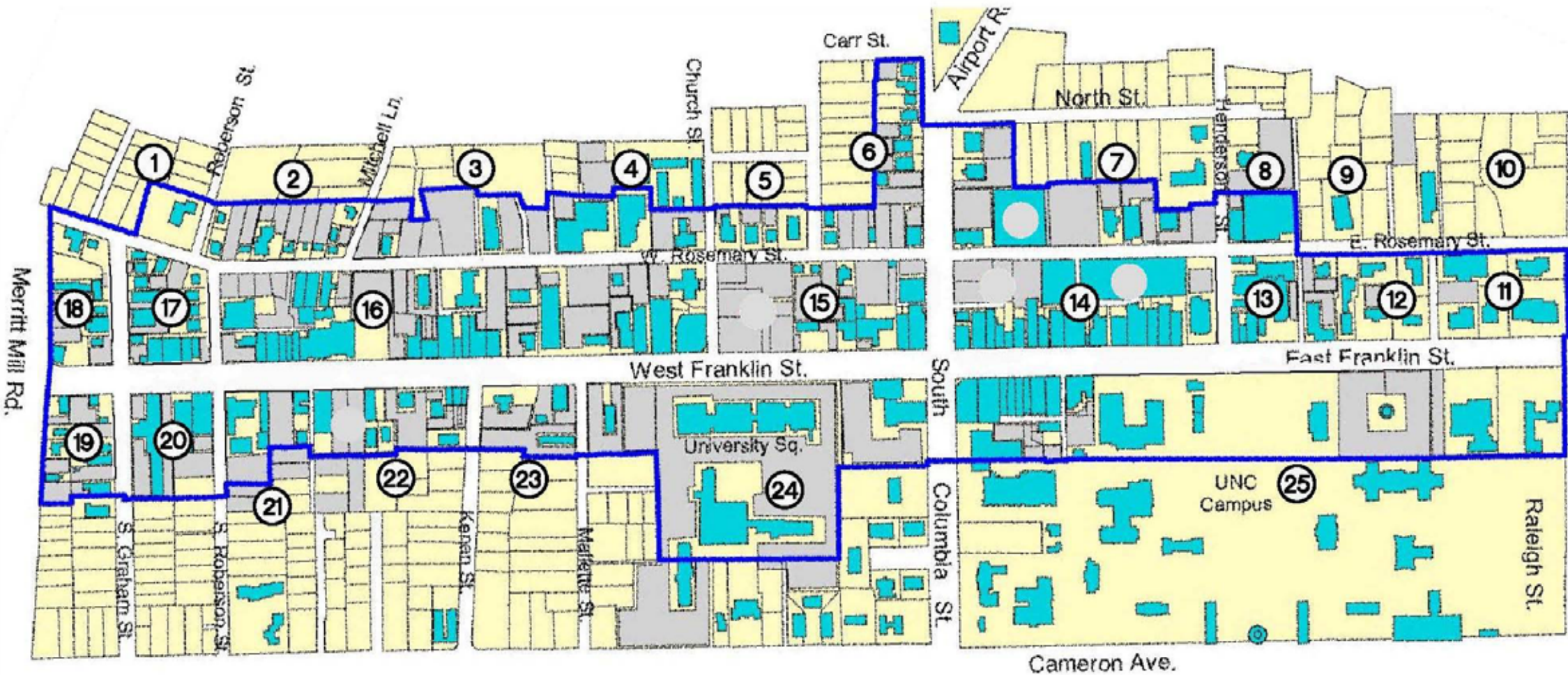
DWG. TITLE:

STUDY AREA

LEGEND

BLOCK #

DATE: 12-20-07
DRAWN BY: GHC

SCALE: N.T.S

Definitions

The following are definitions used for the analysis:

- *Turnover* - Turnover is the number of vehicles that occupied a parking space in a particular period. For example, if a parking lot has 100 spaces and during the course of the day, 250 different vehicles occupied the lot, then the turnover is two and a half times (2.5).

- *Occupancy* - the length of time a parking space is occupied by a vehicle.

- *Circuit* - A circuit refers to the two-hour period between observances of any one particular parking space. For the turnover and occupancy study, a defined route was developed for each survey vehicle. One circuit of the route took approximately two hours to complete and each space was observed once during that circuit.

- *Block Face* - A number was assigned to each block within the study area. Each block is then referenced by its block number and by a letter (A, B, C or D). The letter refers to the cardinal face of the block; with (A) being the north face, (B) the east face, (C) the south face and (D) the west face. Therefore, a block designated as 1A would refer to the north face of block 1.

- *Modal Split* – Method of transportation (i.e. automobile, mass or public transit, walking, train, etc.).

- *Parking Demand* – The number of parking spaces generated by a single-purpose building, multi-purpose building, group of buildings or outdoor amenity.

- *Parking Need* – Represents the number of parkers who need to be accommodated in a given parking facility after the use of alternative parking facilities is considered. Use is affected by price, location, accessibility and user restriction.

- *Parking Supply* – The number of parking spaces available for use by a specified group or groups of individuals (i.e. shoppers, employees, etc.).

SECTION 2 ANALYSIS

2.1   Introduction

This section of the report is an assessment of how the existing parking is operating and if and how much new parking may be required based on current and anticipated future developments. For the analysis, Rich and Associates used turnover and occupancy data, parking and building inventories, downtown business owner surveys, previous study work and previous experience with parking to refine and determine the report's analysis.

The process consisted of a two-part analysis. The first part of the analysis included a calculation of parking demand by block, based on a building inventory and parking generation factors per 1,000 square feet of gross floor space. The demand was netted from the available supply and the resulting surplus or deficit determined on a block-by-block basis.

The second part of the analysis involved comparing the parking surplus and deficit patterns to the turnover and occupancy data. This comparison offered a benchmark, by which the surplus and deficit data was calibrated.

2.2   Parking Inventory

Table 1 is an overview of the existing parking supply in the study area. This data was collected by field counts. In cases where parking spaces were not marked, the number of parking spaces was estimated.

There are a total of 3,362 parking spaces in the study area. Of theses 161 (almost 5 percent) are on-street spaces and 3,201 (95 percent) are off-street spaces. Of all of the on and off-street spaces, 840 are publicly owned or controlled spaces (25 percent) and 2,522 are private parking spaces (75 percent).

Table 1
Parking Supply Summary

On-Street Parking Totals	161
Public Off-Street Parking Totals	<u>679</u>
Public Parking Totals	**840**
Private Parking Totals	2,522
Total Parking in Study Area	**3,362**

The Town of Chapel Hill manages and controls only 25 percent of the parking in the downtown. Based on Rich and Associates experience and best practices, we have found that to successfully manage municipal parking it is desirable for the municipality to have control *of at least 50 percent* of the parking supply. This allows the municipality to effectively manage the parking in terms of allocation of parking, enacting policies that will increase the availability of parking, market pricing, and allows the parking to be enforced with greater efficiency. Chapel Hill falls short on this benchmark.

Map 2

2.3   Turnover and Occupancy Study

A turnover and occupancy study was undertaken in the study area over the course of two days from 8:00 A.M. to 2:00A.M.; Thursday November 8th and December 20th, 2007. From 6:00 P.M. until 2:00 A.M. public and private parking areas were counted for an occupancy analysis only. No license plates were recorded since it was difficult to read license plates due to lighting levels.

Two separate days were picked to include a peak weekday with UNC Chapel Hill in session (Thursday November 8th) and one day with UNC Chapel Hill not in session (Thursday December 20th). There were marked differences in the occupancy in the two occupancy counts.

The turnover portion of the analysis, where license plate numbers were recorded, applied to on-street spaces and spaces with time limits of two hours to determine how long specific vehicles were parked in certain spaces, and if parkers were moving their vehicles to different spaces to avoid being cited for overtime parking. In the long term spaces and in private off-street spaces the number of parking spaces occupied was observed during each two-hour circuit. The turnover information also yields an occupancy result for the parking area and therefore for each circuit a composite occupancy can be derived.

Turnover is an indicator of how often a parking stall is being used by different vehicles throughout the course of the day. Turnover is relevant to time periods when time limits on non metered spaces are being enforced and is most important to short-term customer and visitor parking.

Occupancy is an important aspect of parking because it helps us to understand the dynamic of how parking demand fluctuates throughout the day. Likewise, the occupancy can be used to illustrate how parking demand is impacted by events in the downtown area. Overall, the occupancy data is used by Rich and Associates to calibrate the parking demand model.

2.3.1 Results of Counts

<u>Thursday November 8th, 2007</u>

Table 2 and Figure 1 on page 11 shows a summary of the counts completed. Overall for all on-street and public and private and off-street spaces, there were two peaks; noon to 2:00 P.M. with 73 percent occupancy and 4:00 P.M. to 6:00 P.M. with 48 percent occupancy. The occupancy for the remainder of the evening went down, though the on-street occupancy actually went up substantially from the daytime. Figure 1 shows a summary for the different parking types and their daytime and nighttime peak times.

Table 2

TOWN OF CHAPEL HILL
Turnover / Occupancy

Date: Thursday, November 8, 2007

Description	# of spaces	8:00am to 10:00am	Occ.	10:00am to 12:00pm	Occ.	12:00pm to 2:00pm	Occ.	2:00pm to 4:00pm	Occ.	4:00pm to 6:00pm	Occ.	6:00pm to 8:00pm	Occ.	8:00pm to 10:00pm	Occ.	10:00pm to 12:00am	Occ.	12:00am to 2:00am	Occ.
On-Street	173	45	26%	76	44%	122	71%	89	51%	85	49%	141	82%	115	66%	112	65%	67	39%
Public Off-street	647	95	15%	415	64%	532	82%	487	75%	327	51%	377	58%	341	53%	255	39%	187	29%
Private Off-street	2454	969	39%	1775	72%	1743	71%	1629	66%	1167	48%	933	38%	785	32%	407	17%	259	11%
Totals	3274	1109	34%	2266	69%	2397	73%	2205	67%	1579	48%	1451	44%	1241	38%	774	24%	513	16%

Figure 1

Parking Type Comparison (Thursday, November 8, 2007)
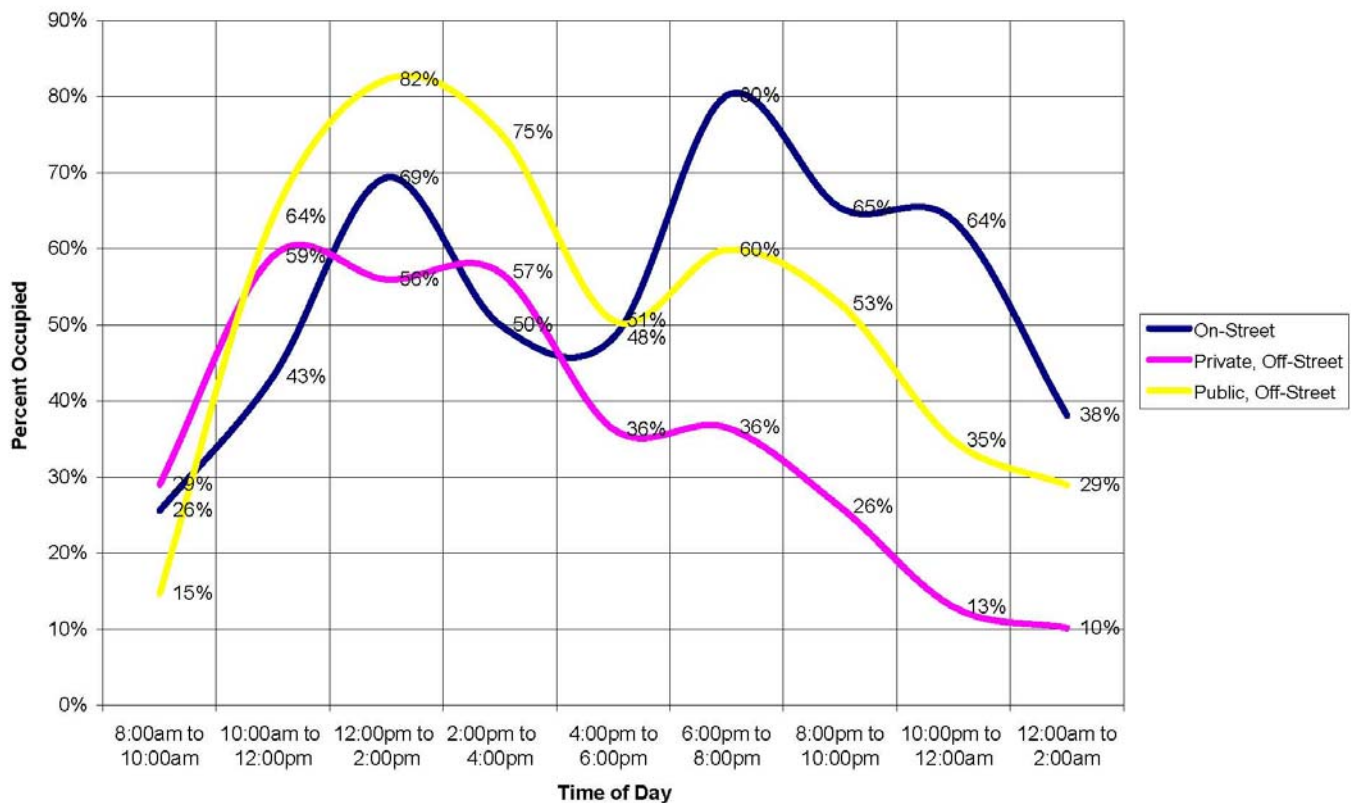
Maps 3 and 4 show graphically the overall daytime (noon to 2:00 P.M.) and nighttime (4:00 to 6:00 P.M.) peak occupancy for the on and off-street parking. The on and off-street parking that are colored red represent parking that is at or above 85 percent occupancy. On the east end of Franklin, the Town's parking lot and parking structure were at 95 percent occupancy and the on-street in the area also exceeded 85 percent occupancy.

This is an important point to consider regarding the parking supply and demand. Motorists, in general, perceive on-street and off-street spaces with occupancies greater than 85 percent to be at capacity, depending on the overall capacity of the parking area. The greater the capacity of the parking area, the greater the occupancy can be before it is perceived as being full. For smaller parking areas the parking is perceived as being full when the 85 percent occupancy is reached. When the perception of full occupancy occurs, motorists will begin to re-circulate to seek more parking, adding to downtown traffic congestion and the parkers' perception that there is no parking available in the downtown.

Map 4 shows that in the evening, the on-street is the first choice for parking as the occupancy of the off-street parking falls steadily during the early evening. It was interesting to note that both on and off-street parking and pedestrian activity was high even at midnight.

Finally, **Figure 1** shows graphically the results for the different parking types and their occupancy during the survey day. In summary this shows that the public off-street peaks in the early afternoon while the on-street peaks later in the early evening. The private off-street peaks in mid morning and the occupancy then decreases steadily throughout the rest of the day.

Map 3

Map 4

Thursday December 20ᵗʰ, 2008

Table 3 below and **Figure 2** on the following page shows a summary of the counts completed. Overall for all on and off-street spaces, there were two peaks; 1:00 P.M. to 3:00 P.M. with 54 percent occupancy and 5:00 P.M. to 7:00 P.M. with 36 percent occupancy. The overall occupancy for the remainder of the evening went down, though the on-street occupancy actually went up from the daytime occupancy similar to the November 8ᵗʰ survey. Figure 2 shows the summary for the different parking types and their daytime and nighttime peak times.

Maps 5 and 6 show graphically the overall daytime (1:00 P.M. to 3:00 P.M.) and nighttime (5:00 to 7:00 P.M.) peak occupancy for the on and off-street parking. Overall, the on and off-street occupancies were lower during the daytime and nighttime when UNC Chapel Hill was out for the holiday break. However, there were exceptions. The on-street parking had higher occupancy in the December 20ᵗʰ counts in both the daytime and nighttime than the November 8ᵗʰ counts. The public off-street were lower in the daytime and nighttime when the December 20ᵗʰ counts were completed than with the November 8ᵗʰ counts, though the private off-street had the opposite results; higher in both the daytime and nighttime in the December 20ᵗʰ counts.
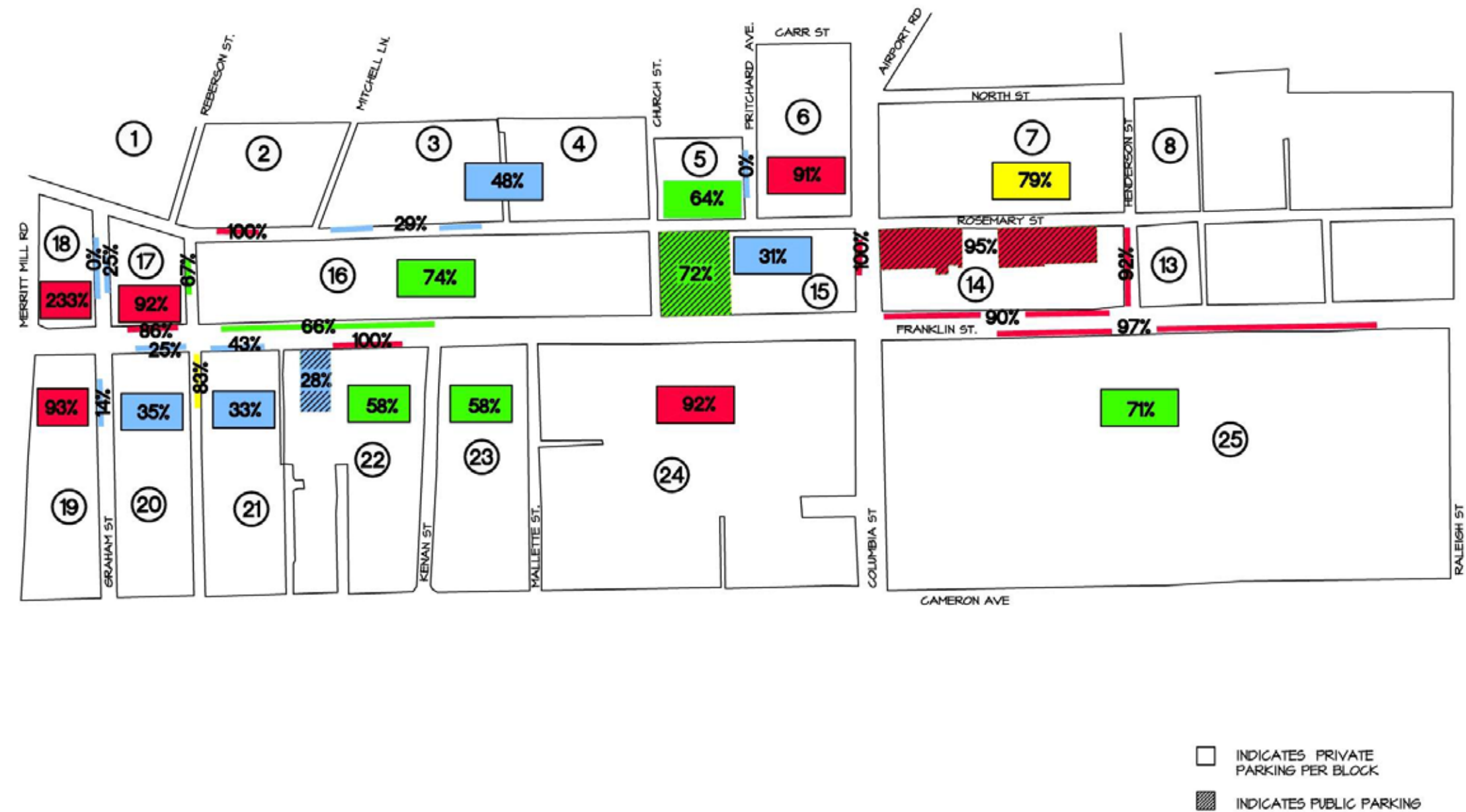
Table 3

TOWN OF CHAPEL HILL
Turnover / Occupancy

Date: Thursday, December 20, 2007

Description	# of spaces	8:00am to 10:00am	Occ.	10:00am to 12:00pm	Occ.	1:00pm to 3:00pm	Occ.	3:00pm to 5:00pm	Occ.	5:00pm to 7:00pm	Occ.	8:00pm to 10:00pm	Occ.	10:00pm to 12:00pm	Occ.	12:00am to 2:00am	Occ.
On-Street	161	22	14%	62	39%	129	80%	77	48%	80	50%	126	78%	138	86%	102	63%
Public Off-street	647	362	56%	348	54%	388	60%	434	67%	396	61%	439	68%	407	63%	112	17%
Private Off-street	2522	940	37%	1223	48%	1266	50%	1130	45%	732	29%	485	19%	422	17%	267	11%
Totals	3330	1324	40%	1633	49%	1783	54%	1641	49%	1208	36%	1050	32%	967	29%	481	14%

Figure 2

Parking Type Comparison (Thursday, December 20, 2007)
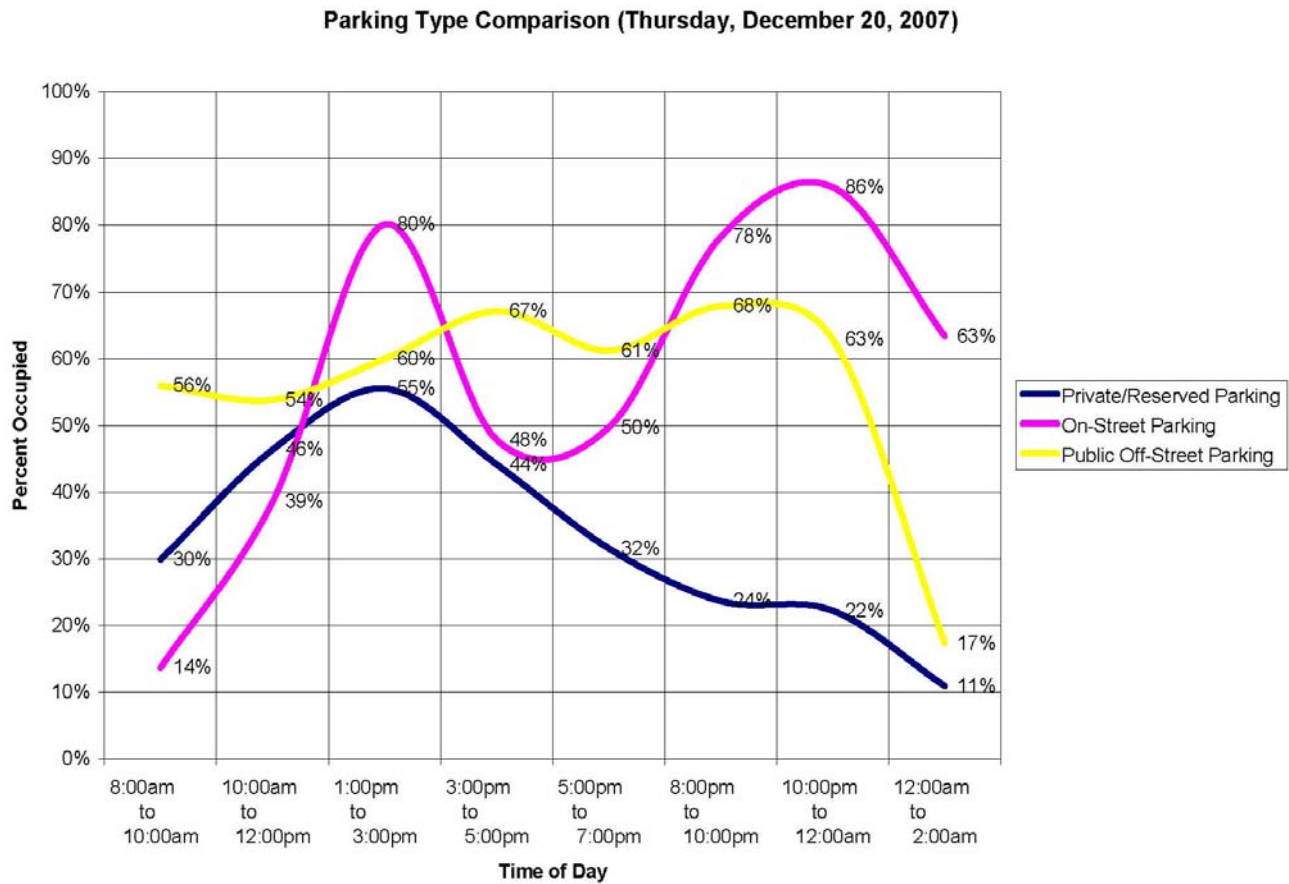
Figure 2 shows the graphic occupancies throughout the day for each parking type. For the off-street there was a similar result to the November 8th counts, while the off-street public occupancy was different and remain stable throughout the day and evening at around 67 percent occupancy until a large drop at midnight. Private off-street spaces had a similar pattern of occupancy as the November 8th counts.

A summary of the occupancies for the on-street, public off-street and private off-street is;

Occupancies (November 8, 2007)

A. On-Street

    Daytime (12:00PM -2:00PM)   71% occupancy
    Nighttime (6:00PM-8:00PM)   82% occupancy

B. Public Off-Street

    Daytime (12:00PM -2:00PM)   82% occupancy
    Nighttime (6:00PM-8:00PM)   58% occupancy

C. Private Off-Street

    Daytime (12:00PM -2:00PM)   72% occupancy
    Nighttime (6:00PM-8:00PM)   38% occupancy

Occupancies (December 20, 2007)

A. On-Street

    Daytime (1:00 -3:00PM)   80% occupancy
    Nighttime (10:00-12:00AM)   86% occupancy

B. Public Off-Street

    Daytime (1:00 -3:00PM)   60% occupancy
    Nighttime (8:00-10:00PM)   68% occupancy

C. Private Off-Street

    Daytime (1:00 -3:00PM)   50% occupancy
    Nighttime (8:00-10:00PM)   29% occupancy

Map 5
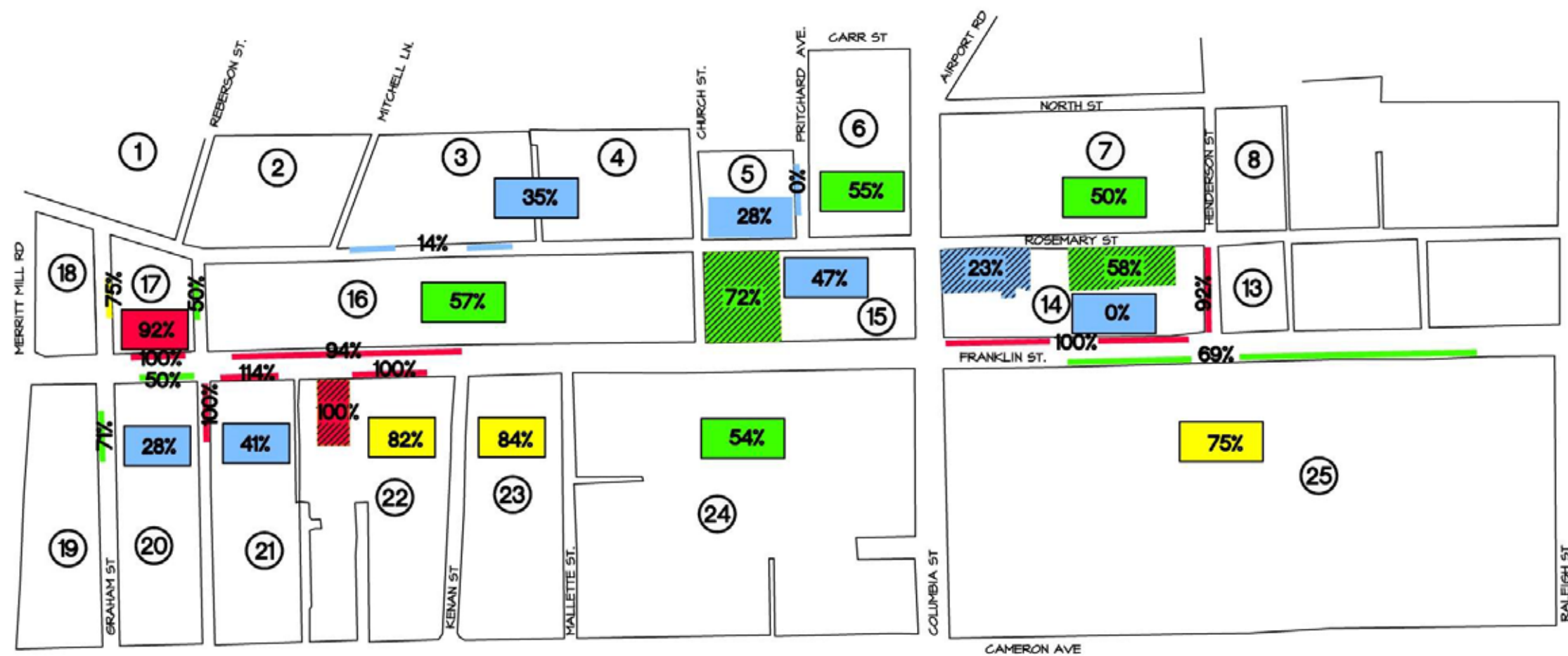
PARKING STUDY
FOR THE TOWN OF
CHAPEL HILL

CHAPEL HILL , NORTH CAROLINA

Parking Consultants
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Planners

RICH
& ASSOCIATES   www.richassoc.com

DWG. TITLE:

PEAK OBSERVED
TURNOVER AND OCCUPANCY

THURSDAY DECEMBER 20, 2007
FROM 1:00 P.M. TO 3:00 P.M.

LEGEND

⊕   BLOCK #

█ 85% – 100%
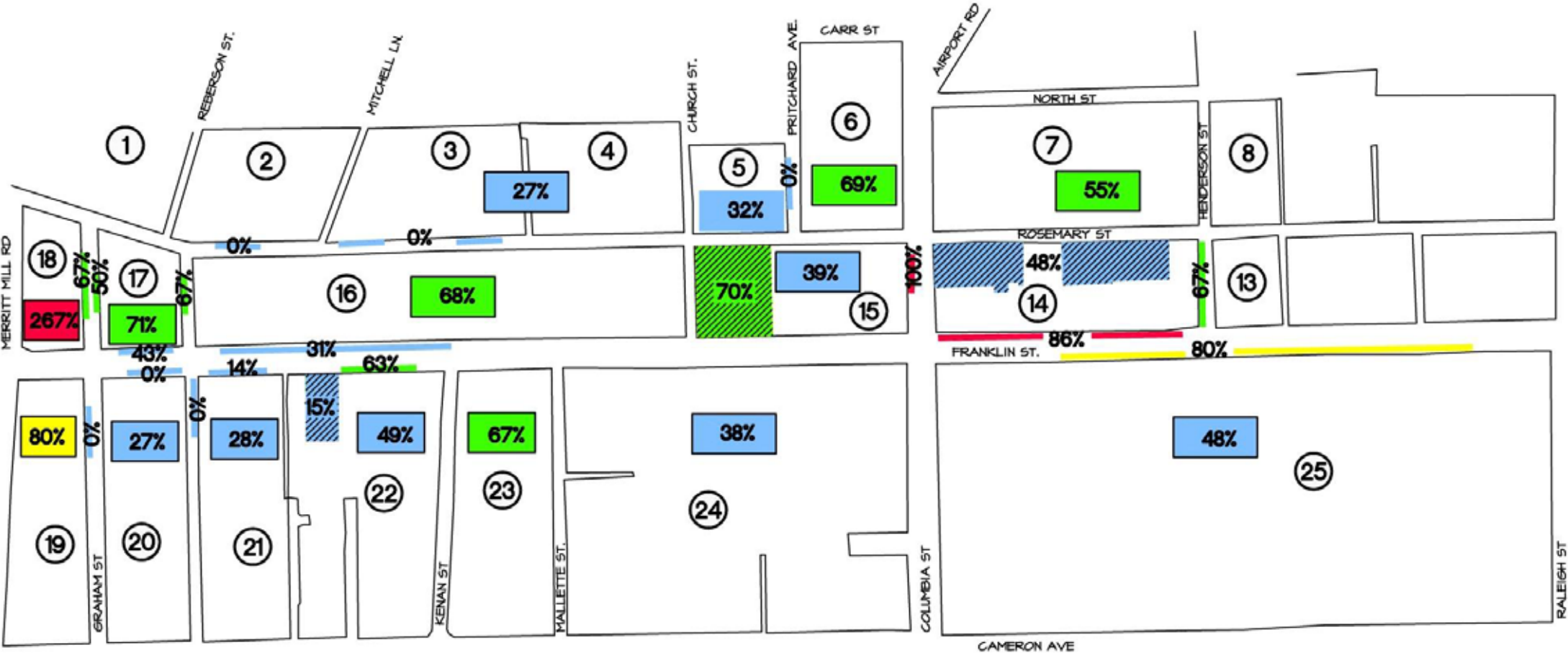█ 75% – 84%
█ 50% – 74%
█ 0 – 49%

DATE: 05-02-08
DRAWN BY: GHC
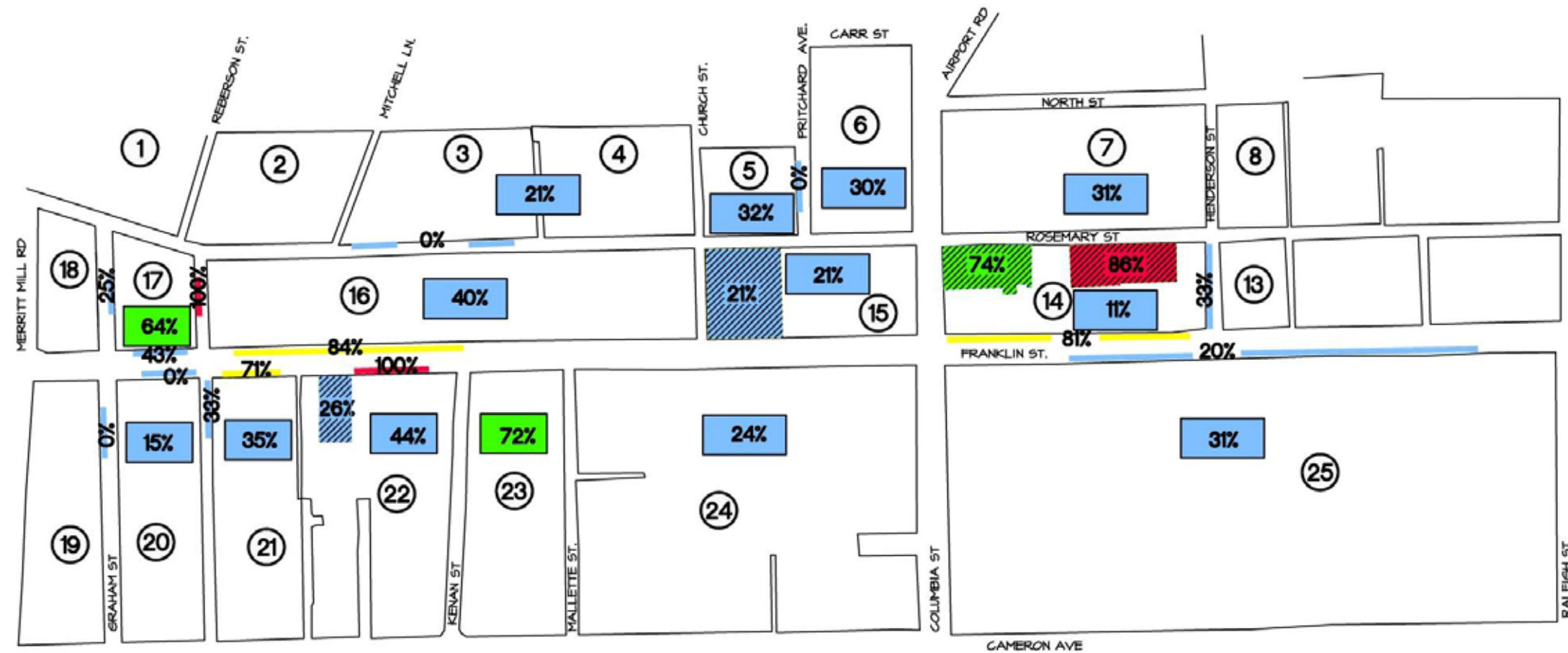
SCALE: N.T.S

☐ INDICATES PRIVATE
     PARKING PER BLOCK

▨ INDICATES PUBLIC PARKING

Map 6

PARKING STUDY
FOR THE TOWN OF
CHAPEL HILL

CHAPEL HILL , NORTH CAROLINA

Parking Consultants
Architects · Engineers
Planners

RICH
& ASSOCIATES

DWG. TITLE:

PEAK OBSERVED
TURNOVER AND OCCUPANCY

THURSDAY DECEMBER 20, 2007
FROM 5:00 PM. TO 7:00 PM

LEGEND

BLOCK #

85% - 100%
75% - 84%
50% - 74%
0 - 49%

DATE: 05-07-08
DRAWN BY: GHC

SCALE: N.T.S

INDICATES PRIVATE
PARKING PER BLOCK

INDICATES PUBLIC PARKING

2.3.2 Turnover Results

Table 4 demonstrates the summary results of the turnover findings. Most of the on-street spaces observed were signed two hour. With circuits lasting approximately two hours, presumably, a vehicle could be observed twice in these spaces and not be in violation. For the November 8th survey there were 390 vehicles observed parking in two-hour on-street spaces and on the December 20th survey 360 vehicles. The break down of vehicles that remained in a stall beyond the posted time is located in Table 4 below.

Table 4 Turnover Summary			
Parking Turnover Summary (by type)	Two Hour On-Street November 8, 2007	Two Hour On-Street December 20, 2007	Tickets Noted
Vehicles that remained less than 2 hours	361(92.8%)	342(95.0%)	1
Vehicles that remained between 2 and 4 hours	25(6.8%)	15(4.2%)	0
Vehicles that remained between 4 and 6 hours	3(0.4%)	2(0.6%)	0
Vehicles that remained between 6 and 8 hours	0	0	0
Vehicles that remained between 8 and 10 hours	0	1(0.2%)	0
Total number of vehicles observed (9:00 A.M. - 5:00 P.M.) in 2 hour stalls	389	360	-
Total number of 2 hour stalls analyzed	202	202	-

Source: Rich and Associates Field Observations, November 8, 2007 and December 20, 2007

The first observation is that the number of vehicles parking beyond the two hour time limit was less than seven percent of all vehicles identified parking in two hour stalls. Based upon best practice we normally see between six and eight percent so the results of the analysis are within the range. We did identify one vehicle that moved from one two hour space to another on the same block face. Additionally we documented about five percent of the vehicles that had expired meters when we did our circuit, but we only saw one ticketed vehicle. This does not mean that more tickets were not given out. The survey is limited by the fact that we cover each

space every two hours, so there are many cases where after we record the vehicles plate that the vehicle either left or may have received a ticket.

Turnover is the next measurement form the analysis. Turnover is an indicator of how often a parking stall is being used by different vehicles throughout the course of the day. Turnover is relevant to time periods when parking is being enforced and is most important to short-term parking.

On-street turnover is particularly important to the customers and visitors to the Town. Higher turnover yields a greater effective supply of parking from the same number of parking stalls. Specifically, higher turnover indicates that vehicles are coming and going more often allowing a greater number of vehicles to utilize the same number of parking stalls than in an area with lower turnover. This is why one of the best policies for a community is to endeavor to keep on-street parking short-term for customers and visitors and to direct long-term parking activity to off-street lots and structures.

The average turnover rate for the two hour on-street parking was 1.93 times per day on November 8th and 1.29 times per day on December 20th. This indicates that on average 1.93 vehicles parked in one parking stall over the course of a ten hour period. This turnover rate is low but is consistent with the finding except for the on-street spaces on Franklin, most of the other two hour spaces were not occupied much during the daytime. It would have been interesting to see what the turnover would have been with nighttime parking. Based on the enforcement hours however, we would assume that the turnover that the low due to the longer survey day.

2.4   Parking Demand Calculation

Analyses were performed to determine the current and future parking demands and needs for the study area. The following data collected and compiled by Rich and Associates to calculate the parking demand included:

- An inventory of the on and off-street parking supply in the study area.

- Turnover and occupancy studies for public and private on and off-street parking areas.

- Block-by-block analysis of the square footage and use of every building in the study area. The Town of Chapel Hill provided Rich and Associates with the Square Footage of each building within the downtown.

The Parking Demand Analysis section of the report contains two levels of parking analyses to determine the number of parking spaces needed. First is a mathematical or hypothetical model of parking demand based on the building gross floor area. The mathematical model multiplies a parking demand generation ratio by the area of specific land uses to derive the number of spaces needed. The second is a method of using field observations to calibrate the mathematical model and is used to establish the number of projected parking spaces needed.

Rich and Associates reviewed proposed and potential developments with Town Staff and the Partnership. There were no immediate developments that were discussed that would potentially impact future parking demand. An assessment of potential development was limited to

redevelopment and re-occupancy of existing buildings. Future parking demand was in part accounted for by the assumption of vacant space re-occupancy at a rate of 40 percent in five years and 80 percent in ten years.

A point to consider regarding the parking supply and demand is that motorists in general perceive off-street spaces with occupancies greater than 85 percent to be at capacity, depending on the overall capacity of the parking area. The greater the capacity, the less this perception is valid. When this occurs, motorists will begin to re-circulate to seek parking, adding to downtown traffic congestion and the driver's perception that there is no parking available in the downtown.

On-street parking is generally considered full when 85 percent of the spaces are occupied.

Table 5 identifies the specific parking demand generation ratios used to calculate parking demand for each block in the study area. These ratios are assigned according to the type of use present in the buildings. The parking generation ratios were established from surveys distributed to managers, business owners and employees throughout the downtown area. The surveys helped establish how many people were in a given business at various times of the day, how they arrived and how much parking was necessary to support each business type.

The demand factors for each land use type include an estimate for employees and patrons to that particular land use. The overall effect is that each type of downtown visitor, whether an employee, business owner or resident is accounted for in the demand model for Chapel Hill. Once parking demand has been calculated for both current and future conditions, a comparison with the existing supply of parking is made. The resulting figures are parking surplus or deficit figures for each block.

The survey method of establishing parking generation ratios customizes the parking generation model specifically to the study area. The ratios are used in conjunction with information from the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI). These two sources are the generally accepted standards for parking generation. Rich and Associates uses experience and the Chapel Hill survey results to modify or customize the parking generation ratios specifically to the study area. **Column 1** on **Table 5 represents** the parking generation factors used for this analysis.

Once a parking generation model is developed that illustrates the surpluses and deficits of parking numerically and graphically, we then compare the model with actual field observations, specifically the turnover and occupancy counts. The comparison serves as a test of the demand model and allows Rich and Associates staff to make further revisions or adjustments where necessary to ensure accuracy, as well as to fully understand the overall parking dynamic in the downtown area.

The assumptions used for the parking demand calculations are:

Assumption 1:   It was assumed that parking demand per block was dependent on the gross floor area contained in the block. Parking demand computed for one block was not affected by the amount of gross floor area available on surrounding blocks. Therefore, a block with surplus parking supply is not used to offset shortfalls on adjacent blocks.

Assumption 2: The parking demand calculations were derived under the assumption that currently occupied properties would remain occupied at existing, or higher than existing levels, into the future.

Assumption 3: Parking demand is not affected by parking availability, use, location and price.

Table 5
Parking Generation Factor Comparison

	1	2
Land Use	Rich & Associates Chapel Hill Model (stalls per 1,000 GSF of gross floor area)	ITE (stalls per 1,000 GFS)
Office	2.65	2.79
Retail	2.38	3.97
Mixed Use	2.50	3.25
Service	2.43	n/a
Medical Office	5.25	3.9
Restaurant	6.00	12.49
Restaurant/Bar	6.00	N/A
Bar	2.00	N/A
Residential	1.50	1.50 (per unit)
Government	3.90	4.15
Community & Civic Org.	0..3	3
Church	0.67	7.81 (Sundays)

(1) Source: Rich and Associates Fieldwork & Surveys,

(2) Source: Institute of Transportation Engineers Parking Generation Manual, 2005

2.4.1 Parking Demand

The following are issues that are considered when developing the number of parking spaces needed:

- Building size, purpose and special use conditions,
- Socioeconomic characteristics of the downtown populations and visitors of the downtown.
- Alternative modes of transportation, which includes availability, use, attractiveness and policy impacts.
- Proportion of the downtown trips that are multiple-use or linked.
- Vehicle traffic.
- Cost of parking.

The demand factors developed for each land use reflect the peak daytime conditions. This correlates with the observed needs within the downtown.

The gross square footage of individual buildings was collected and then sorted by land use categories. This is shown on **Table 6**. The different land uses for each block are in general multiplied by a parking generation factor of parking spaces required per 1,000 square feet. The resulting number of parking spaces demanded is deducted from the available parking supply on each block and a surplus or deficit for each block is then calculated. A summary of the parking demand is located in **Table 7** and graphically on **Map 7**.

The results of the analysis show a current overall surplus of approximately 368 parking spaces within the study area. There are however pocket areas within the study area that have large shortfalls. These areas do have parking available on an adjacent block or within two blocks of the areas with shortages. Due to the linear nature of the downtown this is not feasible though.

The area of concern is centered around blocks 5,6,7,8,13,14,15,16,23,24,and 25. This represents the core of the study area. There is currently only a 59 space surplus and this includes the supply from Lot 5 of 169 spaces. With these lost to the new development there will be a deficit in the area. This is further compounded by the fact that there are very few public available spaces for customer/visitor parking.

The five year future scenario assumes a re-occupancy of vacant space at a rate of 40 percent and the ten-year assumes and re-occupancy rate of 80 percent. The five and ten year scenarios still generate parking surpluses, with the five year at approximately 291 spaces and the ten year at approximately 213spaces. Because these scenarios only include re-occupancy of vacant space any new developments that occur within the study area may greatly increase the parking demand, especially if any of the development occurs on a surface parking lot.

Although at the present time the analysis indicates that there is a surplus of parking in the downtown, it is important to begin to plan for the future. Rich and Associates has identified potential parking structure sites in the study area in the recommendation section. Based on the analysis we recommend that the Town potentially plan for a parking structure in the near future of 300 net added spaces. Because each of the sites are currently parking lots, the capacity lost to the footprint of the parking structure would need to be added back to the capacity. For example if a site contains 100 spaces, then the structure will have to be built for 400 spaces to net out 300 new spaces.

Table 6

Land Use Basis

Retail	125,562 sf	12%
Office	180,949 sf	17%
Service	128,832 sf	12%
Resident	78,303 sf	7%
Restaurant	193,199 sf	19%
Church	121,270 sf	11%
Hotel	75,915 sf	7%
Bars	55,155 sf	5%
Rest/Bar	9,725 sf	less than 1%
Government	9,890 sf	less than 1%
Misc	48,397 sf	5%
Vacant	47,561 sf	5%

Table 7
Surplus/Deficit Analysis

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Block	Retail	Restaurant (1)	Office	Service	Residential	Church	Hotel	Bar	Rest/Bar	FTB	Warehouse	Gov.	Vacant	Museum	Future Demand	Demand (current) *	5 yr. Peak Demand	10 yr. Peak Demand	Parking Supply (approx.)	Change In Parking Supply	Surplus/ Deficit (current)	Surplus/ Deficit (5 years)	Surplus/ Deficit (10 years)
Daytime	2.38	6.87	2.65	2.43	0.68	0.67	0.85	2.00	6.00	0.30	0.75	3.90	3.25	0.30									
1	0	0	2,256	0	2,224	5,458	0	0	0	0	0	0	0	0	0	11	11	11	0	0	-11	-11	-11
2	1,229	4,226	1,229	2,878	0	0	0	0	0	0	0	0	4,916	0	16	42	50	58	54	0	12	4	-4
3	0	6,307	0	1,556	35,588	0	0	0	0	0	0	0	0	0	0	71	71	71	265	0	194	194	194
4	0	3,313	10,982	1,116	0	0	0	0	0	0	0	0	0	0	0	55	55	55	112	0	57	57	57
5	0	8,047	682	3,242	2,228	0	0	0	0	0	0	0	0	0	0	66	66	66	25	0	-41	-41	-41
6	0	0	0	2,939	2,721	0	0	0	0	0	0	0	0	0	0	9	9	9	88	0	79	79	79
7	0	0	21,757	6,590	0	0	0	10,119	0	0	0	2,540	0	0	0	104	104	104	513	0	409	409	409
8	0	0	1,500	0	0	0	0	0	0	0	0	0	500	0	2	4	5	6	0	0	-4	-5	-6
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	14,907	1,817	0	0	64,241	0	10,546	0	0	0	0	0	0	0	171	171	171	18	0	-153	-153	-153
14	26,457	43,761	38,570	2,358	0	0	0	14,542	0	0	3,000	7,350	8,634	2,584	28	532	546	560	456	0	-76	-90	-104
15	3,895	15,589	21,688	7,187	1,171	0	0	3,632	0	0	0	0	2,350	0	8	199	203	207	287	-169	-81	-85	-89
16	44,770	48,531	16,228	31,861	9,697	0	0	10,280	0	0	0	0	3,165	0	10	588	593	598	438	0	-150	-155	-160
17	8,960	4,492	0	9,977	4,814	0	0	1,400	0	0	0	0	3,348	0	11	83	88	93	38	0	-45	-50	-55
18	2,628	2,079	975	5,599	0	0	0	0	0	0	0	0	0	0	0	37	37	37	20	0	-17	-17	-17
19	0	2,612	0	12,220	948	0	0	0	0	1,122	0	0	0	0	0	49	49	49	15	0	-34	-34	-34
20	0	0	0	17,633	0	0	0	0	0	0	0	0	0	0	0	43	43	43	134	0	91	91	91
21	1,100	3,527	0	8,664	0	0	0	0	0	0	0	0	0	0	0	48	48	48	79	0	31	31	31
22	6,516	9,522	0	1,190	18,912	0	0	0	0	0	0	0	2,450	0	8	97	101	105	126	0	29	25	21
23	0	3,320	2,994	0	0	0	75,915	1,600	0	0	0	0	0	0	0	98	98	98	43	0	-55	-55	-55
24	20,561	12,431	43,223	11,522	0	26,571	0	0	0	0	476	0	0	0	0	295	295	295	581	0	286	286	286
25	9,446	10,535	17,048	2,300	0	25,000	0	3,036	9,725	0	0	0	22,198	41,195	72	239	275	311	86	0	-153	-189	-225
Sum	125,562	193,199	180,949	128,832	78,303	121,270	75,915	55,155	9,725	1,122	3,476	9,890	47,561	43,779	155	2,841	2,918	2,996	3,378	-169	368	291	213
															(stalls)	(stalls)	(stalls)	(stalls)	(stalls)		(stalls)	(stalls)	(stalls)

Notes:
FTB -Fraternal and other banquet facilities.

Map 7

PARKING STUDY
FOR THE TOWN OF
CHAPEL HILL

CHAPEL HILL , NORTH CAROLINA

Parking Consultants
Architects · Engineers
Planners

RICH
& ASSOCIATES

DWG. TITLE:

SURPLUS - DEFICIT

LEGEND

BLOCK #

-100 +
-99 - -1
0 - 99
+100

DATE: 04-24-08
DRAWN BY: GHC

SCALE: N.T.S

SECTION 3 PUBLIC INPUT

The following section is a summary of the key points from the surveys completed in Chapel Hill. In addition to these surveys Rich and Associates and the Partnership conducted several stakeholder meetings in late 2007 and again in the Fall of 2008, including a presentation to Town Council and a public meeting.

3.1   Business Owner/Manager Survey Results

Business owner and manager surveys were available on line. Data obtained from the owner/manager surveys was one of the factors used in determining short and long-term parking supply and demand.   A total of 47 surveys were completed. Managers were asked the number of full and part-time employees employed at their business, the average number of customers or visitors that come into their business and the percentage of those customers or visitors who are downtown for other purposes (i.e., employed in the downtown).

Owner/Manager Survey Summary

1. **Type of business?**

    a) Retail..33%

    b) Office Professional.......................... 6%

    c) Bar 6%

    d) Public Use/Government................ 4%

    e) Restaurant or Restaurant/Bar.... 33%

    f) Service 10%

    g) Financial...2%

    h) Other..6%

2. **Do you have a policy that encourages employees to reserve the most desirable parking for customers?**

    a) Yes..35%

    b) No.. 65%

3. **Where do your employees park?**

    a) Town lot/structure..........................32%

    b) Privately owned lot...................... 64%

    c) On-street 4%

Owner/Manager Survey Summary (Opinion Questions)

Scale Key: respondents were asked to indicate opinions using a scale of 1 to 5; 1 being strongly-disagree (left side), 3 being neutral (middle) and 5 being strongly-agree (right side). The red dot indicates the average response from the returned surveys.
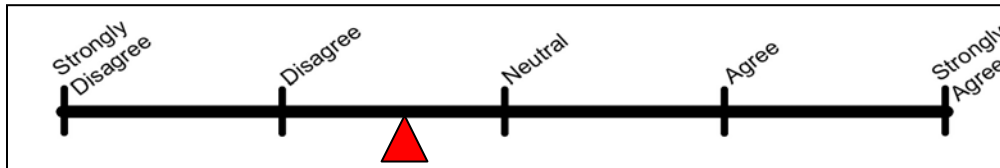
Below is a summary of the opinion questions:

A) There **are an adequate number of parking spaces in the downtown for customers and visitors.**
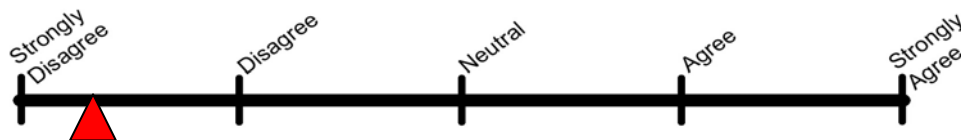
B)   The parking downtown is reasonably close to my destination.
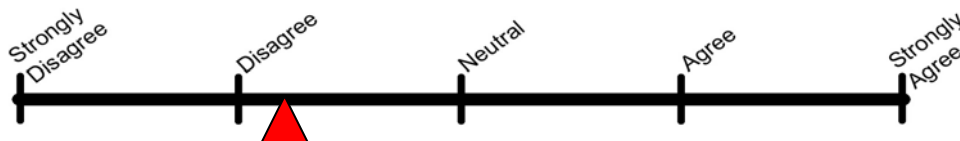
C)   I would pay to park closer to my destination.
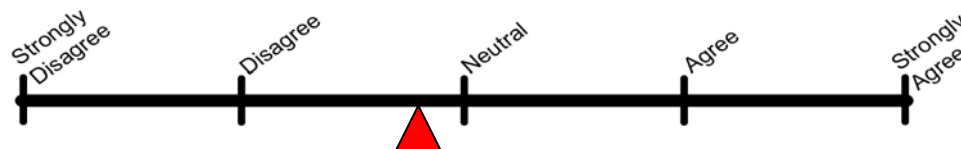
3.2   Employee Survey Results

Along with the manger surveys, employee survey forms were also available online. A total of 139 employee surveys were completed on line. These surveys were used as part of the parking analysis for the Chapel Hill study.

1.   Employment Status

    a) Full time 80%

    b) Part time.. 20%

2.   Employment Classification

    a) Office..27%

    b) Retail Sales... 13%

    c) Service (salon, cleaners, etc.)...............6%

    d) Government 4%

    e) Restaurant/Restaurant/Bar...................5%

    f) UNC 42%

    g) Other 3%

3.   How do you generally come to work downtown?

    a) Drive and park 71%

    b) Dropped off 2%

    c) Ride with friend/relative 5%

    d) Walk 6%

    e) Bus 12%

    f) Ride Bicycle 2%

    g) Other 2%

4.   If you drive when you come downtown where do you usually park?

    a) Public lot 24%

    b) Privately owned lot...............................67%

    c) On-street 9%

5. How far do you generally walk from your parking location to your workplace?

a) 50 feet or less 46%

b) More than 50 feet, less than 20%
   one block

c) One to two blocks 20%

d) More than two blocks 14%

6. The fine for overtime parking should be?

36% responded less than $5.00	**11% responded $25.00**
31% responded $10.00	**2% responded $30.00**
8% responded $15.00	**4% responded more than $30.00**
8% responded $20.00	

7. How many of the downtown shops or services do you typically visit during the week?

Average was approximately 2.50

Below are the employee responses to the opinion questions on the survey:

A)   There are an adequate number of parking spaces for downtown customers / visitors.

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

B)   The parking downtown is reasonably close to my destination.

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

C)   I would pay to park closer to my destination.

Strongly Disagree   Disagree   Neutral   Agree   Strongly Agree

3.3 Residents and Customer/ Visitor Survey Results:

Residents and visitors surveys were posted on the Town web site. A total of 627 public surveys were completed. These surveys were used as part of the parking analysis for the Town study.

1. The fine for overtime parking should be?

    30% responded less than $5.00   9% responded $25.00

    27% responded $10.00   3% responded $30.00

    14% responded $15.00   4% responded more than $30.00

    13% responded $20.00

2. **How many of the downtown shops of services do you typically visit during the week?**

    The average was **2**

3. **When you visit downtown, is it primarily during**

    a) Weekday mornings or afternoons 49%

    b) Weekday evenings 21%

    c) Weekend mornings or afternoons 17%

    d) Weekend evenings 13%

4. **How do you generally come to work downtown?**

    a) Drive and park 62%

    b) Dropped off 2%

    c) Ride with friend/relative 5%

    d) Walk 12%

    e) Bus 12%

    f) Ride Bicycle 6%

    g) Other 1%

5. **If you drive when you come downtown, where do you normally park?**

    a) Public lot 46%

    b) Privately owned lot................................. 21%

    c) On-street 33%

6. How far do you generally walk from your parking location to your destination?

    a)   50 feet or less.. 7%

    b)   More than 50 feet, less than one block 18%

    c) One to two blocks... 50%

    d)   More than two blocks............................ 25%

Below are the resident and customer/visitor responses to the opinion questions on the survey:

A)   I can always find a parking spot near my destination when I come downtown.
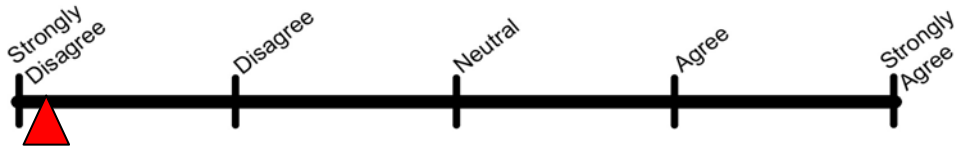
B)   The parking downtown is reasonably close to my destination.
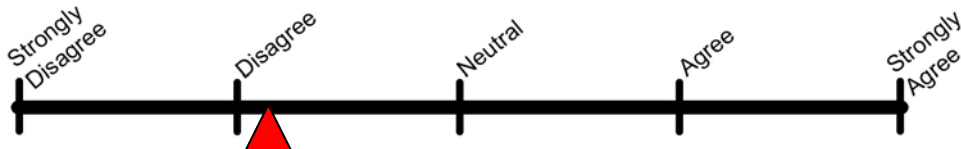
C)   I would pay more to park closer to my destination.
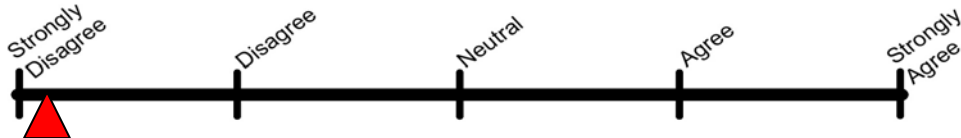
SECTION 4: RECOMMENDATIONS OVERVIEW

4.1   Introduction:

The recommendations overview presents a review of the changes being suggested for Chapel Hill's parking system. Important among these are elements that can change the reality and perceptions of parking such as the signage, marketing and promotion of parking and the fundamental shift of parking management to an agency that is vested in downtown economic development as opposed to parking as a revenue choice. This change will in effect re-direct parking towards aiding economic activity through gradual and incremental operating changes and through a revision in revenue sharing with the Town.

The recommendations include comprehensive signage recommendations and new marketing strategies that will aid in wayfinding and provide all users with concise information on parking. Structural changes are also being suggested that will impact how new parking is created in the downtown area. A fundamental shift towards public parking will aid in promoting shared parking and greater use of transportation alternatives. Both of which will reduce parking demand while generating more activity.

Finally, the parking analysis has revealed that additional parking is needed in Chapel Hill in the future. Exploration of new parking possibilities, locations and recommended amounts of new parking are offered in this report.

4.2   Parking Duration:

Two hour parking should be the dominant duration for on-street parking as it suits the needs of the majority of customers and visitors. Individuals requiring more than two hours for parking should be directed to off-street parking areas. The other duration that should be found on-street is fifteen minute or thirty minute parking for use as pick-up and drop off stalls or very short-term parking. The fifteen-minute parking should be located as either the first or last stall on the block face where needed.   Finally, in areas where there is no demand for customer-visitor parking, eight hour parking can be used to add to the overall long-term parking supply.

Summary:

Cost:	Covered under sign program
Benefit:	Parking efficiency is maximized through simplicity. Long-term parking takes place in lots where permits and hourly parking can be utilized. Short-term parking is located on the streets near the business where it is needed the most for customers and visitors.
Action Time:	2008
Responsibility:	TBD

4.2.1   Additional On-Street Parking on Franklin:

When the University Square project was constructed there were on-street spaces removed from the north side of Franklin from Columbia to west of Church. The issue appeared to be the left hand turn from the two driveways from the University Square project. Based upon the width of Franklin and the frequency of vehicles leaving the University Square project, we recommend reconsidering placing two-hour meters back onto Franklin Street between Columbia to west of Church Street. We have estimated that there is the potential for about 20 additional two-hour spaces.

Summary:

Cost:	Cost of meters and installation
Benefit:	Provide additional on-street parking which is prime parking for customers and visitors
Action Time:	2008
Responsibility:	TBD

4.2.2   Handicapped Accessible Parking:

Rich and Associates reviewed the handicapped (ADA) parking in the study area. For on street handicapped parking, there are no requirements under ADA for the number of spaces. Therefore, there is no correct or incorrect number of on-street handicapped accessible spaces.

Providing handicapped accessible spaces on-street should be based first on requests by businesses but also on the already available off-street spaces that contain handicapped accessible stalls, especially as it may relate to employees needing handicapped parking and when there is no viable off-street location for them to use.

For off-street parking areas, we identified the following ADA issues with respect to the number of accessible stalls that have been provided and the need for van accessible stalls.

- Wallace Deck capacity is 309 spaces: there are six spaces provided and there needs be to eight by ADA. While there is a requirement that one of the ADA spaces be a van accessible space, it cannot reasonably be accommodated in the deck due to headroom issues.

- Lot 2 capacity is 104 spaces: there are four spaces provided and there needs to be four. Here a van accessible space which is required as one of the ADA spaces can be reasonably accommodated.

- Lot 5 capacity 169 spaces: there are three spaces and there needs to be six spaces. Here a van accessible space which is required as one of the ADA spaces can be reasonably accommodated.

- Lot 3 has 65 spaces; there appears to be one ADA space and there are three required, with one of those van accessible.

- The two remaining small lots we did not include since they were too small and they are not really conducive to ADA use.

By providing additional ADA spaces there may be a loss of overall capacity of the parking areas. The Town should review these findings and re-layout the parking lots to meet ADA requirements.

> ### Summary:
> | | |
> |---|---|
> | **Cost:** | Cost of re-layout and re-striping |
> | **Benefit:** | Provide ADA requirements |
> | **Action Time:** | 2009 |
> | **Responsibility:** | TBD |

4.3   Parking Revenues and Parking Rates:

The current parking system is operated as an enterprise fund. This means that in general parking operations are reported separately. The Town collects parking revenue and pays for parking expenses from the fund. There is a transfer of funds from parking from the parking fund to the general fund to pay for Town services that are provided to parking.

Best practices for municipally operated parking generally include the following;

- Parking is operated as an enterprise fund and that all parking revenue is first used for the operation and repair of the parking system which includes on and off-street parking and fines.

- There is a sinking fund established for the repair and replacement for the parking structure, off-street lots and the parking and revenue control equipment like parking meters and a sinking fund for the development of new parking areas, surface and/or structured parking.

- In general, all parking revenue is used for parking. In some instances, excess revenue may be used for downtown related maintenance or improvements such as signage, banners etc. that promote parking and downtown events for example.

- In order to build consensus with stakeholders, the setting of parking rates should be based on the income needed to support operations including the sinking funds and the downtown improvements discussed above.

The Town should identify all the costs for parking, especially the chargeback to cover administration of the on and off-street parking so that stakeholders understand that the parking rates and fines are justifiable and that there are no questions about the amount of the charges. Ultimately, the parking rates need to cover actual expenses including repairs for the parking system and sinking fund deposits. Any excess revenue can than cover expenses for support of the downtown as identified above.

In general though, the hourly parking rate in Chapel Hill is lower than Raleigh and about the same as Durham. The issue of parking rate changes for any of the parking was discussed as it related to promoting downtown and with parking being an economic development tool. The issue, based upon this report, is how does the Town finance improvements to the parking including the repairs on the existing parking structure, build additional parking facilities or lease or maintain private lots as described in 4.14, 4.15 and 4.16?

One recommendation that may have only a small revenue impact but a big public relations impact would be to offer the first 15 minutes free at the meters (if they are able to be programmed that way) and to offer half-an-hour free in the lots and parking structure. This could be marketed as part of a park once shop twice campaign. In general, we do not recommend adjusting the hourly parking rates on-street or off street except as otherwise noted.

The current parking rate in Chapel Hill for on-street meters is $.25 per 15 minutes. For the Pay-by Space lots the rate is $.50 per hour. For the other off-street parking the rates are $.50 to $.65 per half hour for zero to four hours and then $1.00 per hour to $1.30 per hour thereafter ($1.80 per hour after six hours in Lot 2), $5.00 flat charge after 9:00 P.M. on Friday and Saturday nights for the Town's parking structure, and a peak time charge ($2.00) in Lot 2 or the Town's parking structure if the vehicle enters before 10:00 A.M. and leaves after 2:00 P.M. Finally, monthly parking is $85.00 per month.

Rich and Associates compared these parking rates with parking rates in cities and towns in the area. Two close examples are Raleigh and Durham. Raleigh's rates are; there are no on-street meters, off-street and structures are $1.00 per half hour with the first 15 minutes free, and monthly rates ranging from $50.00 to 125.00 per month. In Durham, the off-street parking is $.60 per hour ($1.00 per hour in one lot) and monthly parking ranges from $30.00 to $60.00 per month.

In general, Chapel Hills parking rates are lower than Raleigh's but equal to or less than Durham, Greensboro, and Winston-Salem. The question is, is there an alternate parking rate strategy that can help promote different parking areas for different user groups as well as use parking as an economic development tool.

One strategy is to price parking that is more remote cheaper than parking that is closer and more convenient. An example is the proposal to provide remote parking during construction on lot 5 to reallocate monthly parking and give hourly parkers more close-in spaces (see 4.14). The shuttle or very remote parking for employees would be at a much reduced cost than the $85.00 per month now charged. At the same time, monthly rates would increase in prime parking areas in the core of the area to shift employee demand to more remote parking and increase the supply for hourly parking.

The charge for event parking (except during some athletic events at UNC) in Chapel Hill is $5.00 (and some events $10.00) and is lower than Raleigh ($7.00) but higher than Durham ($2.00).   In general, the event parking rate in Chapel Hill is reasonable, though when there are events that $10.00 is charged there has not been adequate notification to the businesses downtown. Additional

Chapel Hill's peak hour additional charge appears to be unique compared to other communities. Obviously the intent is to dissuade part time and full time employees from parking in these locations. We do not have data on how often this charge is levied, but we recommend dropping this charge and instead instituting a rate schedule that automatically increases the per hour rate after the fourth hour of stay (similar to the rates charged in Lot 2) in the parking structure.

In 4.17 we discuss parking validation. This function will help market parking downtown and give customers and visitors free parking. The validation could be in the form of tokens for the meters and Pay-by Space machine (if they can accept them), and a stamp for the parking structure. Businesses would pre-purchase stamps (or tokens) and distribute them to customers and visitors.

Summary:

Cost:	Cost of changing meters and fee computer
Benefit:	Provide positive public relations
Action Time:	2008
Responsibility:	TBD

4.4   Valet Parking:

Valet parking is currently used in the western downtown area of Chapel Hill. As land uses change and evolve in the downtown there is the potential for an expansion of the valet parking in the eastern side of the downtown, especially for restaurant and entertainment venues between Columbia and Henderson Streets.

Discussion with various local businesses and the current valet operator should be facilitated by the Downtown Partnership to aid in defining operating costs and reimbursement options. Presumably the current operation with local business voluntarily contributions would serve as a model for an east valet operation.

Policies derived for operating valet parking should include identifying/defining parking for valet operations; both off-street lots and on-street spaces for vehicle drop off and pick up. The policy should specify locations, hours of operation and any fees associated with parking lot use by the valet operator. Additionally, the number of on-street spaces that the operator uses for the staging of vehicles should be defined and monitored.

Summary:

Cost:	To be determined from existing operation.
Benefit:	Tracks and regulates valet operations through a comprehensive operating agreement and policy.
Action Time:	2008.
Responsibility:	Downtown Partnership

4.5   Bicycle Parking/Enhancements:

Recently, Chapel Hill adopted a Bike and Pedestrian plan for the Town. Promotion of bike and pedestrian activity adds to the community's multi-modal initiatives. Additionally, installation of facilities such as bicycle racks/lockers in the downtown will help to promote bicycle activity. This is especially true if the Town builds a new parking structure.

Guidelines on Bicycle Racks:

- Racks should allow bike frame to make contact at two points.
- Should allow for more than one bike per rack.
- Needs to allow for popular "U" shape lock.
- Racks should be placed where they will not impede upon pedestrian traffic, though need to be readily identifiable.
- Should be clearly signed with a bicycle parking sign.

Two examples of recommended bike racks

Marketing Bicycle Ridership

- There is National "Ride Your Bike to Work Day/Month" in May. There are several communities throughout the U.S. that participate. Information can be found through the League of American Bicyclists www.bikeleague.org.

- Bicycle Friendly Community Campaign (www.bicyclefriendlycommunity.org) awards communities who are bicycle friendly and promote walk-able, safe communities.

  "Communities that are bicycle-friendly are seen as places with a high quality of life. This often translates into increased property values, business growth and increased tourism. Bicycle-friendly communities are places where people feel safe and comfortable riding their bikes for fun, fitness, and transportation. With more people bicycling, communities experience reduced traffic demands, improved air quality and greater physical fitness" www.bicyclefriendlycommunity.org

- Source of possible grant funding through Bikes Belong Coalition, http://bikesbelong.org

- Pedestrian and Bicycling Information center is a great link that offers advice on funding and marketing bicycling in downtowns. http://www.bicyclinginfo.org

Summary:

- **Bicycle Parking Enhancements/Marketing**

Cost:	Budget $50,000.
Benefit:	As mentioned, bicycle friendly communities draw people and activity into the downtown areas, promoting economic and social activity.
Action Time:	2008
Responsibility:	TBD
Issue Addressed:	Creates a more pedestrian friendly downtown and encourages alternate modes of transportation.
Additional Comments:	Investigate State and Federal funding sources for bicycle initiatives. Multi-modal efforts are endorsed through several grant programs including Next-TEA (US Federal – Revised, Transportation Equities Act).

4.6 Pedestrian Activity

Pedestrian movement is a very important aspect of parking. It is difficult to get people to park beyond the front door of their destination if there is any worry about safety or the experience is not pleasant. Lighting and landscaping can greatly change a perception of safety in lots and along sidewalks. A police presence after dusk can give a feeling of safety. Murals, art, window decorations and flowers can create a pleasant walking experience.

4.6.1   Minimize Surface Lots and Breaks Between Buildings:

Minimize surface lots and large breaks between buildings to promote walking in the downtown. People tend to walk further without complaints if the walk is pleasant and enjoyable. Landscaping, murals, and decorated store windows tend to create an experience. Parking areas are important, though large parking lots without landscaping can be viewed as unsightly and unsafe.

4.6.2   Install Pedestrian Wayfinding Kiosks:

Consider adding pedestrian wayfinding to the downtown. Kiosks near parking areas and on busy corners with maps and listings of businesses in the downtown are very helpful in directing visitors/customers of the downtown.   Pedestrian wayfinding will work hand in hand with marketing and signage in the downtown. The maps should show where long term parking should occur without the worry of a parking ticket.

Two examples of pedestrian wayfinding kiosks

4.6.3 Minimize Pedestrian and Vehicular Interaction:

Minimize pedestrian and vehicular interaction by creating a clear differential between the street and sidewalk. This can be done by using texture, colors, trees, or planters between the sidewalks and streets. The pictures below show a clear distinction between the street and sidewalks. It is also important to provide handicap access at all intersections. When all sidewalks are accessible it is then possible for someone with less mobility to park at a non-handicap designate parking space when designated handicap spaces are full.

Example of a sidewalk separating pedestrians from vehicles with texture color and light poles. This example is also handicap accessible
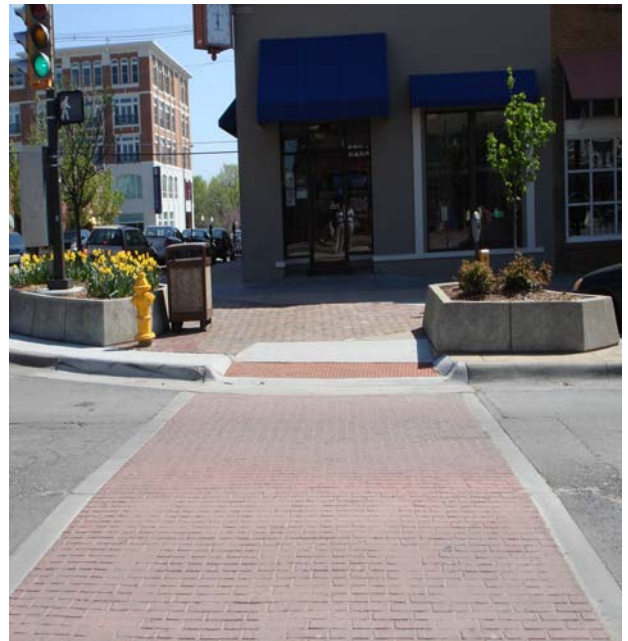
Another example of using color and texture to create a clear path for pedestrians. This example uses planters to protect pedestrians waiting to cross the road.

Summary:

- **Pedestrian Enhancements**

Cost:	Budget $50,000.
Benefit:	Pedestrian enhancements draw people and activity into the downtown areas, promoting economic and social activity.
Action Time:	2008
Responsibility:	TBD

Issue Addressed: Creates a more pedestrian friendly downtown and
                    encourages alternate modes of transportation.

Additional Comments: Investigate State and Federal funding sources for pedestrian
                        initiatives. Multi-modal efforts are endorsed through several
                        grant programs including Next-TEA (US Federal – Revised,
                        Transportation Equities Act).

4.7   Signage

Rich and Associates recommend the following five types of parking signs that increases drivers'
way finding experience.

These include:

Introduction: Introduction parking signage alerts drivers approaching the downtown of
                 the locations of the publicly owned, off-street parking lots. This type of
                 signage is distinctive in color and size, and it can be characterized by
                 unique logos. The signs display the names of the off-street parking lots
                 and the names of their streets. The signs are located on the street, and
                 are mounted on poles of standard heights.

Directional: Directional-parking signage is distinct in color, size and logo and directs
                drivers to off-street parking areas. The signs are mounted on poles at
                standard heights, on the streets.

Location: Parking location signage complements the directional parking signage.
             The signs have arrows pointing to the off-street lots. The signs are mounted
             on poles at standard heights and located on-street.

Identification: Identification signage is placed at the entry of each parking lot. The
                   name of the parking area is identified and the type of parking available
                   at the parking area is listed on the signage. The identification signage is
                   distinctive in color and size, and it is located on a pole at a lower height.

Way Finding: Way finding signs are placed at the points of pedestrian entry/exit to
                parking lots and structures. The sign is a map illustrating the downtown
                area that points out the various shops or attractions that can be found.
                These types of signs are placed at locations easily found by a pedestrian
                and are intended to help that person orient themselves to the downtown
                area such that they can locate their destination and then be able to
                return to where they parked.

Figure 3: Parking Sign Type Examples

<u>Introduction Sign</u>   **<u>Location Sign</u>**

<u>Direction Sign</u>

Identification Sign

This identification sign has 4" text lettering. The parking symbol or identification logo is approximately 26 inches in height.

__Wayfinding Sign__

This is an example of combining a vehicular and pedestrian wayfinding sign. The use of a map for the pedestrian wayfinding is very beneficial.

The general qualities of good signage include the following aspects:

- Use of common logos and colors.

- Placement at or near eye level.

- Use of reflective, durable material.

- All five types used in conjunction to guide motorist and pedestrian activity.

- All entrances to the downtown need to have introduction signage.

- All parking areas need to have identification signage.

- All routes through the downtown need to have directional and location signage.

- All pedestrian routes to and from major customer/visitor parking areas need to have way finding signs.

- The identification signs located at parking areas need to convey parking rates, hours of operation, maximum durations, and validation availability.

<u>Design Specific Criteria Recommendations:</u>

- In general, sign lettering should be 4 inches in height. Smaller lettering may be difficult to see and cause traffic slow-downs as drivers read signs before entering a parking area.

- Depending on the location for the signs, some may need State Department of Transportation approval before installation. The Town Engineering Department will need to be consulted on specific locations that fall under State control and the various regulations that may need to be met.

- Logos and sign colors can be customized to suit the communities desired design criteria. The important element is to be sure that signs can be read easily by being a distinctive color that stands out from background colors of adjacent buildings.

- The signs colors and logos need to be consistent for ease of understanding and quick visual reference by drivers.

- Sign programs are usually best undertaken at a Town-wide level and include all the Town's signs. The comprehensive nature of a large scale sign program helps ensure that all forms of way-finding signs (vehicular and pedestrian) are taken into account.

- Vehicular way-finding needs to be laid out initially in a coordinated fashion to determine what the preferred entry points to the community should be. Often directed traffic flow is a more efficient option that allows the community to take advantage of planned vehicle routes and entry points. A key 'rule of thumb' is that fewer, well thought out and well placed signs are far better than too many signs scattered randomly throughout a community.

- Vehicular way-finding should include direction arrows to key destination places such as theaters, museums, shopping districts, etc., used in conjunction with the parking direction signs to allow a driver to quickly orient them selves to their destination and best parking options. Arrows should always be oriented to indicate forward, left or right movement. Reverse arrows or arrows indicating that a destination has been passed should be avoided to reduce confusion.

<u>Summary:</u>

- Signage

Cost:	Budget $200,000 for design program, creation and installation.
Benefit:	Customer/visitor experience of Chapel Hill will be greatly enhanced by a comprehensive new sign program, as will the overall perception of Chapel Hill as a quality destination place.
Action Time:	2008
Responsibility:	TBD
Issue Addressed:	Existing signs should be replaced with an entirely new sign program. Navigating from the main highways to the downtown and back is difficult for people unfamiliar with the Town and a number of the parking signs are confusing.
Additional Comments:	Consider the associated costs as an investment with long-term results that will champion Chapel Hill's image.

4.8   Marketing

Marketing is one of the most important aspects of a successful parking system. Marketing should be used every time there is a change to the parking system and should be directed towards downtown employers, employees and customers/visitors. It is very important to help encourage downtown employees to park in the long-term parking areas to preserve the on-street parking for customers and visitors. Additionally, an individual's perception of Chapel Hill is greatly enhanced if they know ahead of time where that can park.

The issue of employees parking on-street in two hour spaces is a good example of how consistent marketing will help downtown. Any publication, mailer etc that the partnership sends out to businesses should also have reminders about how employee parking on-street negatively impacts businesses by taking away customer visitor parking. Also, parking updates can be communicated to the business community in the same publication(s).

Materials can include direct mailings, brochures, maps, kiosks, on-line web pages or articles in magazines. Information contained in the marketing material should include location, up-coming changes, regulations, fine payment options and any other information relating to the parking system.

The parking system should have a web site that shows the location of public parking, the time restrictions and information about special event parking. This could also include private parking areas that the Town or Partnership contract with for use as public parking at night or for special events. Most importantly, the web site should be linked to the UNC event sites so that the public can see where both UNC and public parking is available.

Finally, signs are a useful way to market parking. Catchy phrases that designate long term lots can be used to let customers/visitors know where to park. Banners can be used to identify parking areas according to color schemes, letting customers/visitors know where they parked.

Example of using banners to define a district or area in Lawrence, KS. Banners can also be used to market parking.

<u>Summary:</u>

Cost:	Budget $10,000 per year for on-going marketing efforts. Banners could be covered under the sign program.
Benefit:	Customer/visitor experience of Chapel Hill will be greatly enhanced. Also helps to encourage employees to park in long-term lots, providing a greater effective supply of parking for customers and visitors
Action Time:	2008 – ongoing monthly.
Responsibility:	Downtown Partnership
Issue Addressed:	Employee parking on-street and the general misconception by downtown employers that on-street parking should be used by employees.
Additional Comments:	Aids in promoting the use of alternative parking areas such as will be necessary with the closure of Lot #5.

4.9   Enforcement Personnel:

The findings from the study were that parking enforcement was not overzealous, but that some employees were still abusing the two hour metered spaces. Additionally, the average stay for the two hour spaces was under two hours which indicates that customers or visitors are in general using the two hour metered spaces correctly.

Some guidelines on efficient and effective parking enforcement include:

- Routing of officers so that a complete circuit is followed every two hours in the downtown area.

- Officers should use handheld parking ticket writers that track license plate numbers.

- Every parking stall, whether occupied or not, is then entered into the handheld.

- The handhelds should be programmed to issue tickets for overtime parking and vehicle shuffling (moving vehicle to a different on-street stall every two or three hours throughout the day to avoid a ticket).

- Staffing should be at a level adequate to assign one officer to monitor between 600 and 800 parking stalls per shift.

- Parking enforcement officers should be dedicated to parking duties, only being re-assigned during emergencies or special circumstances that may arise.

- Street signs should indicate that parking is enforced from to 9:00 A.M. to 5:00 P.M

Chapel Hill has over 800 public on street and off street parking stalls. Rich and Associates recommends that Chapel Hill have at least two parking enforcement officers (more if using part-time staff) to adequately enforce the public parking.

Summary:

Cost:	Budget to be determined (based on existing staffing costs).
Benefit:	Consistent enforcement targeted towards discouraging improper parking while minimizing the negative impact on downtown customers and visitors
Action Time:	Summer 2008.
Responsibility:	TBD
Issue Addressed:	Discourages improper parking activity such as repeat or multiple offences, shuffling by employees improperly parking on-street. This increases turnover of the most important parking in the downtown area. Customer/visitor friendly efforts are consistent with the downtown goals.
Additional Comments:	Consider working with the courts to create an ordinance on collecting parking fines.

4.10   Handheld Technology for Enforcement:

Rich and Associates recommend that Chapel Hill use the full capability of the handheld ticket writers to enforce parking. The handheld units increase efficiency by storing the license plate numbers of vehicles, thus negating the need to physically chalk tires. This will allow enforcement to occur during inclement weather, whereas marking tires with chalk is difficult in the rain because the chalk can be washed away and does not mark well on a wet tire.

Handhelds units can also store a "hot list" with information such as stolen vehicles, warrants, previous offenders, shuffling of vehicles, and unpaid tickets. When the vehicles license plate gets put into the handheld, the plate gets run through a database and if it is an offender the handheld responds with the appropriate information. If a vehicle needs to be booted or towed because of unpaid multiple tickets, the information will come up on the screen of the handheld. This helps make the entire parking system more efficient.

With the purchase of the handheld ticket writers there also needs to be a central computer. A home base needs to be set up where the handhelds can be downloaded and updated daily with pertinent information regarding parking violations and information from the Police Department as well as be recharged. Finally, there will be software, much of which is available with little or no modification required. The software should also be used to process and file tickets.

Summary:

Cost:	$10,000 for potential software upgrade to existing handhelds for use of license and stall tracking, anti-shuffling and courtesy ticket functionality.
Benefit:	Consistent enforcement targeted towards discouraging improper parking while minimizing the negative impact on downtown customers and visitors
Action Time:	2008.
Responsibility:	TBD
Issue Addressed:	Discourages improper parking activity such as repeat or multiple offences, shuffling by employees improperly parking on-street. This increases turnover of the most important parking in the downtown area. Customer/visitor friendly efforts are consistent with the downtown goals.
Additional Comments:	Consider working with the courts to create an ordinance on collecting parking fines.

4.11   Enforcement Vehicles:

Consider purchasing vehicles to aid in enforcement. These vehicles need to be energy efficient such as electric or hybrid and should be capable of driving in all types of weather.

Summary:

Cost: Starting from $7,000 per vehicle and should also include a maintenance contract after the first year warranty. Budget $50,000 to start.

Benefit: New vehicles will allow the officers to provide parking enforcement during all but the most inclement of weather.

Global Electric Motorcar used by Fulton Missouri parking enforcement. Designed by Chrysler

Action Time: Summer 2008.

Responsibility: TDB

4.12   Courtesy Ticket:

Rich and Associates recommends that Chapel Hill consider courtesy tickets for the first offense as opposed to other methods of alleviating parking fines against customers and visitors. This would require a handheld and storage of data for a long period of time. If a vehicle parking at a short stay space has not received a ticket during a specific period of time (the last six months as an example), then a courtesy ticket could be issued that would first thank the parker for coming to downtown Chapel Hill and state that their patronage is appreciated. Then the courtesy ticket would go on to alert the parker to the fact that they were in violation and then give the parker a map with alternatives to where they can park for longer periods of time.

Summary:

Cost: Loss of ticket revenue. Requires the use of handheld ticket writers.

Benefit: Public relations are championed in Chapel Hill and the customers of the Town's businesses are less impacted by more stringent parking enforcement or by other policy and management changes that enhance parking regulations.

Action Time: 2008.

Responsibility: TBD

Issue Addressed: Public relations and improved business relationships between
                    local business and the Town due to the creation of a
                    customer friendly atmosphere while still increasing the
                    effectiveness of parking enforcement.

4.13 Privately Developed Parking:

Discourage future development of private surface parking lots in the downtown. Small surface parking lots disrupt pedestrian activity and reduce density. A better option for Chapel Hill is to have control over parking and to build new structured parking as required or seek public/private joint ventures.

Parking structures increase density. Density combined with a mixture of use types encourages activity in an urban setting. Privately developed surface parking lots can be discouraged through zoning ordinances. Some communities outright ban parking development by private developers, while others implement parking maximums that limit the amount of on-site parking that can be built with development.

Communities that ban parking undertake responsibility for providing all of the parking necessary to support economic activity in a downtown setting. Typically this is fairly easy in dense urban settings where pedestrian activity is substantial. However, more suburban areas that lack viable pedestrian activity are difficult to service with public parking.

Under this scenario, all of the parking needed is provided by the Town through a series of parking structures and on-street parking. The Town can then consider charging an impact fee for new development to fund new parking projects. Developers sometimes argue against this style of parking control and development, however, it has been successful in communities such as Grand Rapids Michigan.

The in-lieu-of-fees are usually based on a percentage of the cost of providing one parking stall in a new parking structure. The average fee in the United States among communities that provide an in-lieu-option for parking is approximately $10,000 per stall (as of 2006). To determine how much parking a development's assessment should be based on, comprehensive listing of parking ratios are used as a basis and any shared potential can then be applied as a potential reduction.

As an example, if a mixed use development is proposed that includes retail, office and residential space, the floor area of each use would have a ratio applied to it to determine the amount of parking needed. The amount of parking needed to serve the development would then be the basis of the impact fee assessment. If the developer could demonstrate a shared use potential for the development that would result in a reduction in the overall amount of parking needed, the shared use reduction would then be deducted from the total amount parking needed.

Figure 4 offers a sample calculation for determining the impact fee for a proposed re-occupancy project. The sample uses 50% of the cost of providing a parking stall in a new parking structure.

Figure 4: In-Lieu-Fee Sample Calculation

I.   Building Gross Floor Area: **50,000 sq.ft.**

Current Use: Vacant with no parking.
New Use: Mixed retail, offices and residential.

Parking Needed: 50,000 x 0.00225   113 stalls

II.   Cost of Supplying Parking in a Deck/Structure $17,500/parking stall

Parking Impact Fee (50% of cost)
             $17,500 x 50%   = $8,750 / parking stall

III. Project Subsidy (Incentive x Added Public Parking)

113 stalls x $8,750 / stall = $988,750 (for parking fund)

Parking development can also be coordinated with demand to ensure that as new buildings are built and/or proposed the Town will have the ability to decide if the next new parking structure project should be initiated. The development threshold model is a planning tool for the Town to use when considering the timing for bringing new parking structure projects on line. An example of which is presented on the following page as Figure 5.

The way the model works is to use building gross floor area as the variable in a decision making flow chart that will assist with determining when new parking demand justifies a new parking structure. In Chapel Hill's case, proposed re-occupancy of building vacant space will be the dominate consideration, as most new development projects will probably have on-site parking.

Another option is for the Town to have the right to add public available parking spaces to a privately developed parking structure. With this option, the Town would pay for the pro-rated costs of the additional public parking spaces to be built. The Town would have an easement agreement with the developer and would pay for the pro-rated operating expenses. To defer the Town's costs, there should be paid parking.

Finally, another option may be to sell a developer a Town owned site and write down some of the costs if the developer builds additional public parking as part of their development.

Figure 5: New Parking Threshold Calculation Worksheet

Part A: Determining Floor Area

      Total Built Gross Floor Area For Entire Downtown District:_____

      (+) Proposed New Gross Floor Area:_____

      (=) Total Existing and Proposed New Gross Floor Area:_____

Part B: Determining Parking Need

      Total Existing and Proposed New Gross Floor Area:_____

      (X) 2.25 Parking Stalls Per 1,000 Square Feet Or 0.00225:_____

      (=) Total Parking Stalls Demanded:_____

      (-) Existing Off-Street Parking:_____

      (=) New Parking Demanded:_____

Part C: Decision Guide

      New Parking Demanded:_____

      (X) 85%:_____

      (=) Minimum New Parking Needed:_____

      (If) Minimum New Parking Needed Is: Optimal Capacity of Next New Parking Structure

      Then: Initiate Project

      (Or) Minimum New Parking Needed Is: Optimal Capacity of Next New Parking Structure

      Then: Delay Initiation Until The Above Condition Is Met

4.14   Interim Alternative Parking: (Lot #5 Closure)

Lot #5 located at the intersection of Church Street and Franklin Street is a public parking lot that contains a mixture of monthly leased and hourly transient parking stalls. This lot is scheduled for closure in late spring of 2008 to make way for a new mixed use development project. Tentatively, the new mixed use development will contain 160 public parking stalls in an underground facility.

While the public parking component of the proposed new underground parking facility will address a portion of the local parking need, during construction alternate parking arrangements will be needed. One option that has emerged from dialogue between the Downtown Partnership and the University of North Carolina is the use of the University's remote parking areas and shuttle service in to the downtown. Details of this potential solution will need to be refined between the University and the Downtown Partnership, but a remote lot and shuttle arrangement

will be the best short-term solution given the lack of available parking in or near the downtown area.

Consideration could be given to potentially leasing some private parking for public use. However, there is a shortage of downtown parking and the amount of parking needed exceeds the size of most private parking areas.

Optimally, the shuttle system would run on a 15 minute cycle time from 8:00 am until 9:30 am., 30 minute intervals until 11:30 am, 15 minute intervals until 1:30 pm, 30 minute intervals until 3:30 pm, 15 minute intervals until 6:30 pm. Negotiations will need to take place with the University to determine the cost of operating additional shuttles into the downtown area during the closure of lot #5. Similar systems in other communities have been estimated to cost between $65,000 and $120,000 annually for vehicle lease, drivers, insurance and fuel.

Summary:

Cost:	TBD; will depend on level of involvement of UNC. Discussions between the University and the Downtown Partnership are pending.
Benefit:	Provides an adequate source of available alternative parking during the closure of Lot #5.
Action Time:	2008.
Responsibility:	Downtown Partnership

Another option would be to reallocate long term parking in the Town's parking lots and parking structure. Eliminating permit parking from these areas would create more hourly customer/visitor parking. Permit parkers could use the shuttle lot as defined above. This system will require an ongoing marketing program including informational and directional signage for visitor and customers, web site directions on how to park in downtown during construction, and then adding parking updates to anything that the Partnership sends out to businesses.

One concept that has been used successfully has been to develop a character like a gopher with a hard hat for example that would direct the public to available hourly parking and give updates on the construction.

Finally, the Town or Partnership should look at negotiating deals with private parking owners whose lots during the day or evenings have available parking spaces. The Town or Partnership would agree to clean and insure the parking area and then market this parking for customer and visitors if the parking area is within a reasonable walking distance or for employees if the parking area is farther from the core downtown.

4.15 Parking Demand:

In the current condition, there is a demand for an estimated 2,840 parking spaces but there is only an estimated 840 public spaces. Rich and Associate estimated that 45 percent of the demand was for short term (customer/visitor) parking which equals about 1,280 parking spaces. Since most customers and visitors rely on public parking, there is a shortfall in customer/visitor parking.

In the future, it is estimated that the parking demand will increase to 3,000 parking spaces based on 50 percent re-occupancy of the vacant space in the study area in the next five years. As a result, the need for additional parking will grow over the next five years.

There have been recommendations to alleviate the parking shortfall by using private parking areas that would be maintained either by the Town or the Partnership. This would allow better utilization of all parking spaces in the downtown. Even with this action, there will be a need for additional parking in the next five years. It is possible that two 300 to 400 space parking structures could be developed on the east and west ends.

4.16 Land Banking/Sites for Additional Parking:

The parking analysis revealed that there is a shortage of parking in Chapel Hill. This particular issue is exacerbated by the amount of private parking that cannot be used for general public parking purposes. In order to attain greater economic success, Chapel Hill will need additional public parking sources. In order to maintain adequate density, mixture of uses and pedestrian activity, consideration should be given to the potential for a new parking structure.

Three sites in the community have been identified as possibilities. Criteria used to examine potential sites included adequacy of site size, existing uses, proximity to key parking demand areas and traffic flow implications. The two optimal sites identified are as follows: (See Map on following page).

- ⇒ Existing Private Parking Structure and Adjacent Lot on Rosemary.
- ⇒ Old Auto Dealership Building and Lot on Franklin near Mitchell Lane.
- ⇒ University Square

UNC has recently purchased University Square. The surface parking area provides an excellent site for a potential parking structure to accommodate University and area employee, visitors and customers. The Town should have discussions with the University about the potential for a joint venture development of a parking structure which will provide parking on that side of the study area.

The cost per space of an above ground parking structure will range from $18,000 to $22,000. Below ground parking could run 50 percent more that above ground parking? These costs do not include land or demolition costs.

The Town should consider analyzing additional parking on the other possible sites. This would provide a potential parking structure on both the east and west ends of the study area. The following is an example of project and finance costs for a 400 space parking structure.

The estimated Project and Finance Costs are shown on page 60. The financing assumed the Town issued debt using a tax exempt bond issue. It should be noted that at the time of this report municipal debt financing is not readily available and the conditions and terms of financing when it is once again available are unknown. We have used rates and terms as of July, 2008.

The following are explanations of the various line items.

1. **Construction Costs**: The costs assumed $18,000 construction cost per space and spread footings which will need to be confirmed by soil borings and a geotechnical report.

2. **Professional Fees**: These are the design fees and reimbursed expenses. It assumes a conventional design/bid scenario.

3. **Insurance**: Testing during construction paid for by the owner

4. **Geo-Tech and Survey**: Fees for a survey and topographical of the site and soil borings and report on foundations.

5. **Legal and Accounting**: The legal and accounting costs for the City during the course of construction.

6. **Land Costs and Demolition:** There was no estimate made of these costs.

7. **Contingency**: Rich and Associates has used a 10% contingency for the design and construction to cover design issues and issues during construction.

8. **Project Costs to be Financed**: Project costs represent the construction hard and soft costs.

9. **Finance Term**: The term of the bond is 20 years. A longer amortization schedule is also possible.

10. **Interest Rate**: Based on an un-rated bond issue with no insurance and rates as of the second quarter of 2008. The rate assumed a general obligation type bond issue.

11. **Term of Construction**: The construction period is estimated at 10 months. This depends on the time of year that the project is started and site availability for lay-down for example.

12. **Interest During Construction**: All bond proceeds are received up front and draws are made on these funds to pay for construction. This represents capitalized interest for the term of construction.

13. **Interest Income**: The bond proceeds are put into an interest bearing account and generates interest income that is used to offset costs.

14. **Legal and Accounting Fees**: These are the legal fees and accounting fees of the bond issuer.

15. **Debt Service Reserve**: No debt service was assumed.

16. **Financing Fees**: These are the points paid to the bond underwriter.

17. **Cost of Issuance**: These are expenses such as printing of offering/official statements.

18. **Total Financing Fees**: Total soft costs for financing.

19. **Addition of the Project Costs**: from line 8.

20. **Total Amount of Bonds**: Total of lines 18 and 19.

21. **Debt Service**: The annual principal and interest payment assuming a level payment each year.

The calculated debt service is estimated at $725,000. In addition to this cost, Rich and Associates recommends that owners establish a Repair and Replacement fund for the repairs that are required during the life of the facility, which can be 40 years or more. Approximately $50.00 per space per year should be deposited into this fund.

Summary:

Cost:	TBD; discussions with land owners are pending.
Benefit:	Provides a long-term parking solution for the downtown.
Action Time:	2008.
Responsibility:	Downtown Partnership

**TOWN OF CHAPEL HILL
SAMPLE PROJECT AND FINANCE COSTS
400 SPACE PARKING STRUCTURE**

1 Construction Cost	400 x $18,000		$7,200,000
2 Professional Fees (Architectural/Engineering & Reimbursed)			$396,000
3 Insurance			$25,000
4 Legal and Accounting			$35,000
5 Geotech and Survey			$25,000
6 Land Costs and Demo			$0
7 Contingency			$720,000

8 Project Cost to be Financed	$8,401,000

9 Financing Term	20 Years
10 Interest Rate	5 %
11 Term of Construction	10 Months

Financing Costs

12 Interest During Construction			$377,000
13 Interest Income	40% @ 2%		($53,000)
14 Legal & Accounting Fees	@ 1.00%		$90,000
15 Debt Service Reserve			**None**
16 Financing Fees (Points)	@ 2.00%		$181,000
17 Cost of Issuance	@ 0.50%		$45,000

18	*Total Financing Costs*	$640,000
19	*+ Project Cost to Be Financed*	$8,401,000
20	**Total Amount of Bonds**	**$9,041,000**
21	**Debt Service**	**$725,000**

4.17   Special Event Parking:

There are several types of special events in Chapel, with many of these centering on UNC. Obviously, sporting events cause severe parking problems in the downtown. However, the number of these types of events is limited. Though not as many people are coming to the smaller events such as those at the Planetarium, Ackland and Hanes Art Center at one time, they offer more regular events and these venues are close enough to the downtown that they directly affect parking. The Town, Partnership and UNC need to work more closely to coordinate parking for events at these locations, especially when they are in the evening. Temporary signage that directs visitors to off-street parking locations such as the Town's parking structure is needed. The web site development and linkage will also help in this regard.

 Parking during mall and large special events can also present an opportunity for economic activity and downtown promotion in general. University events that have shuttle access could be promoted by the Downtown Partnership for sporting events for example. Further, shuttle stops could be re-worked to include the downtown area to help create pedestrian activity between the University area and the downtown.

Working with UNC to help promote and utilize the University's remote lots and shuttle system would be the lowest cost and most effective method of handling parking during events for Chapel Hill. Discussions between the University and Downtown Partnership will need to be undertaken to explore opportunities and options. Other potential event parking solutions for the downtown could include a validation program.

A validation program would be a method of allowing downtown businesses to offer their customers free parking through the use of tokens, hang tags or coupons. Essentially, the downtown business could purchase the validations from the Town/Downtown Partnership at a discounted rate over standard parking rates. The business could then offer the validations to their customers that the customer could use on their next trip or even for the current trip.

Typically validation programs use a special type of token or slug that can be put into an on-street parking meter to obtain the maximum allowable parking time. The slugs would be specially prepared by a manufacture to be used in the meters and purchased in bulk from the downtown partnership by local businesses interested in providing the tokens to their customers.

Alternatively, parking hang-tags could be made available to the downtown businesses from the Partnership that would allow business customers to park in Town lots for free on a given day. The hang tags are low cost and because the customers simply scratch the ticket (like a scratch and win lottery ticket) to indicate the day parked, validation can be used anytime or restricted to certain days or events.

A third alternative is to simply allow individuals who park in places where they pay on exit (such as the Town parking structure) to obtain a coupon from the local businesses for free or discounted parking. The coupons could again be purchased for the Downtown Partnership by businesses for distribution to their customers.

The validation programs where the merchant purchases discounted parking from the Downtown Partnership presents a win-win situation. Parking revenue is obtained for operations by the Downtown Partnership or Town, the business can then promote themselves to customers (parking marketing) and customers can have free or low cost parking. Validation also avoids the issues of abuse with a free parking system by being directed solely towards customers and downtown businesses.

Summary:

Cost:	TBD; discussions with UNC, Downtown Partnership and local businesses pending.
Benefit:	Provides a long-term parking customer focused solution for the downtown during events.
Action Time:	2008.
Responsibility:	Downtown Partnership

4.18   Parking Management:

Parking management in Chapel Hill currently spans a series of departments, which is one of the most common approaches to parking in general. Typically, as a community grows or as parking demand grows, the need for comprehensive centralization of parking management becomes a key solution to better management and resolution of issues that can arise.

Parking issues that typical arise from a maturing parking system include:

⇒ perception of a lack of parking by the public and local business community,

⇒ perception of aggressive ticketing for parking infractions,

⇒ a general sense that parking is too costly or that parking is a form of taxation that drains a downtown commercial district, and

⇒ a perception that parking is a secondary or lesser consideration for local government.

Centralized parking management can help to re-focus parking function and provide for incremental changes towards the utilization of parking as an economic development tool in a community. At times, the lack of one common management focus restricts adaptive changes to a parking system that take advantage of new parking technologies or to allow for operational changes that reallocate long and short term parking to better suit a community's needs.

Downtown's are a core economic area in a community that need to be responsive to changes in economic dynamics, social interaction, population shifts, transportation modalities and a host of other variables that impact interaction and can have an impact on parking demand. Management focus that is representative of a local cross section of downtown stakeholders can benefit an entire downtown dynamic through greater involvement in parking management.

Specifically, a group such as the Downtown Partnership in Chapel Hill with a Director and Board presents an ideal opportunity to for the parking system to be managed by an organization with an economic development focus. Initiatives such as a Parking Ambassador program, courtesy tickets, quick parking re-allocation, public private initiatives can potentially be identified and implemented quicker and easier when directed by an economic development agency.

One common theme that emerged from the Chapel Hill study was the desire by local merchants to keep the parking fund revenue in downtown. Specifically, downtown merchants generally supported paid parking, but also felt that the parking revenue should stay in the downtown to either improve parking, or to undertake other initiatives that would benefit the downtown from an aesthetic, safety or functional standpoint.

The optimal choice in Chapel Hill is to assign parking management and enforcement to the Downtown Partnership. As a part of this recommendation, two important issues will need to be addressed. First, existing parking staff will need to be offered their exiting position with the new parking agency. Issues such as pay rates and benefits will need to be considered carefully by the Downtown Partnership.

The second issue is the existing debt service for parking facilities (currently projected at $457,847 for FY08 and $463,505 for FY09). Movement of the debt service to the downtown Partnership is not possible. A better option may be for the Downtown Partnership and the Town to agree to a profit sharing arrangement so that the Town continues to service existing debt and the Downtown Partnership transfers parking revenue back to the General Fund to help pay for some or all of the debt service payments.

Finally, within the constraints of the debt service payments, operating costs and funds for capital repairs, the Partnership can adjust parking charges based on needs of the downtown such as special event parking.

Summary:

Cost: No immediate increase or decrease in budget. Existing parking staff should be maintained and simply shifted to the Downtown Partnership along with the parking system. Gradual transition to part-time parking enforcement will potentially reduce current staffing costs. However, Chapel Hill does need more public parking and an expanded system will require adequate staffing.

Benefit: Greater economic development focus of the parking system; updated management and operational strategies; exploration of public private opportunities.

Action Time: 2008

Responsibility: Town Council/Downtown Partnership