# Section 2 – Analysis

# Section 2 Analysis

## Introduction

Concerns regarding the need for additional parking have been voiced by business owners and some residents of Surfside who feel that more parking is needed to support the business district while others (including some Surfside residents) are convinced that adequate parking exists. This study is intended to quantify and qualify the parking needs for the commercial district and determine if additional parking is needed and if so, the magnitude of the additional need. If a structure is needed, the study is also to investigate which of three alternative sites would be the best location for a parking structure or structures and how such a facility can fit in and provide additional benefit to the community.

The commercial district of Surfside, after having been declining for several years, is now experiencing a renaissance with many vibrant and exciting restaurants and businesses moving into the downtown and others expressing a desire to be part of the community. With one new hotel already under construction and another hotel project plus several residential developments under review together with expansion plans of two synagogues, Surfside has become a very desirable destination and residential community.

## Methodology

The level of existing activity downtown and the potential for even more business activity from the new developments which brings an excitement to the community has necessitated a thorough review of the parking system and the constraint that a lack of parking would have on the ability of Surfside to move forward. For this reason, the study undertaken in Surfside has employed a methodology pioneered by Rich and Associates which considers the existing and future land uses and quantifies the parking demand as it exists currently and as it can be expected to exist with the new development and full occupancy of existing storefronts. This then can provide the community with the necessary information to make an informed decision on the best course of action to pursue.

In order to assess the need for parking, Rich and Associates has relied upon a methodology that includes a series of steps:

- Quantifying the existing and potential square footage by land use within the defined study area.
- Quantifying and qualifying the amount of parking that services downtown Surfside.
- Collecting data from the Town's master meters which provided historical utilization and revenue data for the majority of the publicly provided on and off-street parking.

- Conducting turnover and occupancy counts of parking in the downtown district for a selected Friday (July 20, 2012) and Saturday (July 21, 2012) which provided actual utilization of the parking for benchmarking to the demand model.

- Quantifying the need for parking through the use of surveys and the collection of other information that provide relevant characteristics (drive and park rates, average length of stay, trip frequency etc) for application to Rich and Associates proprietary parking demand model.

- Rich and Associates has also quantified the parking needs by applying the Town's existing zoning ordinance to demonstrate what the parking needs would be without the constraint of the existing limited parking supply. The observed parking demand as provided by the demand model for the existing peak season condition (December through May) is constrained by the lack of parking.

- Application of the zoning requirements to demonstrate what the parking needs would be if downtown patrons were assured of being able to find a reasonably convenient parking space when coming to downtown Surfside. These results demonstrate the shortfall between the amount of parking needed to meet the existing and projected levels of business activity downtown and the amount of parking that is provided.

## Results

Land Use Summary

The land use information is based on data provided by the Town's Planning Consultant (Calvin, Giordano and Associates) and supported by Rich and Associates field inventory of buildings in the defined study area. The defined study area includes the commercial and multi-family residential properties from 92nd Street between Abbott Avenue and the Ocean to 96th Street. This total building area totals 363,000 gross square feet. This existing building area is further detailed (as shown in Table 1 on the following page) into the various land uses consistent with the Town's classifications for zoning purposes.

**Table 1 – Land Use Summary**

| Land Use | Square Footage |
|---|---|
| Financial | 25,212 |
| Retail | 74,869 |
| Grocery | 65,372 |
| Medical / Dental | 9,495 |
| Office / Professional | 28,201 |
| Restaurant | 36,046 |
| Vacant | 13,896 |
| **Sub-Total** | **253,091** |
| **Special Use** | |
| The Shul[1] | 65,732 |
| Town Hall[2] | 25,417 |
| Community Center[2] | 18,803 |
| **Special Use Square Footage** | **109,952** |
| **Total Square Footage** | **363,043** |
| Hotel (107 rooms)[3] | 75,097 |
| Residential Dwelling Units[4] | 1,141 |

1 *Based on seating capacity - assembly space*

2 *Not subject to zoning ordinance*

3 *Parking requirement based on rooms - (1 per hotel room or 1.25 per room for suite hotel)*

4 *Condominium / Apt Units in commercial district, excludes single family homes*

In addition to these existing uses there are a number of projects which are either:

a) already approved or;
b) currently being reviewed or;
c) under construction

These projects will add additional building area (and parking supply) to the downtown business district. These projects are listed in **Table 2**.

**Table 2 – Future Development Projects**

| Block | Project Name | Configuration | Required Parking | Parking Provided |
|---|---|---|---|---|
| 6 | ***92nd Street Hotel*** | 183 Rooms | 1 space per Room = 183 Spaces Req'd | 208 |
| 4 | ***The Chateu Condominium*** | 85 Units<br>32 - 1 Bedroom Units<br>25 - 2 to 3 Bedrooms<br>28 - 4 Bedroom Units | 1.50 per unit = 48 spaces required<br>2.00 per unit = 50 spaces required<br>2.25 per unit = 63 spaces required<br>161 Spaces Required | 180 |
| 3/8 | ***Grand Beach Hotel*** | 341 Rooms | 1 Space per Room = 341 Spaces Req'd | 368 |
| 9 | ***The Shul Expansion*** | Existing 264 Seat Sanctuary plus proposed 39,834 sf of construction on 3 floors* | It is anticipated that the new configuration will require 198± spaces. The Shul and the Town are working on determining this number | 101** |
| 16 | ***Young Israel*** | 216 seat Sanctuary | Number required per Settlement Agreement | 32*** |

* Plus one additional floor for parking (12,410 sf)
** It is expected that the new configuration will require 198± spaces and that approximately 101± spaces will be provided (Per Town Planner)
*** Per Settlement Agreement. Twenty-One spaces will be used in Abbott Lot

The Shul and Young Israel facilities are presumed to have the parking requirements based on the number of available seats in the primary assembly and other areas adjusted for the religious practices of the Orthodox community. The hotels have parking requirements which are based on the number of rooms (which are different for hotels and suite hotels). It is presumed that each of these projects will provide for their parking needs only and will not provide net additional parking supply that could be used by patrons to other commercial businesses downtown. This means that any "extra" parking spaces provided in excess of the code requirements by these projects are not intended for use by the public.

## Parking Supply

The supply of parking available in downtown Surfside is a combination of publicly provided and privately provided spaces. At the time of the field data collection there were a total of 2,982± spaces existing in the defined study area including public, private and parking associated with residential apartment or condominium projects but does not include residential parking associated with single family homes.

Whether the parking is public or private is an important distinction because privately provided spaces are only available to customers and staff of that business at any given time. Few businesses have sufficient parking associated with them to provide for all their staff and customer needs and therefore many rely on the publicly provided parking.


Public Parking - Under Rich's definition, public parking is parking that is available to anyone regardless of their destination. The public supply servicing downtown Surfside is a combination of parking provided in the Town's off-street parking lots and on-street spaces. Patrons using one of these spaces are free to visit any business or businesses they choose within the stated time limits of the parking.


Parking spaces in each of the Town's off-street lots are controlled by strategically placed "master meters" rather than individual meter heads. Patrons wishing to park in any public spaces are required to either have purchased a windshield sticker for parking in certain off-street lots or pay the appropriate fee (current rate $1.25 per hour) at one of the meters for their desired length of stay (up to four hours). Patrons paying by the hour once having paid for their parking at the meter are directed to then return to their vehicle and display the receipt on the vehicle dashboard. In the parking industry this is referred to as "pay and display". There are also spaces along Harding Avenue, Collins Avenue, Abbott Avenue and 95th Street that are also controlled by master meters at the same rate and that are also pay and display. In addition to the master meters, the Town still has a few older single or double head (each meter head controlling one space) mechanical meters in service along Collins Avenue and

94th Street.[1] In addition to paying at the meter, the Town sells permits that allow patrons to park in certain lots without paying at the meter. These permits currently cost $69.55 per month. In addition, there are residential parking permits that allow the residents who purchase these permits, to park in off-street lots and on-street spaces (excluding Harding) without paying at the meter. There are approximately 1,600 permits issued which cost $10.00 per year. Publicly provided and available parking totals 601± spaces.

Private Parking – In addition to the public lots, there are a few defined parking lots that are privately controlled for customer / visitor parking. These include the Publix Lot (and covered parking), Big Daddy's Lot and Wells Fargo Bank Lot plus the SunTrust Bank Lot on the south side of 96th Street adjacent to the Sun Harbour Hotel. Unlike publicly provided parking, parking provided by private entities is much more restrictive as patrons parking in these lots or spaces would be expected to be visiting the specific business (under threat of towing) and to move their vehicle as soon as that business is concluded to make room for the next customer. Visitors to the beach or other downtown businesses are generally discouraged from parking in these private lots for such purposes. Much of the other private parking (under Rich's definition) is along the Harding alleys. The alley parking because of its location (or condition) would generally not be intended for customers but is likely used only by staff members of the associated businesses. In this regard, the majority of the parking in downtown Surfside (excluding residential) is publicly provided. Even if there is private supply associated with a specific business, it may not be enough to meet all the businesses needs.

A subset of the private parking is the parking associated with multi-family residential properties such as along Collins Avenue and to a lesser extent along Harding or Abbott. The parking serving the properties on the west side of Collins is generally uncontrolled and thus accessible and conceivably (albeit unlikely due to the threat of being towed) open to use by non-residents. The multi-family properties along Abbott south of 95th Street also have limited parking in front of the property which is uncontrolled except for signage restricting it to residents.

[1] A trial was recently completed whereby 30 of the old mechanical meters heads were replaced with meter heads that accept credit cards. In the first 60 days of this experiment, revenues from these meters increased by 184 percent.

Conversely, the large condominium properties on the east side of Collins have controlled access parking either within gated lots or beneath the buildings or a combination of both which makes access by non-residents virtually impossible. There is, in many cases, limited amounts of parking outside the controlled area (intended for guests of residents) but which is also generally signed as for guest use only so that downtown patrons are discouraged from trying to occupy these spaces.

In order to quantify the number of parking spaces in these buildings which did not allow for a direct observation, Rich and Associates reviewed the Miami-Dade County Property Appraiser's website in order to get the number of bedrooms in each unit. This is because the Town's current code determines the number of parking spaces to be provided with the property based on the number of bedrooms in each unit. In these buildings, one bedroom units require 1.5 spaces per unit while two or three bedroom units require 2.0 spaces per unit and units with 4 or more bedrooms require 2.25 spaces per unit. For each of the newer buildings along Collins Avenue, the number of one bedroom units, two to three bedroom units and four or more bedroom units was collected from the Miami-Dade County website and the appropriate number of parking spaces calculated and used for the parking supply for that property. In any older condominium buildings where the parking supply could not be directly observed, just one space per residential unit was assumed for the amount of parking associated with the building. This data is summarized in **Appendix A**.

The allocation of the parking is illustrated by **Table 3** on the following page. Part A of the table shows that the proportion of publicly provided parking is only about 20 percent of the total. However, Section A also shows that 82 percent of the privately provided parking is associated with residential apartment and condominium properties. If the parking spaces associated with these residential properties are excluded (since they clearly are only intended for the residents' use) as shown by Part B of the table, the proportion of publicly provided parking increases to 58 percent of the available parking in the commercial district. The addition of the parking supply associated with the Grand Beach and Surfside Hotel projects (+576 spaces) plus the Young Israel spaces (+32) and approximately 70 additional spaces for the Shul expansion, will mean that the proportion of public parking (as shown in Part D of the Table) would be reduced from 58 percent to just 36 percent of the non-residential public and private parking supply in the downtown if no further public parking is constructed.

Rich and Associates generally recommend that at least 50 percent of the parking be publicly available in order to facilitate a more pedestrian friendly environment where a patron can park once and walk to multiple destinations. The parking supply is also shown by **Map 2** on **page 2-9.** The detailed inventory of the off-street and on-street parking supply is shown in **Appendix B** of the report.

**Table 3 – Parking Supply Summary**

**A**

**Existing Proportion Public / Private Including Residential**

| Public | # | % | |
|---|---|---|---|
| Off-Street | 461 | 76.7% | |
| On-Street | 140 | 23.3% | |
| **Total Public** | **601** | **100.0%** | **20.2%** |
| **Private** | | | |
| Residential | 1,949 | 81.9% | |
| Commercial | 306 | 12.9% | |
| Best Western Hotel | 57 | 2.4% | |
| Town Employee | 12 | 0.5% | |
| Reserved | 30 | 1.3% | |
| Police Vehicle | 27 | 1.1% | |
| **Total Private** | **2,381** | **100.0%** | **79.8%** |
| **Public / Private** | **2,982** | | **100.0%** |

**C**

**Future Proportion Public / Private Including Residential**

| Public | # | % | |
|---|---|---|---|
| Off-Street | 461 | 76.7% | |
| On-Street | 140 | 23.3% | |
| **Total Public** | **601** | **100.0%** | **15.9%** |
| **Private** | | | |
| Residential | 2,129 | 66.9% | |
| Commercial | 984 | 30.9% | |
| Best Western | NA | 0.0% | |
| Town Employee | 12 | 0.4% | |
| Reserved | 30 | 0.9% | |
| Police Vehicle | 27 | 0.8% | |
| **Total Private** | **3,182** | **100.0%** | **84.1%** |
| **Public / Private** | **3,783** | | **100.0%** |

**B**

**Proportion Public / Private Excluding Residential**

| Public | # | % | |
|---|---|---|---|
| Off-Street | 461 | 76.7% | |
| On-Street | 140 | 23.3% | |
| **Total Public** | **601** | **100.0%** | **58.2%** |
| **Private** | | | |
| Residential | **NA** | **0.0%** | |
| Commercial | 306 | 12.9% | |
| Best Western Hotel | 57 | 2.4% | |
| Town Employee | 12 | 0.5% | |
| Reserved | 30 | 1.3% | |
| Police Vehicle | 27 | 1.1% | |
| **Total Private** | **432** | **18.1%** | **41.8%** |
| **Public / Private** | **1,033** | | **100.0%** |

**D**

**Proportion Public / Private Excluding Residential**

| Public | # | % | |
|---|---|---|---|
| Off-Street | 461 | 76.7% | |
| On-Street | 140 | 23.3% | |
| **Total Public** | **601** | **100.0%** | **36.3%** |
| **Private** | | | |
| Residential | **NA** | **0.0%** | |
| Commercial | 984 | 30.9% | |
| Best Western Hotel | NA | 0.0% | |
| Town Employee | 12 | 0.4% | |
| Reserved | 30 | 0.9% | |
| Police Vehicle | 27 | 0.8% | |
| **Total Private** | **1,053** | **33.1%** | **63.7%** |
| **Public / Private** | **1,654** | | **100.0%** |

# PARKING STUDY

FOR

# TOWN OF SURFSIDE

SURFSIDE, FLORIDA

RICH & ASSOCIATES

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Engineers, Planners

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LEGEND:

- (#) BLOCK NUMBER
- STUDY AREA

ON-STREET PARKING

- 4-HOUR METERS
- UNMARKED
- NO PARKING

OFF-STREET PARKING

- PUBLIC
- PRIVATE
- RESIDENTIAL
- POLICE
- BUS
- HOTEL

Sheet Title:

## PARKING SUPPLY

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-24-13 |
| Checked by | dwb |

NORTH

MAP Number:

## MAP 2

## Public Space Turnover Study

With the parking supply quantified and qualified, the next step in the process is to evaluate how the existing parking supply is being used. In this regard, among the critical elements of the Parking Structure Feasibility Study was the turnover / occupancy analysis completed on Friday July 20, 2012 and Saturday July 21, 2012[2]. This information, when compared against historical data on parking activity in the downtown and building occupancy information can be helpful when determining the need for more parking.

There are a number of useful elements available from the turnover / occupancy analysis. The methodology employed by Rich and Associates provides valuable data in addition to the critical information of the hourly occupancy of total parking supply throughout the survey dates. In those public lots and on-street spaces where license plate information was recorded, the number of times (hours) vehicles were observed parked in the same parking space can be determined which provides an indication of parking abuse.

With both public and private spaces included in the occupancy analysis, this can be further refined into number and percentage of public off-street parking spaces occupied versus privately controlled spaces. It is important to analyze private parking areas in addition to the public spaces to see if there are opportunities with underutilized private supply. In past studies completed by Rich and Associates, the turnover and occupancy analysis has identified underutilized privately controlled parking areas. In some instances, in these past studies, the land owner has been approached about either selling or leasing the land to the municipality for additional public parking. Additionally, where spaces are being occupied (or underutilized) can also provide vital information to the analysis of the adequacy of downtown parking. If certain areas have very high proportions of parking utilization while others are going unused, such information can provide an indication of how far patrons may be willing to walk for available parking. Finally, the number of occupied parking spaces at peak time as determined from the turnover / occupancy analysis can be compared against the occupied building square footage to develop a parking occupancy per one-thousand occupied square feet. This in turn can be compared against the number of provided spaces and factored for any vacant square footage that may become occupied in the future.

[2] Saturday occupancy study results are shown in Appendix C2.

The turnover / occupancy analysis was conducted by Rich and Associates staff circulating through on-street and off-street parking areas once per hour between 9:00 am and 9:00 pm on the two selected dates. The first three characters of each license plate were recorded in the on-street spaces along Harding Avenue between 96th and 94th Streets as well as on Abbott Avenue between 95th and 96th Street. License plate information was also recorded on both Friday and Saturday for each space in the Abbott Avenue Lot, the 94th Street Lot, the parking lot at 93rd and Harding and the Post Office Lot. ***License plate data was recorded in the lot at 95th Street and Collins and in the lot at 93rd Street and Collins <u>on the Friday survey date only</u>. Because of time constraints of being able to complete the circuits, on the Saturday survey date, just the periodic occupancy of the spaces in these two lots was recorded***. Using the license plate information it was possible to determine not only the occupancy of the parking area but also if the spaces were turning over or if vehicles were staying beyond the defined four-hour time limits. **Table 4** on **page 2-13** summarizes the results of the turnover analysis for both the Friday and Saturday survey dates. On-street spaces and off-street parking lots are shown separately.

Table 4 shows that approximately 6 percent of the vehicles observed in on-street spaces on the Friday survey date were staying beyond the stated four hour limit which dropped to only about 3½ percent on the Saturday survey date. Even if the six percent of overstaying vehicles paid for the added time, this is not permitted by Section 74-42 of the Town code as noted below so these vehicles are all in violation. One caveat of this analysis is that although the north side of 95th Street between Collins and Harding was not observed for turnover on the Saturday survey date, most of the vehicles (31 of the 33 vehicles) counted on Friday in these spaces were parking for less than four hours (in fact less than two hours) so even if these spaces had been included it is not likely that the 3½ percent of vehicles staying beyond four hours on Saturday would have been significantly higher since the average stay for all on-street spaces decreased from Friday's results.

Vehicles parking for extended periods in prime spaces are often the primary reason why some patrons may feel that the parking is inadequate in a downtown as the most desirable spaces are always occupied. This is the main reason why enforcement of reasonable time limits and making sure that the spaces do in fact "turn over" is so critical to the smooth operation of downtown parking.

In this regard, the Town has an existing ordinance which prohibits patrons from "feeding the meters" to extend the time limit as noted below in any parking space in town.

**Sec. 74-42. - Deposit of coin to extend parking time beyond legal time prohibited.**

It shall be unlawful for any person to deposit or cause to be deposited in any parking meter in the town any coin for the purpose of enlarging or extending the parking time for any vehicle beyond that legal parking time which has been established for the parking space immediately adjacent to which such parking meter shall have been placed.

Rich and Associates typically consider violation rates of 5 percent or less indications of adequate enforcement so the six percent violation rate is not cause for undue concern. In studies conducted for other municipalities Rich and Associates have experienced on-street violation rates as high as eighteen percent of the vehicles abusing the stated time limit. It should also be noted however that on-street parking in other jurisdictions studied by Rich and Associates is more typically limited to two hours.

**Table 4 – Turnover Counts Summary – On-Street Off-Street**

| Friday July 20, 2012 | Number of Spaces | Turnover | Turnover Index | 1 hour or less | Between 1 & 2 Hours | Between 2 & 3 Hours | Between 3 & 4 Hours | Between 4 & 5 Hours | Between 5 & 6 Hours | Between 6 & 7 Hours | Between 8 & 9 Hours | Between 9 & 10 Hours | Between 10 & 11 Hours | Between 11 & 12 Hours | Total Cars Observed | Average Occupancy |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Street Spaces** | **Number of Times Cars Observed ==>** | | | **1X** | **2X** | **3X** | **4X** | **5X** | **6X** | **7X** | **8X** | **9X** | **10X** | **11X** | | |
| West Side Harding (95th - 96th) | 20 | 4.80 | 5.65 | 63 | 18 | 6 | 2 | 1 | 1 | 5 | 0 | 0 | 0 | 0 | **96** | **85.0%** |
| West Side Harding (94th - 95th) | 6 | 4.17 | 8.74 | 16 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **25** | **47.7%** |
| East Side Harding (95th - 96th) | 20 | 5.20 | 6.08 | 72 | 19 | 7 | 2 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | **104** | **85.5%** |
| East Side Harding (94th - 95th) | 18 | 4.89 | 7.75 | 74 | 6 | 6 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | **88** | **63.1%** |
| North Side 95th (Harding to Collins) | 6 | 5.50 | 7.41 | 29 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | **33** | **74.2%** |
| East Side Abbott (95th - 96th) | 16 | 2.00 | 3.63 | 15 | 8 | 0 | 1 | 2 | 0 | 4 | 1 | 0 | 1 | 0 | **32** | **55.1%** |
| 95th Street (Abbott - Harding) | 1 | 1.00 | 1.57 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | **1** | **63.6%** |
| **Combined On-Street** | **87** | **4.36** | | **269** | **58** | **23** | **6** | **3** | **2** | **11** | **4** | **1** | **2** | **0** | 379 | |
| | | | | **71.0%** | **15.3%** | **6.1%** | **1.6%** | **0.8%** | **0.5%** | **2.9%** | **1.1%** | **0.3%** | **0.5%** | **0.0%** | | |
| **Average Stay (Hours:Minutes)** | | | | | | | | | | | **6.1%** | | | | **1:48** | |
| **Off-Street Lots** | | | | | | | | | | | | | | | | |
| 93rd Street & Collins Lot | 17 | 2.71 | 4.05 | 17 | 8 | 10 | 6 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | **46** | **66.8%** |
| 93rd Street & Harding Lot | 37 | 1.46 | 2.75 | 22 | 6 | 3 | 0 | 0 | 4 | 12 | 6 | 1 | 0 | 0 | **54** | **53.1%** |
| 94th Street & Harding Lot | 99 | 1.56 | 2.59 | 48 | 17 | 19 | 12 | 3 | 6 | 29 | 6 | 7 | 7 | 0 | **154** | **60.1%** |
| 95th Street & Collins Lot | 20 | 2.55 | 4.96 | 34 | 8 | 2 | 1 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | **51** | **51.4%** |
| Abbott Ave Lot | 207 | 2.93 | 4.12 | 328 | 76 | 65 | 31 | 20 | 21 | 38 | 11 | 14 | 2 | 0 | **606** | **71.1%** |
| Post Office Lot | 61 | 2.38 | 4.88 | 76 | 28 | 22 | 4 | 4 | 3 | 8 | 0 | 0 | 0 | 0 | **145** | **48.7%** |
| **Combined Off-Street** | **441** | **2.39** | | **525** | **143** | **121** | **54** | **28** | **37** | **93** | **23** | **23** | **9** | **0** | 1056 | |
| | | | | 52.5 | 157.3 | 254.1 | 167.4 | 114.8 | 188.7 | 567.3 | 186.3 | 209.3 | 90.9 | 0 | **1988.6** | |
| | | | | | | | | | | | | | | | **1.88** | |
| **Average Stay (Hours:Minutes)** | | | | **49.7%** | **13.5%** | **11.5%** | **5.1%** | **2.7%** | **3.5%** | **8.8%** | **2.2%** | **2.2%** | **0.9%** | **0.0%** | **1:52** | |
| | | | | | | | | | | | **20.2%** | | | | | |
| **Combined On-Street & Off-Street** | 528 | **2.72** | | **794** | **201** | **144** | **60** | **31** | **39** | **104** | **27** | **24** | **11** | **0** | 1435 | |
| **Average Stay (Hours:Minutes)** | | | | | | | | | | | | | | | **1:36** | |

| Saturday July 21, 2012 | Number of Spaces | Turnover | Turnover Index | 1 hour or less | Between 1 & 2 Hours | Between 2 & 3 Hours | Between 3 & 4 Hours | Between 4 & 5 Hours | Between 5 & 6 Hours | Between 6 & 7 Hours | Between 8 & 9 Hours | Between 9 & 10 Hours | Between 10 & 11 Hours | Between 11 & 12 Hours | Total Cars Observed | Average Occupancy |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **On-Street Spaces** | **Number of Times Cars Observed ==>** | | | **1X** | **2X** | **3X** | **4X** | **5X** | **6X** | **7X** | **8X** | **9X** | **10X** | **11X** | | |
| West Side Harding (95th - 96th) | 20 | 5.05 | 8.54 | 83 | 10 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **101** | **59.1%** |
| West Side Harding (94th - 95th) | 6 | 4.33 | 18.52 | 22 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **26** | **23.4%** |
| East Side Harding (95th - 96th) | 20 | 5.05 | 8.54 | 86 | 11 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | **101** | **59.1%** |
| East Side Harding (94th - 95th) | 18 | 3.83 | 9.49 | 59 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **69** | **40.4%** |
| East Side Abbott (95th - 96th) | 16 | 1.38 | 2.52 | 6 | 4 | 1 | 2 | 2 | 1 | 1 | 1 | 0 | 4 | | **22** | **54.5%** |
| **Combined On-Street** | **80** | **3.99** | | **256** | **35** | **9** | **8** | **2** | **2** | **1** | **1** | **0** | **5** | **0** | 319 | |
| | | | | **80.3%** | **11.0%** | **2.8%** | **2.5%** | **0.6%** | **0.6%** | **0.3%** | **0.3%** | **0.0%** | **1.6%** | **0.0%** | | |
| **Average Stay (Hours:Minutes)** | | | | | | | | | | | **3.4%** | | | | **1:35** | |
| **Off-Street Lots** | | | | | | | | | | | | | | | | |
| 93rd Street & Harding Lot | 37 | 1.32 | 3.07 | 14 | 10 | 7 | 8 | 0 | 2 | 0 | 1 | 1 | 6 | 0 | **49** | **43.2%** |
| 94th Street & Harding Lot | 99 | 1.46 | 2.41 | 26 | 24 | 26 | 10 | 6 | 5 | 8 | 22 | 2 | 16 | 0 | **145** | **60.8%** |
| Abbott Ave Lot | 207 | 1.83 | 4.49 | 199 | 78 | 25 | 23 | 7 | 4 | 16 | 14 | 5 | 8 | 0 | **379** | **40.8%** |
| Post Office Lot | 61 | 2.26 | 4.54 | 53 | 38 | 18 | 17 | 5 | 2 | 1 | 3 | 0 | 1 | 0 | **138** | **49.8%** |
| **Combined Off-Street** | **404** | **1.76** | | **292** | **150** | **76** | **58** | **18** | **13** | **25** | **40** | **8** | **31** | **0** | 711 | |
| **Average Stay (Hours:Minutes)** | | | | 29.2 | 165 | 159.6 | 179.8 | 73.8 | 66.3 | 152.5 | 284 | 72.8 | 313.1 | 0 | **1496.1** | |
| | | | | | | | | | | | | | | | **2.10** | |
| **Average Stay (Hours:Minutes)** | | | | **41.1%** | **21.1%** | **10.7%** | **8.2%** | **2.5%** | **1.8%** | **3.5%** | **5.6%** | **1.1%** | **4.4%** | **0.0%** | **1:6** | |
| | | | | | | | | | | | **19.0%** | | | | | |
| **Combined On-Street & Off-Street** | 484 | **2.13** | | **548** | **185** | **85** | **66** | **20** | **15** | **26** | **41** | **8** | **36** | **0** | 1030 | |
| **Average Stay (Hours:Minutes)** | | | | | | | | | | | | | | | **1:38** | |

**Table 4** also shows how approximately 20 percent of the vehicles in the public off-street parking lots were staying beyond four hours on both the Friday and Saturday survey dates. However, it is not as clear that these vehicles are necessarily in violation since holders of business permits are allowed to park in certain off-street lots for longer than four hours. It should be noted however that this is not clear in the existing ordinance but rather is intended to only provide a convenience to paying for parking without having to deposit money each day.

**Sec. 74-57. - Enforcement; windshield stickers.**

(a) The town manager is authorized and directed to enforce the pertinent provisions of this article in connection with the town's operation of such street and off-street parking facilities; provided, however, in lieu of requiring the deposit of coins in parking meters installed within street and off-street parking areas and to add to the convenience of those using such facilities, the town manager be, and he hereby is authorized to sell and issue either stickers or removable placards, the exhibition of which will permit the vehicle upon which they are so exhibited to remain in a metered parking space, in areas designated by the town manager, without the deposit of a coin. Such stickers and placards shall not be transferable or assignable. Only the vehicle upon which a current sticker shall have been placed shall be entitled to parking in a metered parking space, in areas designated by the town manager, without the deposit of a coin.

## Town's Historical Data

Another important component of the parking assessment for the Town of Surfside was information provided regarding utilization of the on-street spaces and off-street lots controlled by the Town's master meter system. Monthly summary sheets were provided (an example is shown by **Figure A** on the following page) covering the period from December 2010 through December of 2012. **Table 5** on **page 2-16** compiles the data from these reports showing the number of cash, credit card and total transactions from calendar years 2011 and 2012. This data was requested by Rich and Associates so that the occupancy of parking data collected by Rich and Associates as part of the fieldwork could be compared to levels of activity during other months of the year and appropriate conclusions and adjustments made in quantifying the downtown parking needs. Concerns were voiced by some citizens regarding performing the turnover and occupancy counts during the spring or summer months rather than during "peak season" which is presumed to be during the winter months. However, the real purpose of the occupancy counts is to calibrate the parking demand model to what is actually happening at that time and then use the model to forecast the conditions as they may exist at other periods of the year.

## EMS Transaction Summary

Date/Time: 07/01/2012 00:00 to 07/31/2012 23:59:59 EDT
Setting: All
Region/Pay Station: All Regions
Stall Number: N/A Plate Number: N/A
Ticket #: All
Coupon #: N/A
Transaction Type: All
Grouping: None

Overall Summary

| CASH | | |
|---|---|---|
| Total Collections | 22510 | $44945.65 |
| Revenue | 25508 | $44926.40 |
| Change Issued | 0 | $0.00 |
| Refund Tickets | 10 | $19.25 |
| Total Refunds | 10 | $19.25 |
| Excess Payment | 353 | $294.05 |
| Attendant Deposit | 0 | $0.00 |

| CREDIT CARD | | |
|---|---|---|
| Total Collections | 11996 | $33375.40 |
| Revenue | 11996 | $33375.40 |

| VALUE CARD | | |
|---|---|---|
| Total Collections | 0 | $0.00 |
| Revenue | 0 | $0.00 |

| PATROLLER CARD | | |
|---|---|---|
| Revenue | 0 | $0.00 |
| Test Transactions | 0 | $0.00 |

| SMART CARD | | |
|---|---|---|
| Revenue | 0 | $0.00 |
| Recharges | 0 | $0.00 |

| TOTAL | | |
|---|---|---|
| Total Transactions | | 37539 |
| Total Collections | 37479 | $78321.05 |
| Revenue | 37477 | $78301.80 |

Report Date: 09/18/2012 15:01 EDG EMS Transaction Summary 1 of 1

**Figure A -** Example of Historical Master Meter Report showing July 2012 activity for all master meters combined.

**Table 5** - Master Meter Transaction Results 2011 - 2012

| | Cash | | | | Credit Card | | | | Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2011** | Revenue | Transactions | Avg Transaction | Avg Stay (hours:min) | Revenue | Transactions | Avg Transaction | Avg Stay (hours:min) | Revenue | Transactions | Avg Transaction | Avg Stay (hours:min) |
| Jan | $32,754.65 | 26,349 | $1.24 | 1:14 | $13,540.25 | 6,918 | $1.96 | 1:57 | $46,294.90 | 33,267 | $1.39 | 1:23 |
| Feb | $33,332.50 | 25,785 | $1.29 | 1:17 | $14,686.25 | 7,340 | $2.00 | 2:0 | $48,018.75 | 33,125 | $1.45 | 1:26 |
| Mar | $39,211.20 | 30,214 | $1.30 | 1:17 | $17,879.85 | 8,585 | $2.08 | 2:4 | $57,091.05 | 38,799 | $1.47 | 1:28 |
| Apr | $40,006.35 | 29,063 | $1.38 | 1:22 | $16,698.85 | 8,027 | $2.08 | 2:4 | $56,705.20 | 37,090 | $1.53 | 1:31 |
| May | $42,023.50 | 28,704 | $1.46 | 1:27 | $17,340.95 | 7,654 | $2.27 | 2:15 | $59,364.45 | 36,358 | $1.63 | 1:37 |
| Jun | $37,703.35 | 27,082 | $1.39 | 1:23 | $17,722.50 | 7,728 | $2.29 | 2:17 | $55,425.85 | 34,810 | $1.59 | 1:35 |
| July | $42,902.80 | 29,277 | $1.47 | 1:27 | $19,350.40 | 8,364 | $2.31 | 2:18 | $62,253.20 | 37,641 | $1.65 | 1:39 |
| Aug | $37,919.15 | 27,246 | $1.39 | 1:23 | $17,844.05 | 7,925 | $2.25 | 2:15 | $55,763.20 | 35,171 | $1.59 | 1:35 |
| Sep | $36,653.50 | 25,179 | $1.46 | 1:27 | $18,833.00 | 8,128 | $2.32 | 2:19 | $55,486.50 | 33,307 | $1.67 | 1:39 |
| Oct | $32,183.85 | 23,326 | $1.38 | 1:22 | $17,140.50 | 7,553 | $2.27 | 2:16 | $49,324.35 | 30,879 | $1.60 | 1:35 |
| Nov | $36,590.60 | 23,023 | $1.59 | 1:35 | $20,669.45 | 7,937 | $2.60 | 2:36 | $57,260.05 | 30,960 | $1.85 | 1:50 |
| Dec | $41,609.45 | 26,622 | $1.56 | 1:33 | $22,646.75 | 8,945 | $2.53 | 2:31 | $64,256.20 | 35,567 | $1.81 | 1:48 |
| 12-Month Total | $452,890.90 | 321,870 | | | $214,352.80 | 95,104 | | | $667,243.70 | 416,974 | | |
| Average | $37,740.91 | 26,823 | $1.41 | 1:24 | $17,862.73 | 7,925 | $2.25 | 2:15 | $55,603.64 | 34,748 | $1.60 | 1:36 |
| **2012** | | | | | | | | | | | | |
| Jan | $44,666.30 | 28,497 | $1.57 | 1:15 | $24,612.05 | 9,682 | $2.54 | 2:2 | $69,278.35 | 38,179 | $1.81 | 1:27 |
| Feb | $42,389.45 | 26,943 | $1.57 | 1:15 | $22,951.65 | 9,366 | $2.45 | 1:57 | $65,341.10 | 36,309 | $1.80 | 1:26 |
| Mar | $45,176.15 | 26,896 | $1.68 | 1:20 | $26,584.80 | 10,444 | $2.55 | 2:2 | $71,760.95 | 37,340 | $1.92 | 1:32 |
| Apr | $39,382.85 | 24,392 | $1.61 | 1:17 | $23,088.00 | 9,154 | $2.52 | 2:1 | $62,470.85 | 33,546 | $1.86 | 1:29 |
| May | $40,492.00 | 24,574 | $1.65 | 1:19 | $28,040.15 | 10,704 | $2.62 | 2:5 | $68,532.15 | 35,278 | $1.94 | 1:33 |
| Jun | $39,155.40 | 23,481 | $1.67 | 1:20 | $28,357.85 | 10,666 | $2.66 | 2:7 | $67,513.25 | 34,147 | $1.98 | 1:34 |
| July | $44,945.55 | 25,508 | $1.76 | 1:24 | $33,375.40 | 11,996 | $2.78 | 2:13 | $78,320.95 | 37,504 | $2.09 | 1:40 |
| Aug | $41,545.60 | 25,036 | $1.66 | 1:19 | $27,370.00 | 10,623 | $2.58 | 2:3 | $68,915.60 | 35,659 | $1.93 | 1:32 |
| Sep | $37,465.90 | 22,070 | $1.70 | 1:21 | $25,403.75 | 9,688 | $2.62 | 2:5 | $62,869.65 | 31,758 | $1.98 | 1:35 |
| Oct | $35,516.80 | 22,380 | $1.59 | 1:16 | $25,383.40 | 9,932 | $2.56 | 2:2 | $60,900.20 | 32,312 | $1.88 | 1:30 |
| Nov | $37,009.40 | 22,879 | $1.62 | 1:17 | $26,287.50 | 10,095 | $2.60 | 2:4 | $63,296.90 | 32,974 | $1.92 | 1:32 |
| Dec | $42,904.65 | 25,998 | $1.65 | 1:19 | $31,563.95 | 12,061 | $2.62 | 2:5 | $74,468.60 | 38,059 | $1.96 | 1:33 |
| 12-Month Total | $490,650.05 | 298,654 | | | $323,018.50 | 124,411 | | | $813,668.55 | 423,065 | | |
| Average | $40,887.50 | 24,888 | $1.64 | 1:18 | $26,918.21 | 10,368 | $2.60 | 2:4 | $67,805.71 | 35,255 | $1.92 | 1:32 |

The summary data from the master meters showed the monthly activity which was useful in assessing how well the turnover and occupancy counts completed in July of 2012 represented the level of activity throughout the year. A graph of the data from **Table 5** is shown by **Figure B** below. The graph demonstrates how the 2 year average is 35,000 transactions per month in the lots and on-street spaces. One surprising result was that the 37,500 transactions recorded in July of 2012 in the lots and on-street spaces covered by the master meters (the same period during which the turnover and occupancy counts were conducted downtown) put it as one of the busier months of the year. July of 2011 was also one of the busier months of calendar year 2011. The data below shows that the 37,500 transactions recorded in July of 2012 was within 3.3 percent of the busiest month of the last 25 months (March of 2011) which had 38,799 transactions recorded. While the data shows that July is busy it must be recognized that this data would not include holders of residential permits who can park without paying the meters. If many of these patrons return during the in-season months that could explain the increased parking space occupancy without the significant increase in recorded transactions.

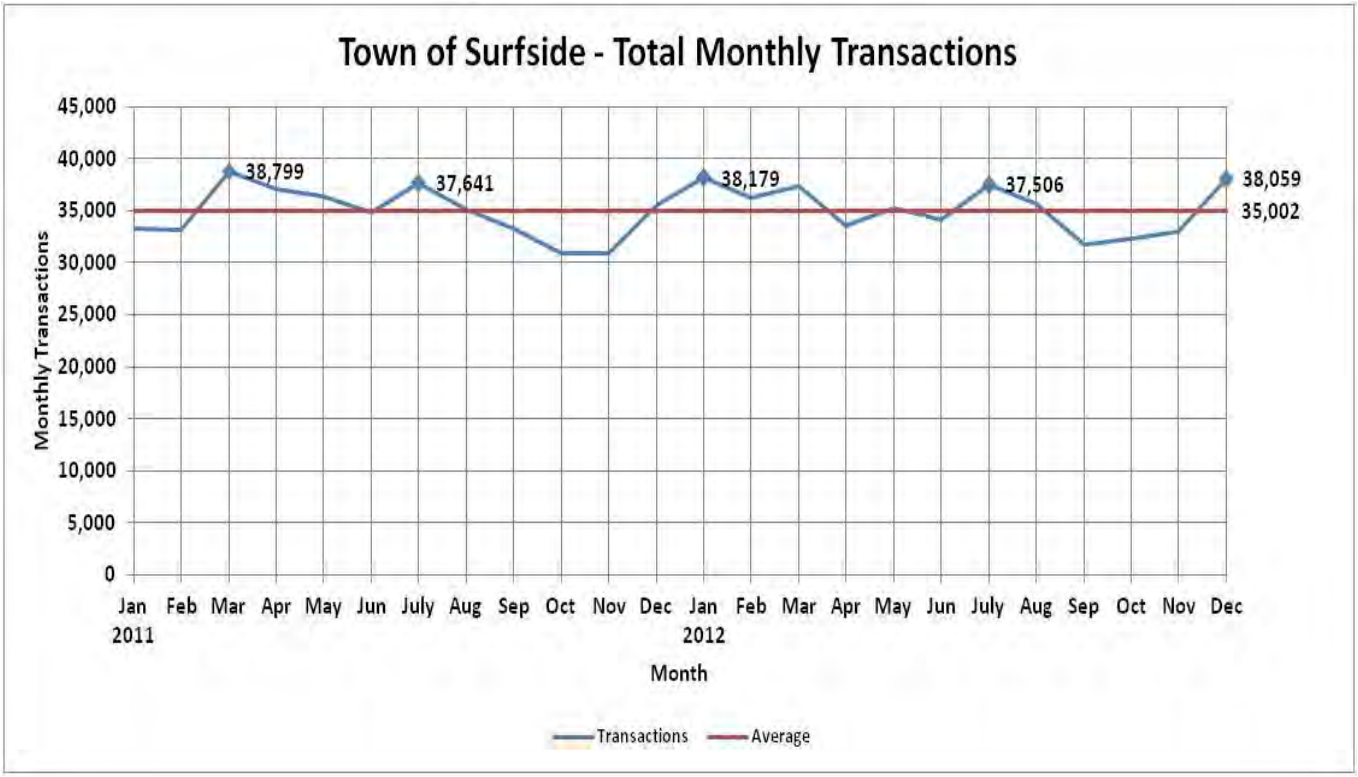



**Figure B** - Average Monthly Master Meter Transactions 2011 – 2012.

## Occupancy Study

Rich and Associates use the results of the occupancy study as a basis to compare the actually observed parking needs to the parking needs as determined based on the parking model developed. The observed parking spaces include the public and non-residential private spaces between and including the north side of 92nd Street to the south side of 96th Street and from the Ocean to and including the east side of Abbott Avenue. The model relates the level of building occupancy at the time of the fieldwork to the parking demand at the same time. Therefore, this initial run of the model does not include the potential parking demand from currently vacant space nor does it include the parking demand from new developments. The impact of re-occupancy of the vacant building space and future development will be discussed in the section on future parking demand, beginning on **page 2-32.**

The parking model uses survey material completed by the various businesses noting typical numbers of customers coming to the business and staffing needs both in-season (December – May) and out-of-season. The model relates this information to land use data and ITE (Institute of Transportation Engineers) projections for shared use rates by time of day. The intent is that the composite parking need from the various land uses "should" match the observed conditions of parking utilization. This then provides a reference point to project the parking needs for the peak season.

Using the occupancy count results, the intent is to calibrate the parking demand model by correlating the conditions at the time of the occupancy counts to the values in the parking demand model which are based on survey answers. If the parking demand model developed on the basis to the questions asked regarding out-of-season levels of activity accurately shows the parking needs as they were observed at the same time (out-of-season) then the expectation is that the survey information is "reasonable". If the out-of-season answers are reasonable then it is assumed that the responses regarding the "in-season" levels of activity are similarly reasonable. This information is then applied to the demand model and results in the calculated parking demand during the peak season. With this demand quantified based on the survey results, Rich and Associates then extrapolated back to what the likely parking space occupancy would be if the counts had been conducted during the peak season.

The major focus of the occupancy analysis and this study is to determine the adequacy of the parking supply provided by the Town to meet the needs of the existing and potential future businesses. Most businesses, with few exceptions, depend on the publicly provided parking supply provided by the Town to meet the needs of their customers and staff. This is

due to the fact that the existing geographic constraints of the building configuration of downtown affords very few opportunities for businesses to provide their own parking adjacent to their business as there simply isn't the land available to provide the parking. This may be one reason why the Town has the off-site parking ordinance in which businesses pay an amount equal to the cost of providing for any spaces for which they are deficient per the zoning ordinance. This amount which is periodically adjusted by the Town Commission is set at a level to cover the costs of developing the parking in a parking structure.

Those businesses which are fortunate enough to have property for parking attached or nearby to their business generally restrict that parking for only their customer or staff use and expect their customers to move their vehicle at the conclusion of their business. It is the businesses that do not have their own parking that suffer when the amount of publicly provided parking is insufficient to meet the business needs of the downtown community.

Of the two occupancy study survey days in July 2012 (Friday July 20th and Saturday July 21st), Friday was the busier of the two. **Figure C** below demonstrates the occupancy study results showing that 466 of 601 (78%) publicly provided spaces in the defined study area between 92nd Street and 96th Street were occupied at peak time (12:00 to 1:00 pm) on this date. The detailed occupancy results from the Friday and Saturday survey dates are shown in **Appendix C**.

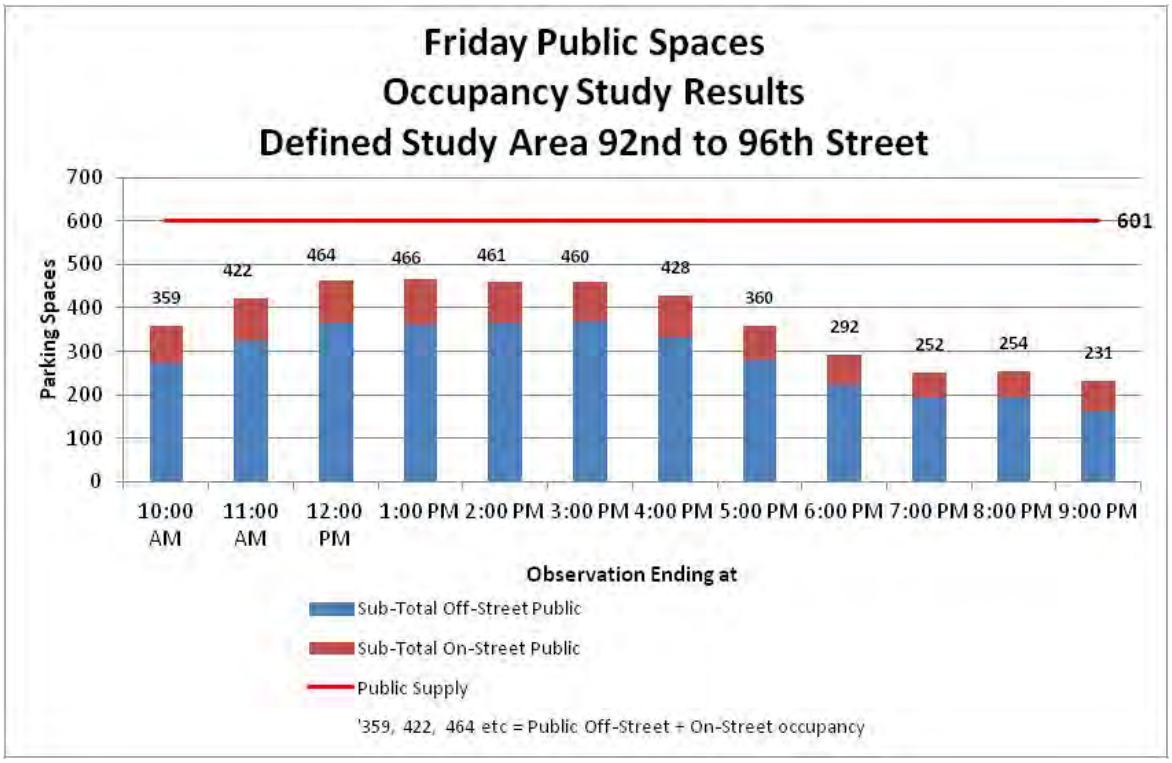



**Figure C –** Friday Survey Date Public Space Occupancy Summary

In order to demonstrate the parking needs during the peak season, the occupancy of the private spaces must also be considered and the combined public /private occupancy compared to the calculated off-season parking needs as determined from the demand model. If the calculated demand from the model then matches the observed parking needs, the parking can be calculated for the peak season using the survey responses noting the numbers of customers and staffing for the peak season and from this the expected parking utilization of the publicly provided parking extrapolated.

As **Figure D** below shows, the peak occupancy of the privately provided parking spaces as observed (again in the defined study area between 92nd Street and 96th Street between the Ocean and including the east side of Abbott Avenue) as part of the occupancy analysis totaled 230 spaces at the peak time (1:00 pm). The 12:00 to 1:00 pm hour was also the time period which coincided with the peak occupancy of the publicly provided spaces. The peak hour occupancy for all spaces is shown by **Map 3** on **page 2-21.**

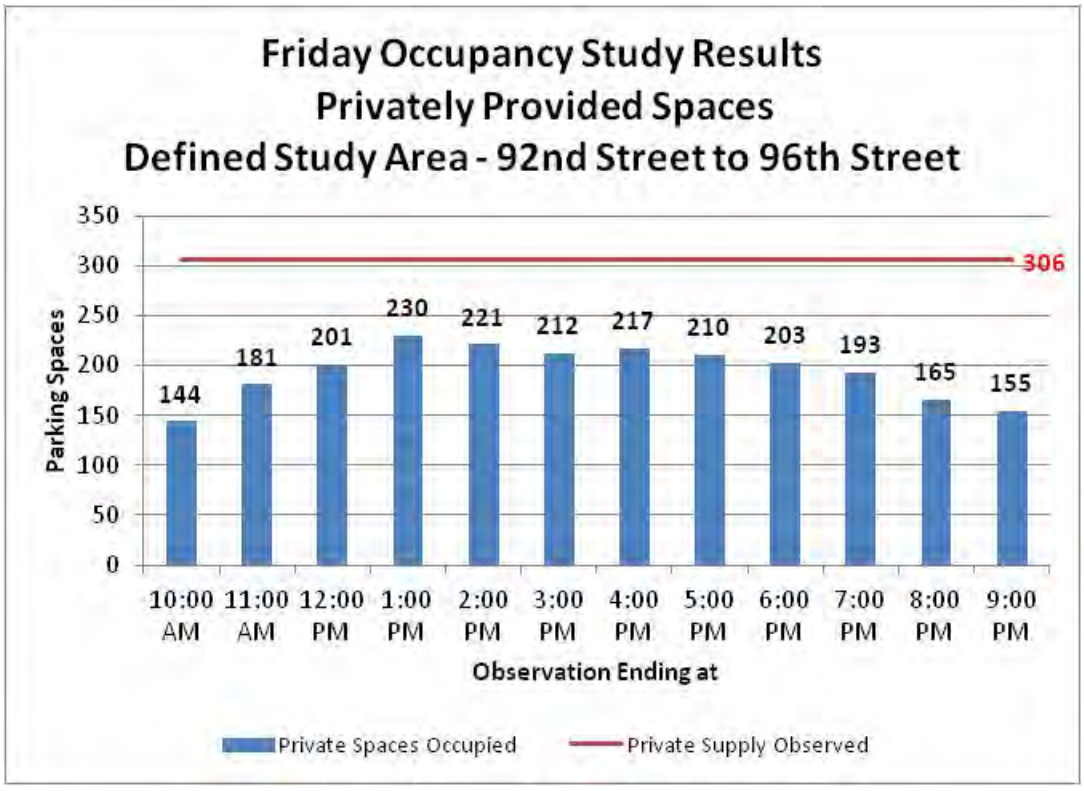



**Figure D – Friday Survey Date Private Space Occupancy Summary**

# PARKING STUDY

FOR

# TOWN OF SURFSIDE

SURFSIDE, FLORIDA

RICH & ASSOCIATES

Parking Consultants, Architects
Engineers, Planners

26877 NW Hwy. Suite 208
Southfield, Mich. 48033
Tel: 248-353-5080
Fax: 248-353-3830

Lutz, Florida
Tel: 813-949-9860

www.richassoc.com

LEGEND:

- (#) BLOCK NUMBER
- STUDY AREA

PEAK HOUR % OCCUPANCY

- 85% through 100%
- 75% through 84%
- 50% through 74%
- 0 through 49%
- * Construction on Friday

Sheet Title:

## FRIDAY PEAK HOUR

NOON – 1 PM

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-10-13 |
| Checked by | dwb |

NORTH

MAP Number:

## MAP 3

2-21

As noted previously, the primary purpose of the occupancy count is to provide a means to validate the survey responses and how this information when applied to the parking demand model accurately represent what is actually occurring with the parking at that same time.

The parking demand model uses the land use data as detailed in **Table 1** on **page 2-3** applied to the survey responses and ITE (Institute of Transportation Engineers) projections of shared use to quantify the amount of parking needed by time of day. The relative amount of parking needed by each type of land use is shown by the different shaded areas in **Figure E** below. This model and table demonstrates how the amount of parking needed by one type of land use may be increasing (such as restaurants) around lunchtime and during the evening hours while a different land use (such as office or retail) may be declining. The values shown in **Figure E** total the amount of parking needed in aggregate of the various land uses by time of day.

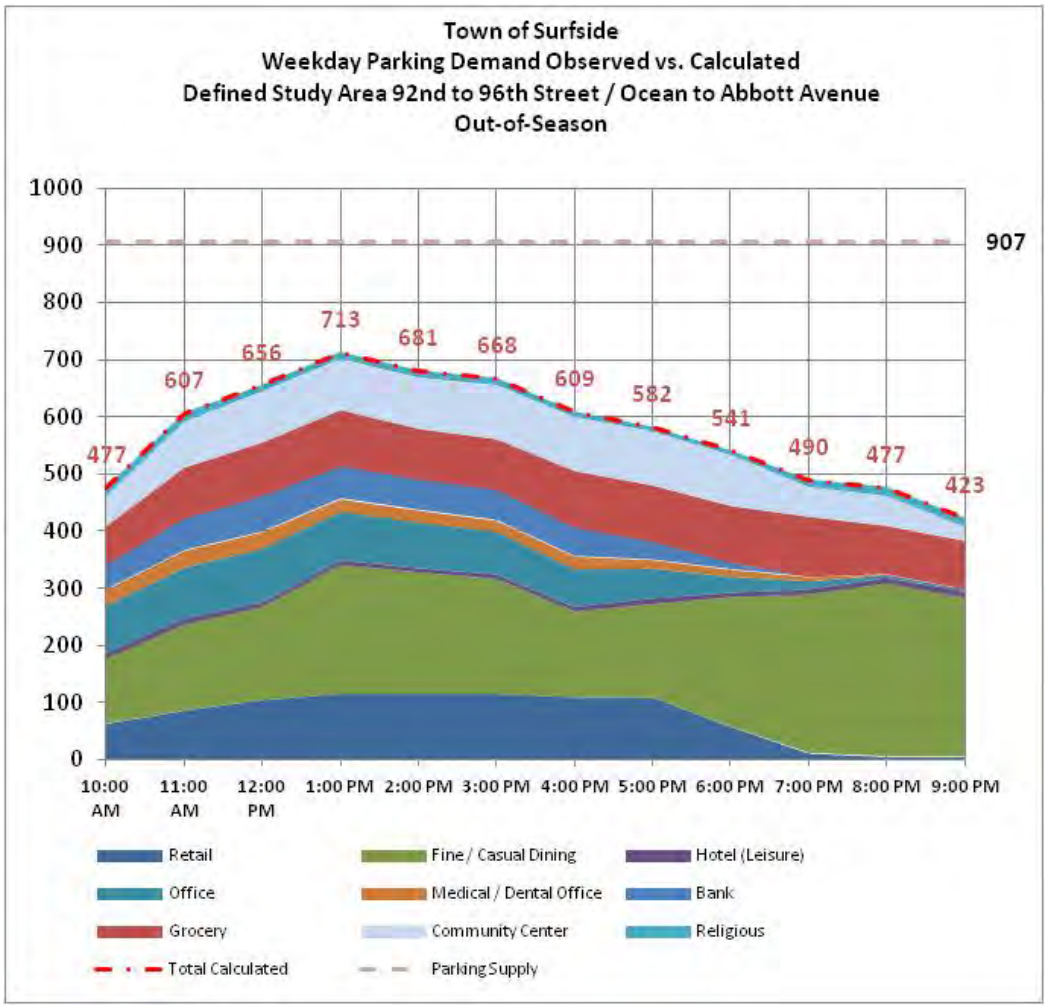



**Figure E –** Calculated Parking Need by Land Use (Out-of-Season Period)

The combination of the observed public and private space occupancy during the July survey period and how this corresponds with the calculated occupancy (based on the survey material) reflecting the "out-of-season" responses is shown by **Figure F** below. The addition of the public and private space occupancy very closely matches the calculated parking demand for the same period. The close correlation of the data between the calculated and observed occupancy suggests that the data provided by the surveys is accurately representative of the levels and customer activity and staffing as reported by the business owners.

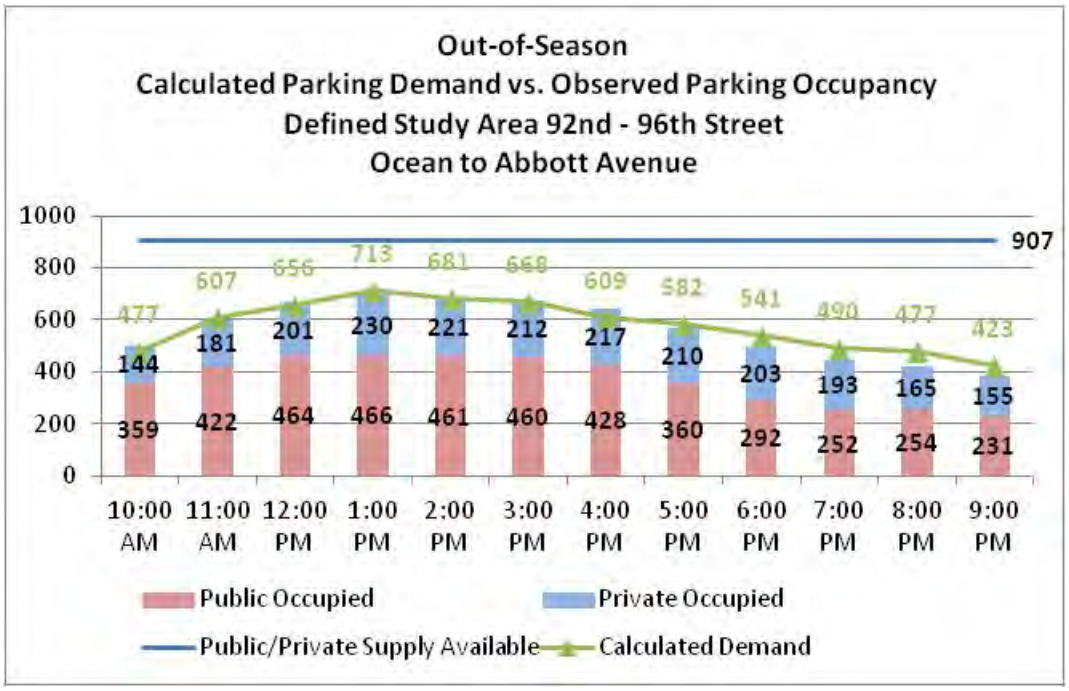



**Figure F – Comparison of Calculated vs. Observed Parking Need**

Rich and Associates are therefore concluding that the data provided from the surveys for the levels of activity reasonably reported the out-of-season parking demand. The next step in the process is to apply the survey responses which asked about levels of activity during the in-season period. As with the out-of-season period, this does not include the parking demand from any currently vacant buildings nor does it include the potential parking demand from new (as yet un-built) developments. The intent of the analysis is to apply the patterns and characteristics to project the in-season parking needs and from this to extrapolate the current occupancy of the public (and private) parking supply for the existing condition given the current building vacancy rate.

**Figure G** below shows the same model with the parking generation rate recalculated reflecting the responses for daily numbers of customers and staffing as reported by the business owners that they experience during the in-season months. The calculated peak demand for the in-season months shows that the parking demand peaks at 938± spaces needed which exceeds the combined public and private parking capacity of 907± spaces.

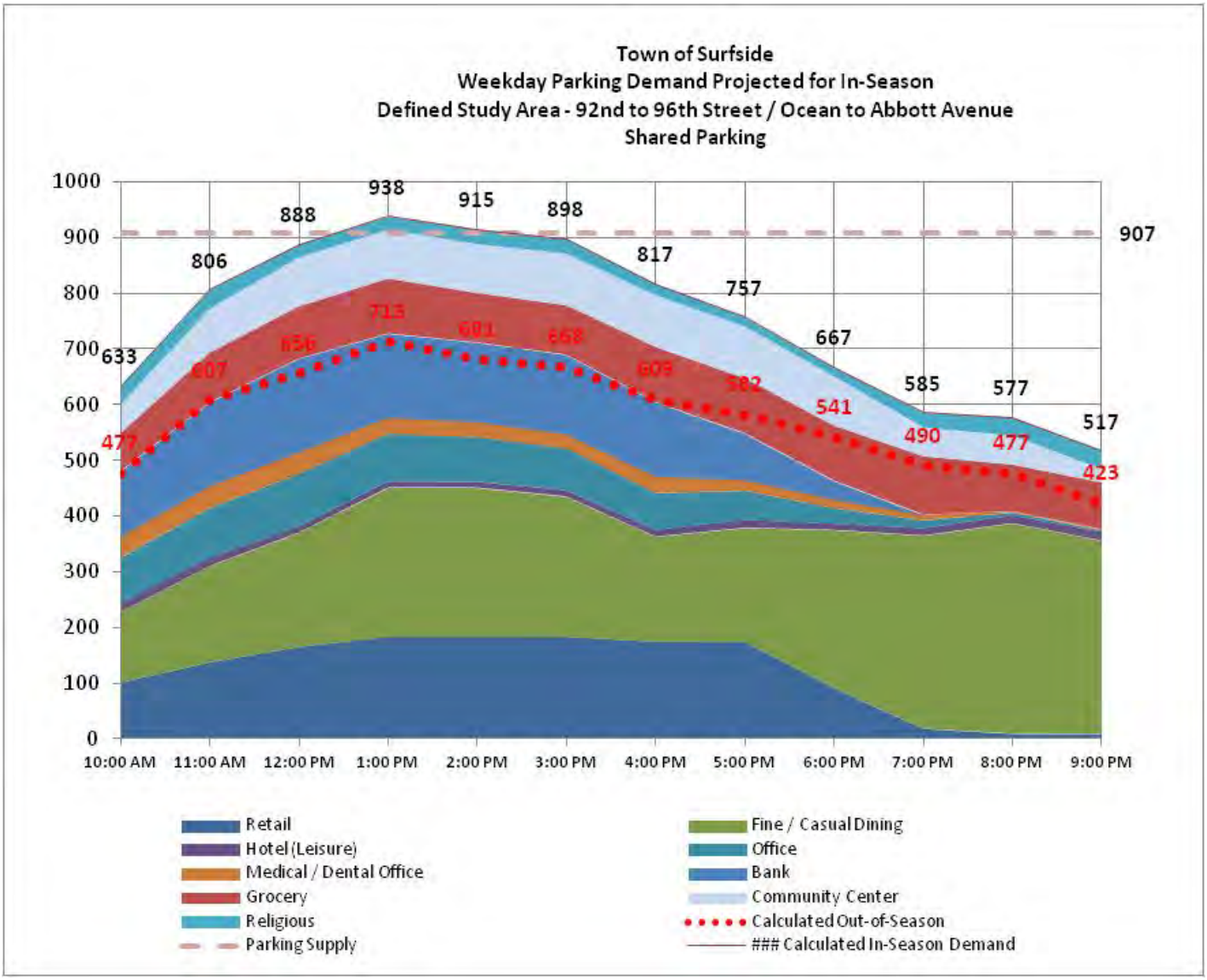



**Figure G-** Calculated Parking Needs Current Condition (In-Season)

*It must be clearly understood that Rich and Associates is not saying that the 938± space parking demand shown in the **Figure G** is the level of parking needed for the downtown. This value simply demonstrates the current level of activity for the in-season condition before adding the parking demand that would occur if currently vacant buildings were re-occupied and the proposed new developments were in place.* Because this analysis is showing that the parking supply is being fully occupied, *Rich and Associates are also of the opinion that parking may be a constraining factor for business activity. With a lack of parking, it is likely that some patrons will be hesitant to visit the downtown since they would feel that finding a convenient parking space is too difficult.*

With the calculated level of parking needed during the in-season period and the correlation to the level of activity experienced during the out-of-season period, Rich and Associates would expect that the occupancy of the publicly provided parking supply would be as shown in **Figure H** below. As the graph shows, the occupancy of the publicly provided supply during the out-of-season condition peaked at 466± spaces occupied. Using the results of the surveys to calculate the parking demand for the current in-season condition as demonstrated in **Figure G** and given that level of parking demand, Rich and Associates is of the opinion that it is likely that were the occupancy counts to be done during the in-season period that that the results would show that the available public supply would achieve full occupancy during the peak period of the day as demonstrated below.

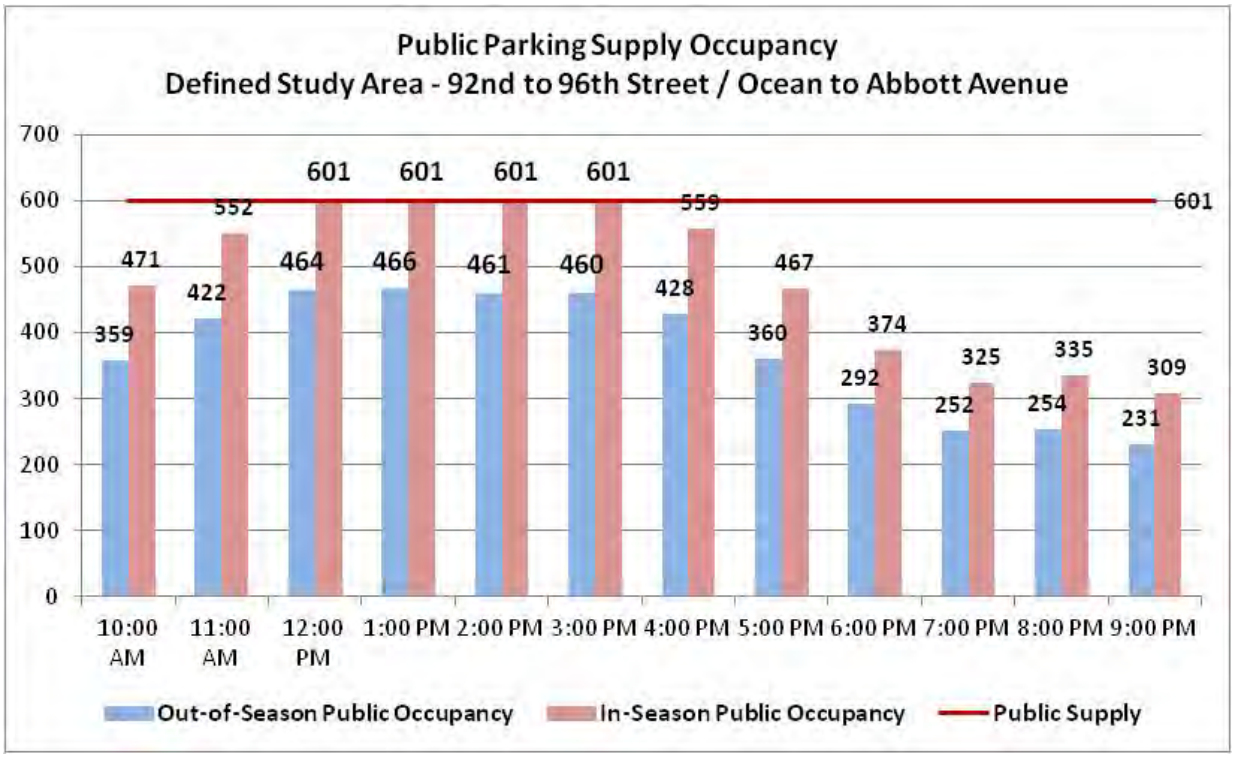



**Figure H** – In-Season vs. Out-of-Season Projected Public Space Occupancy


The important point to understand about the calculated peak demand of 938± spaces and the corresponding public space occupancy of 601 spaces is that it reflects the results of the surveys provided by business owners. ***Because the available parking is achieving a point that it is fully occupied, the level of activity that they report is constrained by the amount of parking available.*** Rich and Associates expect that patrons would be hesitant to come to downtown Surfside if they feel that parking will not be available.

The next step in the process is to project the amount of parking to be provided which is appropriate to meet the current and future business needs of the Surfside community.

## Parking Need per Zoning Code

The parking needs evaluated and demonstrated to this point reflect the current in-season and out-of-season conditions. Data showing the parking demand for the in-season condition compared to the public supply on which so many businesses and patrons depend, shows that the available public spaces are reaching full occupancy.

As such this information suggests that the lack of parking may be constraining existing businesses and any potential future businesses that may be considering moving into downtown from being able to reach their full potential. Patrons, because of the lack of parking, may be hesitant to visit Surfside because of the difficulty in finding parking during certain periods of the day. Although more likely to occur during the busier in-season months, depending on the activities or events going on downtown, the data provided by the master meter system suggests that this may occur at other times during the year as well.

The full occupancy of the existing parking supply expected to occur during the peak season period does not reflect the parking demand from the current 14,000 square feet of vacant building space that should eventually be occupied nor does it include additional parking demand from new developments downtown that include; Young Israel, The Shul, Starbucks and CVS that will further impact the need for public supply as they cannot provide for all their needs on their building sites.

The parking generation values derived from the surveys give parking needs that max out at the available parking capacity. Given this limitation, a reasonable substitute is needed to evaluate the appropriate amount of parking to be provided going forward.

Surfside, like most communities has in place an existing ordinance for the number of parking spaces to be provided for each business. In conjunction with the required parking ordinance, the Town has an offsite fund ordinance which recognizes that it may be difficult for a business to provide the needed parking given the geographic constraints of the downtown. Although various options for meeting the parking requirements are provided, should none of these be sufficient to the meet the code requirements, the business can pay a specified amount for each space it is deficient into the offsite parking fund to help the Town provide for the needed parking.

**Table 6** on the following page shows the parking requirements for each land use per the Town's zoning ordinance.

**Table 6 – Town Parking Requirements**

| Types of Residential Unit/Type of Use | | Minimum Space Requirements |
|---|---|---|
| Single-family or Two-family | | 2 spaces / unit |
| Multi-family - Efficiency and 1-bedroom | | 1.5 spaces / unit |
| Multi-family - 2-bedroom and 3-bedroom | | 2.0 spaces / unit |
| Multi-family - 4-bedrooms or more | | 2.25 spaces / unit |
| Hotel | | 1 space for each room |
| Suite-Hotels | | 1.25 space for each room |
| Hotel and Suite Hotel ancillary uses | Meeting/banquet space | 100% of code required parking for places of public assembly for square footage in excess of 20 square feet of gross floor area per hotel room. |
| | Restaurants | 1 space per 100 square fee of gross floor area |
| Place of Public Assembly: Where seats and/or benches are provided | | 1 space for every 4 seats, or 1 space for every 6 linear feet or part thereof of bench |
| Place of Public Assembly: Where fixed seats and not provided | | 1 space for each 50 square feet of non-administrative and congregation space. |
| Grocery, fruit or meat market | | 1 space for each 250 gross floor area |
| Retail store or Personal service establishment | | 1 space for each 300 gross floor area |
| Office or Professional services use, except Financial institutions | | 1 space for each 400 gross floor area |
| Medical or Dental uses | | 1 space for each 300 gross floor area |
| Restaurants or other establishments for consumption of food and beverages on the premises | | 1 space for every 4 seats |
| Financial institutions | | 1 space for each 300 gross floor area |
| Educational services | | 1 space for each classroom, plus 1 per 250 gross floor area |

**Surfside, Florida, Code of Ordinances PART II - CODE Chapter 90 - ZONING ARTICLE VII. – OFFSTREET PARKING AND LOADING DIVISION 1. - OFF-STREET PARKING**

90-77(a), Paragraph 2 these options include:

a) Provide the required number spaces
b) Tandem parking as specified in 90-77(d) plus vertical parking as specified in 90-77(f)
c) Joint use of off-site facilities
d) Shared parking
e) Payment of parking trust fee

Rich and Associates has calculated the parking requirements using the zoning code requirements under three conditions.

1) **Existing Conditions** - The detailed calculated requirements showing the square footage by block, code requirements and residential units compared against the available supply by

block for the existing condition are shown in **Appendix E1**. This information is summarized in **Table 7** on the following page.

2) **Full Occupancy of Vacant Building Space** - The parking requirements have also been calculated reflecting the addition of the occupancy of the existing 14,000 square feet of vacant space. This information is detailed in **Appendix E2** and summarized by **Table 8** on **page 2-33**.

3) **Full Occupancy + Existing & Proposed Development Projects** - Finally, **Table 9 on page 2-35** summarizes the parking requirements using the zoning ordinance reflecting both full occupancy and the additional parking demand (and parking supply) from the new developments anticipated for the downtown.

## Existing Conditions

**Table 7** on the following page demonstrates the calculated parking requirements per the Town's zoning ordinance given the conditions as they existed at the time of the field data collection with the 14,000 square feet of vacant building area. The table shows that the non-residential land uses are short by as many as 187± spaces from the number of spaces called for by the zoning ordinance. Because this is intended to demonstrate ***existing conditions*** it includes the impact from the Best Western Hotel which although slated for demolition is still in operation at the time of the fieldwork. The available parking supply on which the deficit is calculated includes both the privately provided parking spaces plus the publicly provided. If just the privately provided parking were included, the deficit would be much greater but the Town's off-site parking fund ordinance has allowed uses that do not have sufficient parking to pay into the fund with the understanding that the Town would eventually provide the parking. This calculation shows that the Town is currently 187 spaces short of meeting the need for the non-residential properties. In addition, the Town is 89 spaces short for the residential properties some of which were built under previous codes.

With the current zoning requirement for residential properties whereby the number of required parking spaces is based on the number of bedrooms in each unit, the right side of the table shows that the apartment and condominium units in the study area are short by as many as 89± spaces from the required number which, in Rich's opinion, puts added pressure on existing public parking spaces. This may be due to a common occurrence in many residential properties where even a couple living in a one or two bedroom unit is likely to have two vehicles or the building does not have sufficient additional parking to accommodate even a limited number of guests. In these cases, the vehicles that cannot be accommodated in the parking provided with the residential building must then use the publicly provided parking spaces.

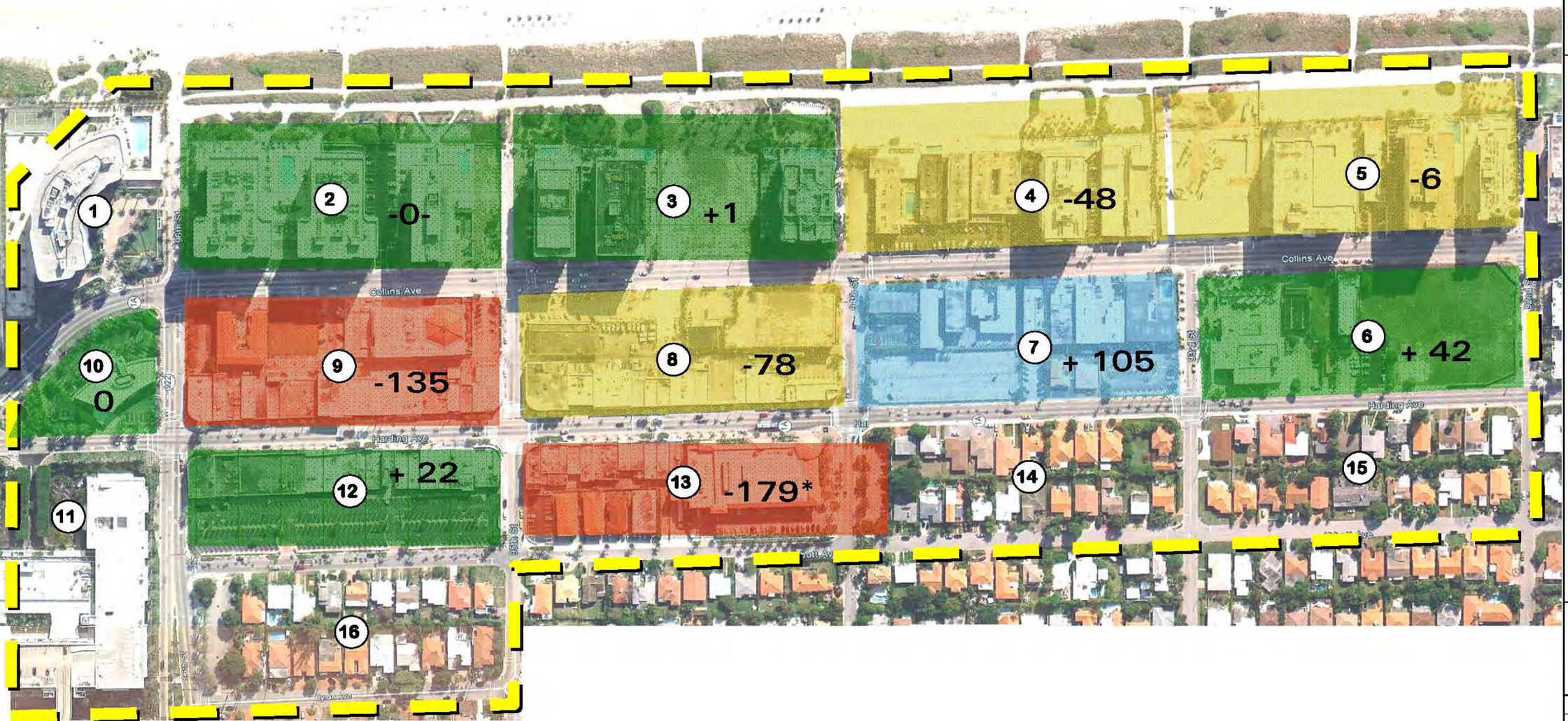
**Table 7** also shows that currently, even before factoring for the additional parking demand that would occur with the re-occupancy of the existing 14,000 square feet of vacant building space, downtown Surfside is short by 276± spaces from the number of spaces required by its zoning ordinance.

**Table 7 - Summary Existing Condition Surplus/(Deficit) – Using Zoning Ordinance.**

| | Non-Residential Properties | | | Apartments / Condominiums | | | |
|---|---|---|---|---|---|---|---|
| Block | Total Parking Demand | Total Supply | Surplus /Deficit) | Total Residential Unit Demand | Residential Property Parking Supply | Surplus /Deficit) | Combined Surplus / (Deficit) |
| 2 | 0 | 0 | 0 | 435 | 435 | 0 | 0 |
| 3 | 0 | 0 | 0 | 524 | 525 | 1 | 1 |
| 4 | 88 | 57 | (31) | 254 | 237 | (17) | (48) |
| 5 | 0 | 0 | 0 | 605 | 599 | (6) | (6) |
| 6 | 0 | 48 | 48 | 22 | 16 | (6) | 42 |
| 7 | 0 | 144 | 144 | 157 | 118 | (39) | 105 |
| 8 | 231 | 153 | (78) | 0 | 0 | 0 | (78) |
| 9 | 281 | 146 | (135) | 0 | 0 | 0 | (135) |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 224 | 246 | 22 | 0 | 0 | 0 | 22 |
| 13 | 327 | 144 | (183) | 41 | 19 | (22) | (205) |
| 14 | 0 | 26 | 26 | 0 | 0 | 0 | 26 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1,151 | 964* | (187) | 2,038 | 1,949 | (89) | (276) |

** Parking Supply (and demand) includes the impact from the existing Best Western Hotel with its 88 rooms (88 space requirement) and 57 on-site parking spaces.*

**Map 4** on the following page demonstrates the combined surplus / deficit by block for the existing condition using the zoning code values.




# PARKING STUDY

FOR

# TOWN OF SURFSIDE

SURFSIDE, FLORIDA

RICH & ASSOCIATES

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Engineers, Planners

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Tel: 248-353-5080
Fax: 248-353-3830

Lutz, Florida
Tel: 813-949-9860
www.richassoc.com

LEGEND:

(#) BLOCK NUMBER

STUDY AREA

SURPLUS OF PARKING

+ 100

0 Through 99

DEFICIT OF PARKING

-99 through -1

-100 +

* includes spaces on block 14

Sheet Title:

**Existing Surplus / Deficit Per Zoning Code**

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-10-13 |
| Checked by | dwb |

NORTH

MAP Number:

**MAP 4**

## Future Conditions

The parking need must also be established reflecting future conditions which include the likely re-occupancy of existing vacant rental space as well as the new development projects either under construction, in process or under review.

Full Occupancy

With the parking needs established as they presently exist, Rich and Associates then quantified the parking as it would be expected to exist with full occupancy of the downtown buildings. At the time of the field data collection, there were approximately 14,000 square feet of vacant building area within the downtown. While the ultimate use of this space will dictate the actual need because of the differing requirements for each type of land use, Rich and Associates has assumed mid-category type uses such as retail or personal service use, medical or dental office or financial services. All of these have requirements of one space for every 300 square feet of gross floor area or 3.33 parking spaces per 1,000 square feet of gross floor area. A grocery or specialty market would have requirements as high as four spaces per 1,000 gross square feet and a restaurant would be as high as 7.69[3] spaces per 1,000 gross square feet.

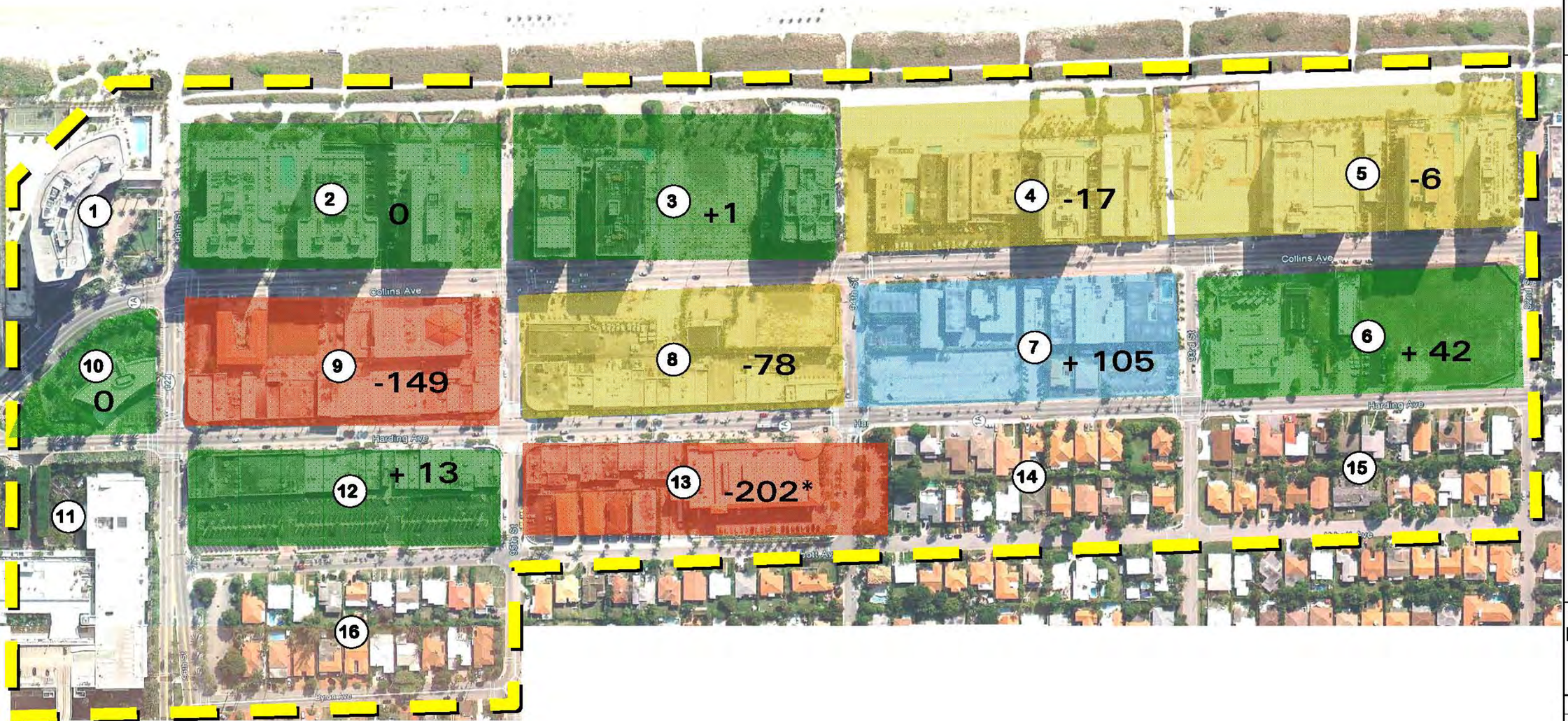
**Table 8** on the following page summarizes parking demand versus the available parking supply by block using the zoning code requirements assuming the full occupancy requirements while the detailed table is shown in **Appendix E2**. Unlike the existing conditions, these values assume the closing of the Best Western Hotel as it is demolished to make way for a luxury condominium project. Will full occupancy and the 3.33 value (noted above) applied to the 14,000 vacant square feet, the net deficit for the non-residential uses has increased from 187± spaces to 202± spaces while the overall downtown deficit is projected to increase to 291± spaces.

This information is also shown by **Map 5** on **page 2-34.**

[3] Although Restaurant use is based on 1 space per 4 seats, Rich has quantified the restaurant demand (at the downtown peak hour) as 7.69 spaces per 1,000 gsf by factoring the restaurant gsf x 85% (to get NSF) x 74% (estimated customer seating area) divided by 15 sf per seat. At 1 space per 4 seats gives total spaces needed divided by GSF x 85% (peak hour) equals approximately 7.69 spaces per thousand square feet. The code requirement and calculation would have to include any outdoor seating area (as part of the customer seating area). Although the code requirement says 1 space per 4 seats it should specify including outdoor seating area as well.

**Table 8 - Summary Full Occupancy Surplus / (Deficit) – Using Zoning Ordinance**

| Block | Non-Residential Properties | | | Apartments / Condominiums | | | |
|---|---|---|---|---|---|---|---|
| | Total Parking Demand | Total Supply | Surplus /Deficit) | Total Residential Unit Demand | Residential Property Parking Supply | Surplus /Deficit) | Combined Surplus / (Deficit) |
| 2 | 0 | 0 | 0 | 435 | 435 | 0 | 0 |
| 3 | 0 | 0 | 0 | 524 | 525 | 1 | 1 |
| 4 | 0 | 0 | 0 | 254 | 237 | (17) | (17) |
| 5 | 0 | 0 | 0 | 605 | 599 | (6) | (6) |
| 6 | 0 | 48 | 48 | 22 | 16 | (6) | 42 |
| 7 | 0 | 144 | 144 | 157 | 118 | (39) | 105 |
| 8 | 231 | 153 | (78) | 0 | 0 | 0 | (78) |
| 9 | 295 | 146 | (149) | 0 | 0 | 0 | (149) |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 233 | 246 | 13 | 0 | 0 | 0 | 13 |
| 13 | 350 | 144 | (206) | 41 | 19 | (22) | (228) |
| 14 | 0 | 26 | 26 | 0 | 0 | 0 | 26 |
| 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 1,109 | 907 | (202) | 2,038 | 1,949 | (89) | (291) |

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LEGEND:

(#) BLOCK NUMBER

STUDY AREA

SURPLUS OF PARKING

+ 100

0 Through 99

DEFICIT OF PARKING

-99 through -1

-100 +

* includes spaces on block 14

Sheet Title:

**Full Building Occupancy Surplus / Deficit Per Zoning Code**

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-10-13 |
| Checked by | dwb |

NORTH

MAP Number:

**MAP 5**

2-34

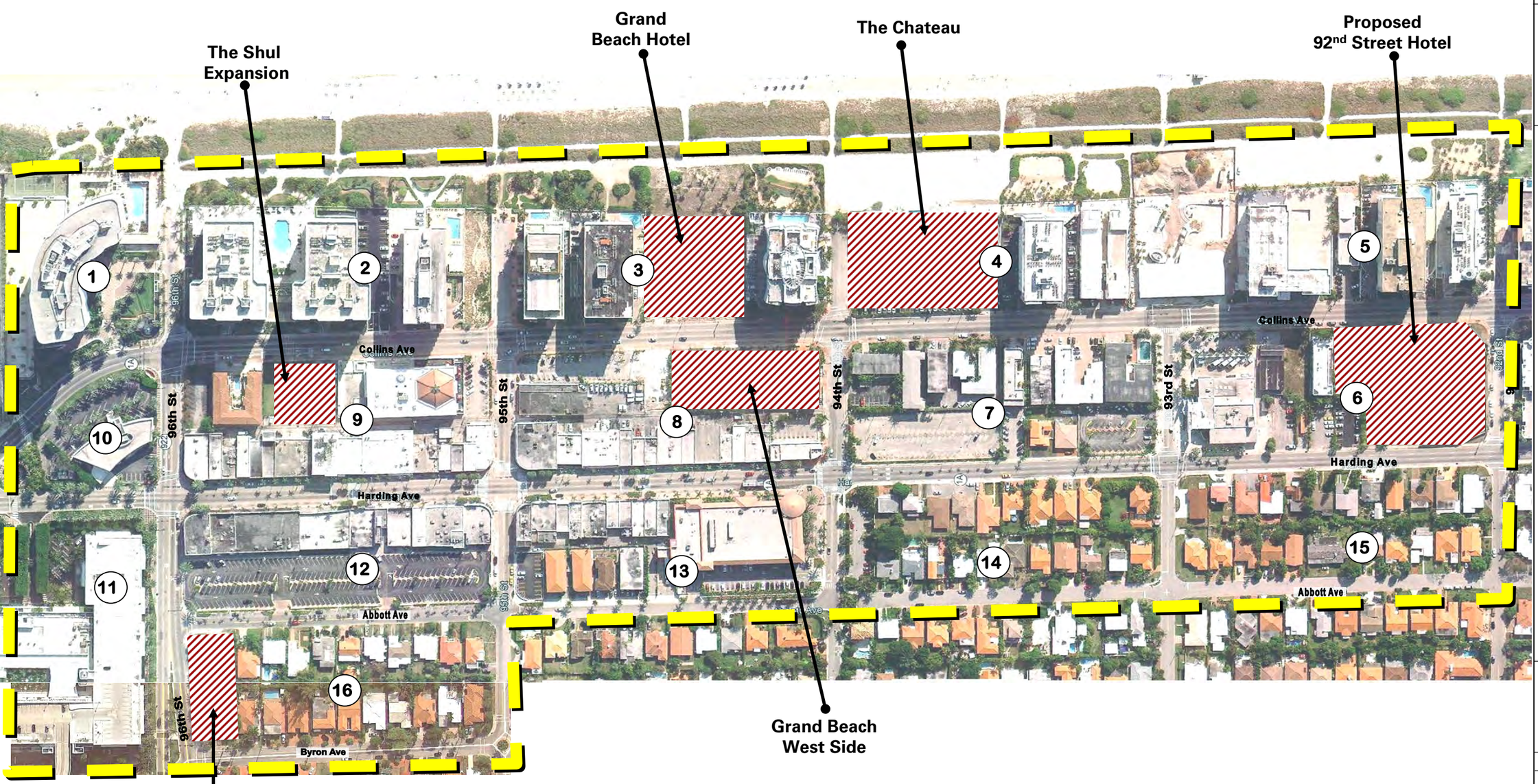
Full Occupancy plus Existing and Proposed Development Projects

The parking needs for downtown Surfside have also been projected for the future condition which reflects the anticipated completion of several development projects. These are either under construction (such as the Grand Beach Hotel), approved and in process or under review. Three of the five anticipated development projects as shown below will provide for their parking needs per the current zoning ordinance. The Shul and Young Israel projects have worked with the Town or are working with the Town (which recognizes the practices of the Orthodox community for their parking needs) to reach agreement on reduced requirements but it is likely that they will require at least some use of publicly provided parking to meet their needs. As **Table 9** shows, the 92nd Street Hotel, Chateau Condominium and Grand Beach Hotel projects are all expected to supply (based on the plans provided) more spaces than required by the zoning ordinance although these spaces would not be available to the public or for use by the Shul and Young Israel projects.

**Table 9- Future Development Projects**

| Block | Project Name | Configuration | Required Parking | Parking Provided |
|---|---|---|---|---|
| 6 | ***92nd Street Hotel*** | 183 Rooms | 1 Space per Room = 183 Spaces Req'd | 208 |
| 4 | ***The Chateu Condominium*** | 85 Units | | |
| | | 32 - 1 Bedroom Units | 1.50 per unit = 48 spaces required | |
| | | 25 - 2 to 3 Bedrooms | 2.00 per unit = 50 spaces required | |
| | | 28 - 4 Bedroom Units | 2.25 per unit = 63 spaces required | |
| | | | 161 Spaces Required | 180 |
| 3/8 | ***Grand Beach Hotel*** | 341 Rooms | 1 Space per Room = 341 Spaces Req'd | 368 |
| 9 | ***The Shul Expansion*** | Existing 264 Seat Sanctuary plus proposed 39,834 sf of construction on 3 floors* | It is anticipated that the new configuration will require 198± spaces. The Shul and the Town are working on determining this number | 101** |
| 16 | ***Young Israel*** | 216 seat Sanctuary | Number required per Settlement Agreement | 32*** |
| | * Plus one additional floor for parking (12,410 sf) | | | |
| | ** It is expected that the new configuration will require 198± spaces and that approximately 101± spaces will be provided (Per Town Planner) | | | |
| | *** Per Settlement Agreement. Twenty-One spaces will be used in Abbott Lot | | | |

These development locations are shown in **Map 6** on the following page.

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LEGEND:

(#) BLOCK NUMBER

STUDY AREA

Sheet Title:

## DEVELOPMENT PROJECTS

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-19-13 |
| Checked by | dwb |

NORTH

MAP Number:

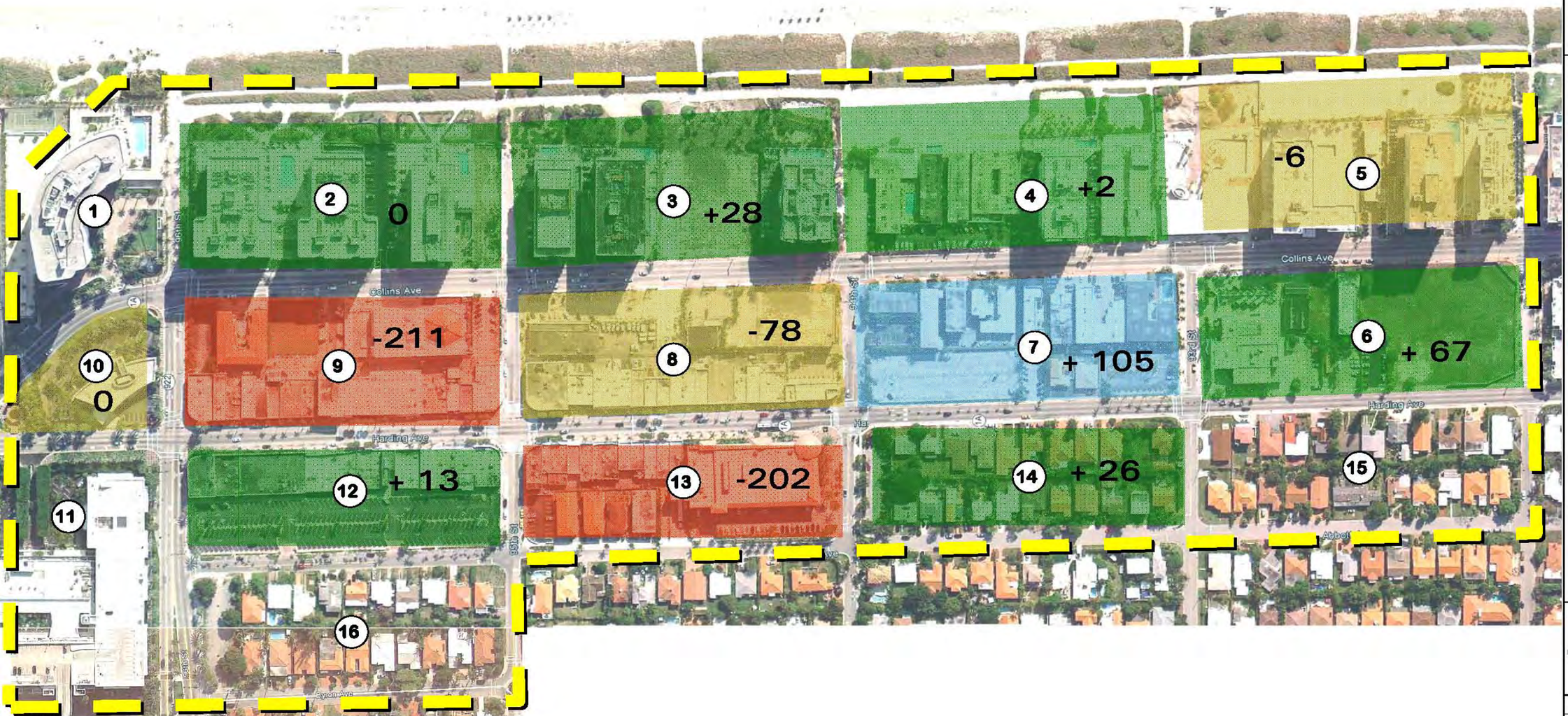
## MAP 6

**Table 10** below (detailed results are in **Appendix E3**) summarizes the parking required downtown assuming full occupancy of the existing building space plus the future development of the projects listed on **page 2-35**. The net deficit for the future condition assuming the completion of the development projects would increase to 303± spaces. The potential reduction of 72 on-street spaces along Harding Avenue as part of a streetscape project would increase this **net** deficit to 375± spaces.

The summary results from **Table 10** are shown in **Map 7** on page **2-38.**

**Table 10 - Summary Parking Demand vs. Supply per Zoning Code (Full Occupancy + Development Options)**

| Block | Non-Residential Properties | | | Apartments / Condominiums | | | |
|---|---|---|---|---|---|---|---|
| | Total Parking Demand | Total Supply | Surplus /Deficit) | Total Residential Unit Demand | Residential Property Parking Supply | Surplus /Deficit) | Combined Surplus / (Deficit) |
| 2 | 0 | 0 | 0 | 435 | 435 | 0 | 0 |
| 3 | 341 | 368 | 27 | 524 | 525 | 1 | 28 |
| 4 | 0 | 0 | 0 | 415 | 417 | 2 | 2 |
| 5 | 0 | 0 | 0 | 605 | 599 | (6) | (6) |
| 6 | 183 | 256 | 73 | 22 | 16 | (6) | 67 |
| 7 | 0 | 144 | 144 | 157 | 118 | (39) | 105 |
| 8 | 231 | 153 | (78) | 0 | 0 | 0 | (78) |
| 9 | 427 | 216 | (211) | 0 | 0 | 0 | (211) |
| 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 12 | 233 | 246 | 13 | 0 | 0 | 0 | 13 |
| 13 | 350 | 144 | (206) | 41 | 19 | (22) | (228) |
| 14 | 0 | 26 | 26 | 0 | 0 | 0 | 26 |
| 16 | 53 | 32 | (21) | 0 | 0 | 0 | (21) |
| Total | 1,818 | 1,585 | (233) | 2,199 | 2,129 | (70) | (303) |

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LEGEND:

(#) BLOCK NUMBER

STUDY AREA

SURPLUS OF PARKING

+ 100

0 Through 99

DEFICIT OF PARKING

-99 through -1

-100 +

Sheet Title:

**Future Building w/Full Occupancy Development Per Zoning Ordinance**

| | |
|---|---|
| File No. | 1234 |
| Scale | NTS |
| Date | 1-10-13 |
| Checked by | dwb |

NORTH

MAP Number:

**MAP 7**

## Summary

The analysis completed by Rich and Associates for the existing parking conditions in downtown Surfside has demonstrated that the publicly available parking supply is reaching full occupancy during the in-season period. This data suggests that the parking is a constraining factor on businesses within the downtown being able to achieve their full potential. The parking generation rates developed from the survey results do not adequately assess what the parking needs would be because of the constraint of the existing limited parking.

Therefore, Rich and Associates have applied the requirements from the Town's existing zoning ordinance, (which reasonably portray the anticipated parking needs) to the existing and future land use configuration. Using the current zoning code requirements, the analysis shows that currently the downtown is short by as many as 276± spaces and this would increase to 291± spaces with the re-occupancy of the currently vacant building space. The additional parking demand that would be created from projects which are either a) in-construction, b) approved and in process, or c) under review increases the ***net deficit*** to 303± spaces.

**The 303± net deficit figure consists of two components**. First is the 233± spaces short attributable to the non-residential properties downtown. This is based on the calculated parking requirement (per the zoning ordinance) of 1,818 spaces, compared to the total 1,585 non-residential parking spaces provided. This non-residential parking supply provided consists of all the publicly provided parking downtown (601 spaces) plus all existing and future private non-residential (commercial and religious) parking supply (984 spaces) downtown.

Second, the net residential shortage which is based on the 2,199 space demand compared to the 2,129 parking spaces supplied by the residential properties[4] results in a net shortage of 70± spaces. The 70 space residential shortage when combined with the 233± space shortage from the non-residential properties results in the 303± space total net deficit.

It should be noted that the "net deficit" figure requires clarification for several reasons:

a) If the decision is made to remove the Harding Avenue parking spaces as part of a streetscape project the deficit would increase by an additional 72 spaces from the 303± space shortage to a total of 375± spaces.

b) The "net" deficit includes parking spaces provided in excess of the calculated requirement by several developments that would not be publicly available.

The 233± parking space shortage calculated for the non-residential properties includes with the 1,585 space supply, 52 total spaces in excess of the total parking requirement per the zoning

[4] Including the spaces to be constructed as part of The Chateau.

ordinance that would be constructed as part of the 92nd Street Hotel (25 "extra" spaces) and the Grand Beach Hotel (27 "extra" spaces). These 52 spaces are not available to non-guests (to park and visit a downtown restaurant for example) yet they are included in the "net" calculation. If these 52 "extra" spaces are eliminated from the parking supply side of the equation, then the previous 1,585 space parking supply figure would be reduced to 1,533 spaces. This parking supply of 1,533 spaces compared to the parking demand of 1,818 spaces would now show a 285± space shortage for the non-residential properties.

Similarly, the calculated net shortage of 70 spaces for residential (which is primarily attributable to older residential properties) is reduced from what should be an 89± space shortage because of the planned construction (per the plans provided to Rich and Associates) of 19 spaces in excess of the calculated requirement for The Chateau. As with the hotels noted in the previous paragraph, these 19 spaces would not be available to the public. Therefore, if these 19 spaces are excluded from the calculation, the result would show that the residential properties instead of being 70 spaces short would actually be 89± spaces short.

The 52± spaces which are provided by the two hotels in excess of their requirements added to the 19± spaces developed with The Chateau in excess of its requirements result in a combined reduction of 71± spaces provided in excess of the code requirement. This would mean that the 303± net shortage plus the 72 spaces potentially eliminated along Harding Avenue for the streetscape project resulting in the 375± ***"net calculated space shortage"*** is artificially reduced by these 71± "surplus" spaces which are not available to the public. If these 71± spaces are therefore added to the 375± space deficit this results in a more accurate shortage of 446± spaces.

Because of the geographic constraints of the downtown, many businesses are not able to meet their parking requirements on-site per the zoning ordinance. Because of this they may have availed themselves of alternatives available in the zoning ordinance including payments to the offsite parking fund with the expectation that the Town will apply these funds to developing the parking necessary to meet their needs.

The following sections of the report will investigate some of the alternatives available for providing the additional parking needed in a parking structure(s) that could be developed on each of three alternative sites. This analysis will investigate capacity, additional public benefit that could be created as part of each of these projects and economic factors which include the cost of building, operating and the impact on downtown parking rates.