

# TOD GROWTH PLAN FOR THE TOWN OF RIVERHEAD PECONIC RIVER/ NYS ROUTE 25 CORRIDOR - BOA STEP II NOMINATION PARKING, TRANSIT, AND PEDESTRIAN/ BICYCLE PLAN STUDY SEPTEMBER 2015



SUBMITTED TO:  
TOWN OF RIVERHEAD  
COMMUNITY DEVELOPEMENT  
AGENCY

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**EXECUTIVE SUMMARY**

As part of the Downtown Riverhead Transit Oriented Development (TOD) Growth Plan, Nelson & Pope conducted a Parking and Public Transportation Study.

The parking study inventoried the parking supply and parking restrictions in the study area. It also identified the peak parking periods and associated peak occupancy by location, calculated the average parking duration and turnover by location.

After reviewing field observations and analyzing the parking accumulation, average duration and turnover results, it was determined that under current conditions, only a few parking areas are highly utilized during weekdays, mostly lots used by the Suffolk County Courts, Riverhead Town Hall and the Police Department. The majority of parking areas are highly underutilized on Saturdays. From the review of the parking data, it appears that Downtown Riverhead has adequate parking to support existing conditions. The following table summarizes the overall peak utilization in Downtown Riverhead.

<b>Lots</b>	<b>Available Spaces</b>	<b>Weekday Peak Occupancy</b>	<b>Weekend Peak Occupancy</b>
Public/ Institutional	2121 Spaces	1059 Spaces (50%)	398 Spaces (22%)
Private	353 Spaces	109 Spaces (50%)	74 Spaces (24%)
On-Street	236 Spaces	122 Spaces (52%)	44 Spaces (29%)
<b>Total</b>	<b>2710 Spaces</b>	<b>1290 Spaces (48%)</b>	<b>516 Spaces (19%)</b>

With development of Alternative Development Scenario 2, it was determined that an additional 1,197 parking spaces will be required. We recommend that the additional required parking be provided by the construction of a parking structure on Lot L, located north of East Main Street between Roanoke Avenue and East Avenue. The following is a brief summary of some of the improvement measures that could be considered to improve parking for the current and future conditions.

- Although there are numerous municipal parking facilities available, it is not always clear which lots are public or which ones are private. Improving signage will assist in the increased use of the various facilities. Many of these municipal lots are located along the various side streets north and south of West Main Street. Our recommendations include a comprehensive signing plan along with new parking signs throughout the downtown to guide patrons to parking lots closest their final destination.
- Parking is generally permitted along West/East Main Street. The Town should attempt to limit this parking to short durations (less than the current 2 hour limit) to allow those motorists that are passing thru to utilize the various retail establishments for actions that require minimal time. Those individuals visiting the Town for lengthier stays, (i.e. Aquarium, Science Center, Court, restaurants) should be encouraged to utilize the off-street parking facilities. This could be accomplished with parking intervals of short duration, i.e. less than one hour, preferably thirty minutes, or perhaps the installation of parking meters. To be effective, these options would require appropriate enforcement.
- Employee parking, shuttles, public valet as well as future parking structures are all measures that could be explored as part of the future redevelopment Scenario.

In order to improve and enhance pedestrian mobility within the downtown a comprehensive field inventory was performed and deficiencies were identified. Enhancements have been recommended to improve overall connectivity, pedestrian mobility and pedestrian safety throughout the downtown.

Bicycle routes and accommodations were also inventoried within and around the downtown area. Recommendations were made to improve the bicycle network and storage within and near the downtown in the short and long term.

Transit elements such as bus and rail were also explored to determine if modifications in the short and long term could enhance mobility and improve roadway function and reduce delay.

The overall objective of the Public Transit and Pedestrian/Bike Plan is to increase multimodal transportation choices and reduce trip generation and congestion. Measures to help implement this plan that are recommended in this study include street scape improvements, improved transit service, improvement of pedestrian/bike facilities to enhance pedestrian circulation and accessibility. In conjunction with the future proposed redevelopment scenarios, operation improvements will be considered with respect to the markings, signing and pedestrian amenities at traffic signals to ensure the safety of pedestrians and motorists alike.

## **PURPOSE OF REPORT**

As part of the Transit Oriented Development (TOD) Growth Plan, Nelson & Pope conducted a Parking and Public Transportation Study. A Study of the primary parking lots and on-street parking areas in Downtown Riverhead was conducted to identify the current supply and demand for commuter and commercial parking. The Transit Plan and Pedestrian/Bicycle Plan focused on the existing roadway and sidewalk network and identified substandard elements that could be improved to serve as mitigation factors for the increased traffic/safety issues within the downtown as redevelopment occurs. An effort was also made to illustrate and encourage the use of multimodal access with the study area.

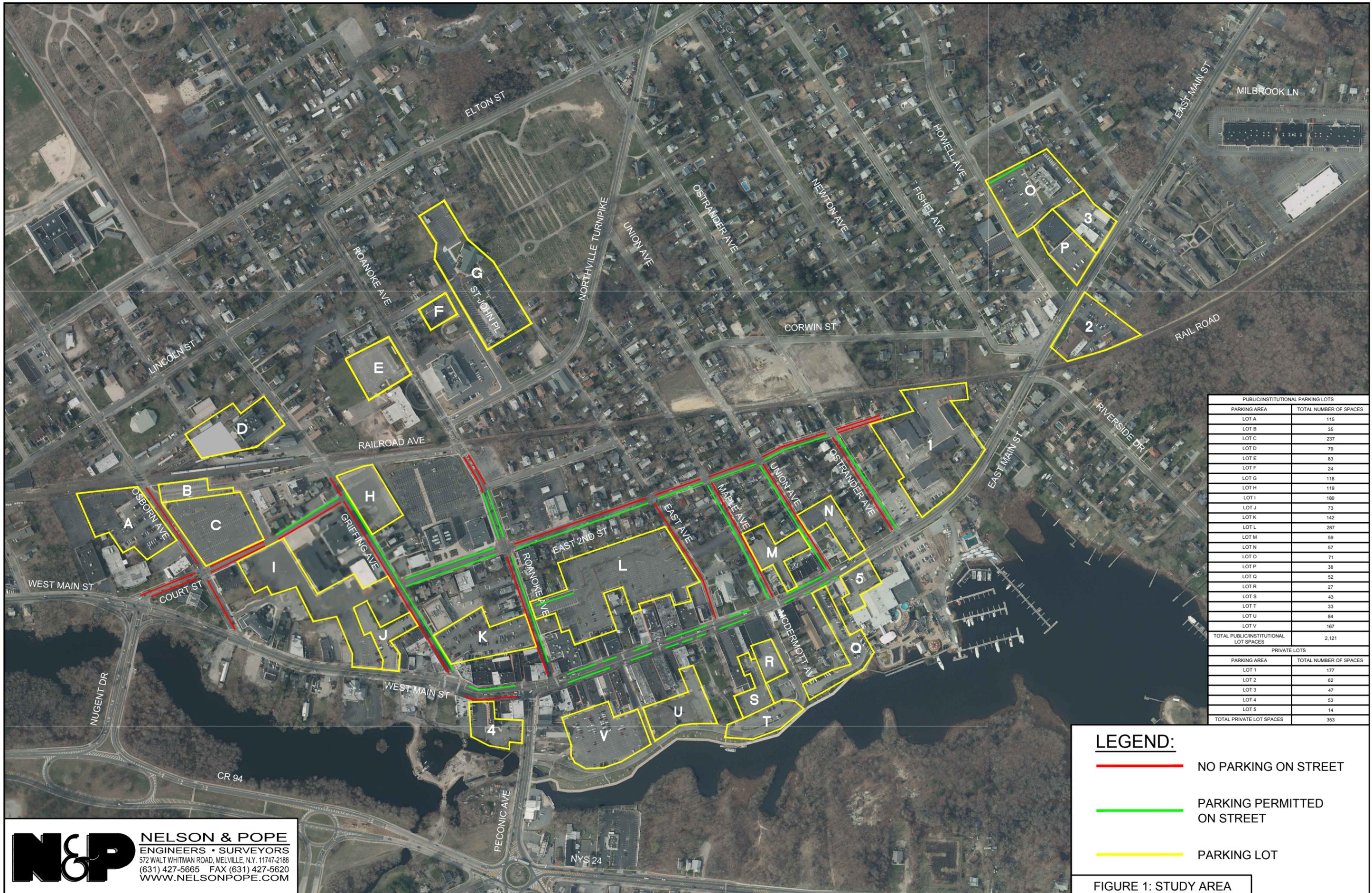
## **PARKING STUDY**

The focus of the parking study includes the public, private and on-street parking areas within the Downtown and as shown in Figure 1.

The objective of the parking study was to:

- Inventory the parking supply and parking restrictions in the study area;
- Identify the peak parking periods and associated peak occupancy by location;
- Calculate the average parking duration and turnover by location;
- Evaluate the future development scenario developed for the Town of Riverhead Peconic River/Route 25 Corridor-BOA Step II Nomination Study (the “Study”) with relation to parking availability; and,
- Improve parking efficiency within Riverhead.

Various parking alternatives to address parking supply, parking efficiency and operational issues in the downtown area were developed as part the parking study. Figure 1 shows the overall study area.



PUBLIC/INSTITUTIONAL PARKING LOTS	
PARKING AREA	TOTAL NUMBER OF SPACES
LOT A	115
LOT B	35
LOT C	237
LOT D	79
LOT E	83
LOT F	24
LOT G	118
LOT H	119
LOT I	180
LOT J	73
LOT K	142
LOT L	287
LOT M	59
LOT N	57
LOT O	71
LOT P	36
LOT Q	52
LOT R	27
LOT S	43
LOT T	33
LOT U	84
LOT V	167
TOTAL PUBLIC/INSTITUTIONAL LOT SPACES	2,121
PRIVATE LOTS	
PARKING AREA	TOTAL NUMBER OF SPACES
LOT 1	177
LOT 2	62
LOT 3	47
LOT 4	53
LOT 5	14
TOTAL PRIVATE LOT SPACES	353

**LEGEND:**

- NO PARKING ON STREET
- PARKING PERMITTED ON STREET
- PARKING LOT

FIGURE 1: STUDY AREA

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## STUDY METHODOLOGY

The study analyzed the information regarding parking utilization and average parking duration in the study area. It also identifies parking alternatives to address parking supply, parking efficiency and operation issues in the downtown area. In executing the scope of work, the following steps were undertaken:

- A detailed field inspection was conducted to obtain an inventory for each of the on-street, public/institutional and private parking areas within the study limits. The field inspection verified the number of parking spaces available, posted restrictions and regulations, pedestrian and vehicular access routes, circulation patterns, guidance and directional signing to and from the facilities.
- Plot Plans in AutoCAD were prepared for each of the parking facilities studied based on aerial photographs, existing surveys, land recorded data, field measurements and observations.
- Parking accumulation and duration surveys were conducted at each of the on-street, public/institutional and private parking areas identified. The parking surveys were conducted between the hours of 10:00 AM and 8:00 PM on a half-hourly basis on Thursday May 16, 2013 and on Saturday May 18, 2013. The parking duration was determined by recording license plate numbers each half-hour to determine the length of continuous time each space is occupied by the same vehicle. It is noted that the team attempted to include lots of Suffolk County National Bank located on East 2<sup>nd</sup> Street and the Town owned property (former Fire Station) also on East 2<sup>nd</sup> Street; but were not permitted access to these locations. Thus they are not included in the inventory and utilization analysis. They will, however be considered as potential shared lots for future redevelopment scenarios.
- The parking counts were tabulated to identify the parking utilization by time-of-day and by location. The peak parking occupancy was identified for each public/institutional parking facility and for the private and on-street parking areas.
- Partial license plate data was matched to identify average parking duration and parking turnover by location.

- The results of the parking utilization and duration were analyzed.
- Based on the future development scenario prepared for the study, peak parking demand estimates were conducted for build out scenario. The estimated demand for the build out scenarios was distributed accordingly throughout the Downtown's area parking supply. In accordance with the findings of the parking analyses, recommendations were made to improve the pedestrian and vehicular access to and circulation within the parking facilities, increase the parking supply, and improve utilization, and signage and wayfinding needs.

## EXISTING PARKING CONDITIONS AND DESCRIPTIONS

A total of twenty two (22) public/institutional parking areas, five (5) private parking areas and eight (8) roadways, where on-street parking is permitted in downtown Riverhead, were studied. The following tables summarize the existing parking supply broken down into the public/institutional parking areas, private parking areas and on-street parking areas.

**Table 1: Existing Public/Institutional Parking Supply**

Parking Area	Total Number of Spaces
<b>Public/Institutional Lots</b>	
Lot A	115
Lot B	35
Lot C	237
Lot D	79
Lot E	83
Lot F	24
Lot G	118
Lot H	119
Lot I	180
Lot J	73
Lot K	142
Lot L	287
Lot M	59
Lot N	57
Lot O	71
Lot P	36
Lot Q	52
Lot R	27
Lot S	43
Lot T	33
Lot U	84
Lot V	167
<b>Total spaces</b>	<b>2121</b>

**Table 2: Existing Private Parking Supply**

Parking Area	Total Number of Spaces
<b>Private Lots</b>	
Lot 1	177
Lot 2	62
Lot 3	47
Lot 4	53
Lot 5	14
<b>Total Private Lot Spaces</b>	<b>353</b>

**Table 3: Existing On-Street Parking Supply**

Parking Area	Total Number of Spaces
<b>On Street</b>	
Griffing Ave between West Main St and Railroad Ave	30
Roanoke Ave between West Main St and Railroad Ave	39
Maple Ave between E 2nd Street and East Main St	19
Union Ave between E 2nd Street and East Main St	17
Ostrander Ave between E 2nd Street and East Main St	13
Court St between W Main St and Griffing Ave	14
E 2nd Street between Griffing Ave and Roanoke Avenue	36
West/East Main St between Griffing Ave and Union Ave	68
<b>Total On-Street Spaces</b>	<b>236</b>

Note: 1 parking space was measured as 20 feet in areas where the parking spaces are not delineated

As shown in Tables 1, 2, and 3 above, a total of 2,121 public/institutional parking spaces, 353 private parking spaces and 236 on-Street parking spaces are provided within the study area.

The following is a brief description of the study area parking areas to accompany Figure 1.

**Public and Institutional Parking Areas**

*Parking Area A* – Lot A is the Riverhead Public Library parking lot and is located on the west side of Osborn Avenue south of Railroad Avenue. Access to this lot is via Osborn Avenue. The parking lot contains 115 marked parking spaces. This lot is exclusively for library patrons. The sign “*Parking for Library Patrons only, all others will be towed*” is posted at the southern access to the library parking lot.

*Parking Area B*– Lot B is the northern section of the Long Island Railroad parking area and is located on Railroad Avenue in the vicinity of the Long Island Railroad Station. Access to this lot is via Osborn Avenue, Railroad Avenue and Cedar Street. This lot contains a total of 32 parking spaces. This lot has no posted restrictions.

*Parking Area C*– Lot C is the main section of the Long Island Railroad parking area which is used extensively for visitors to the Court (reported and observed). This lot contains a total of 237 spaces and is bound by Osborn Avenue to the west, Cedar Street to the east, Court Street to the south and Railroad Avenue to the north. Access to this lot is via Cedar Street. This lot has no posted restrictions.

*Parking Area D* – Lot D is owned by Suffolk County (Cornell Cooperative Extension of Suffolk County). This lot is located on the west side of Griffing Avenue just north of the railroad tracks and it contains 79 parking spaces. This lot has no posted restrictions.

*Parking Area E*– Lot E is the parking lot for Roanoke Avenue Elementary School located on Roanoke Avenue. This lot contains a total of 85 parking spaces. Access to this lot is via Roanoke Avenue. This lot has no posted restrictions.

*Parking Area F*– Lot F is a public parking lot containing 24 parking spaces. This lot is located at the southwest corner of 5<sup>th</sup> Street and St. Johns Place. Access to this lot is via 5<sup>th</sup> Street. This lot has no posted restrictions.

*Parking Area G*– Lot G is the parking lot for St. John’s Church located on St. John’s Place. This lot contains a total of 118 parking spaces. Access to this lot is via St. Johns Place and East Avenue Extension as well as via 5<sup>th</sup> Street. This lot has no posted restrictions.

*Parking Area H*– Lot H is a public parking lot owned by Suffolk County utilized by employees and visitors of the Suffolk County Courts, located at the southeast corner of Griffing Avenue and Railroad Avenue. This lot contains a total of 119 parking spaces. Access to this lot is via Griffing Avenue and Railroad Avenue. This lot has no posted restrictions.

*Parking Area I*– Lot I is a public parking lot owned by Suffolk County and utilized by the Suffolk County Courts located at the rear of the court building on the southwest corner of Griffing Avenue and Court Street. This lot contains a total of 180 parking spaces and is partially within the Riverhead Parking District. Access to this lot is via Court Street, West Main Street and Griffing Avenue. There are no posted parking restrictions within this lot.

*Parking Area J*– Lot J is a public parking lot owned by the Town of Riverhead and is utilized mainly by the Suffolk County Courts located on Griffing Avenue during the week. This lot contains a total of 73 parking spaces and is within the Riverhead Parking District. Access to this lot is via Griffing Avenue and West Main Street. A Town of Riverhead Public Parking District sign is posted in this lot. The sign has parking regulations showing yellow parking spaces with a 2 hour parking limit and blue for handicap spaces. However, this lot had no yellow striped parking spaces. This lot contains 5 spaces with a 1-hour parking limit.

*Parking Area K*– Lot K is a public parking lot owned by the Town of Riverhead and located in the rear of the commercial uses on West Main Street between Griffing Avenue and Roanoke Avenue within the Riverhead Parking District. This lot contains a total of 142 parking spaces, 18 of which are yellow parking spaces (yellow zone) with a 2-hour parking restriction. The amount of yellow parking spaces is an estimate since most of the striping in the lot is worn out. Access to this lot is via Griffing Avenue and Roanoke Avenue. Jurors are not permitted to park in this lot.

*Parking Area L*– Lot L is a public parking lot owned by the Town of Riverhead and located in the rear of the commercial and institutional uses on East Main Street between Roanoke Avenue and East Avenue within the Riverhead Parking District. This lot contains a total of 287 parking spaces, 28 of which are designated green zone (green striping) with a one hour parking limit from 9AM to 5PM, Monday through Friday. This lot also contains 8 parking spaces posted with a two-hour parking limit on the north side of entrance from Roanoke Avenue. Access to this lot is via Roanoke Avenue and East Avenue. This lot is mainly used by the Culinary School, the Church, Aquarium patrons and retail uses on East Main Street.

*Parking Area M* – Lot M is a Town of Riverhead owned public parking lot located on East Main Street between Maple Avenue and Union Avenue within the Riverhead Parking District. It is

noted that this lot is shown as a Town of Riverhead Parking District lot even though it is part of a privately owned parcel. This lot contains a total of 59 parking spaces. Access to this lot is via Main Street, Maple Avenue and Union Avenue.

*Parking Area N*– Lot N is a Town of Riverhead owned public parking lot located on East Main Street in the vicinity of Union Avenue within the Riverhead Parking District. This lot contains a total of 57 parking spaces. Access to this lot is via Union Avenue and East Main Street. A sign posted at the parking entrance from East Main Street reads “*Town of Riverhead Municipal Parking*” but other signs posted within the lot read “*Private Parking for Reginald H. Tuthill Funeral Home*”.

*Parking Area O* – Lot O is the Riverhead Police Department parking lot located on Howell Avenue. This lot contains a total of 107 parking spaces but only 71 spaces were accessible to the public during our parking survey. Access to this lot is via Howell Avenue.

*Parking Area P*– Lot P is the Riverhead Town Hall parking lot located on the east side of Howell Avenue. This lot contains a total of 36 parking spaces. The only access to this lot is via two (2) driveways from East Main Street.

*Parking Areas Q, R, S, T, U, V* – These lots are Town of Riverhead owned public parking lots located in the rear of commercial uses on the south side of East Main Street along the Peconic River within the Riverhead Parking District. These lots contain a total of 406 parking spaces. Access to these lots is via East Main Street (via a one way access, McDermott Avenue (two-way) and a one-way entrance west of Union Avenue) and from Peconic Avenue. Parking Lot S is reserved for East End Full Gospel Church and USDA Workers Compensation Board customers. Signs prohibiting bus parking are posted in these parking lots.

### **Private Parking Areas**

*Private Parking Areas 1, 2, 3, 4 and 5 (Lots 1, 2, 3, 4, 5)* – These lots are located along West/East Main Street between Griffing Avenue and Howell Avenue. Access points to these lots are on West/East Main Street. These parking lots contain a total of 353 marked parking spaces.

Parking lots 1 and 5 are posted with signs permitting parking only for patrons of the uses on the site. Lots 4 and 5 are within the Riverhead Parking District.

### **On-Street Parking Areas**

*West/East Main Street between Griffing Avenue and Ostrander Avenue*-West/East Main Street is an east/west roadway under the jurisdiction of NYSDOT and provides one lane per travel direction within Downtown Riverhead. Sidewalks and other pedestrian amenities are provided on both sides of West/East Main Street. The land uses along this roadway within the study area are predominantly commercial (including several attractions and a few institutional uses). Parking is permitted on both sides of the roadway except for the south side of West Main Street between Griffing and Peconic. A total of 68 parking spaces are on both sides of West/East Main Street between Griffing Avenue and Ostrander Avenue. A 2-hour parking limit is posted on West/East Main Street from 9AM -5PM except Sundays and holidays.

*Griffing Avenue between West Main Street and Railroad Avenue* – Parking is permitted on the eastside of the roadway except in the vicinity of an intersection. No spaces are delineated, they are based upon a general rule of 20 feet per space. A total of 30 parking spaces are estimated on the eastside of Griffing Avenue between West Main Street and Railroad Avenue. There are no parking restrictions posted on Griffing Avenue.

*Roanoke Avenue between East Main Street and Railroad Avenue* – Parking is permitted on the eastside of the roadway between East Main Street and E 2<sup>nd</sup> Street and parking is permitted on both sides of Roanoke Avenue between E 2<sup>nd</sup> Street and 3<sup>rd</sup> Street. No spaces are delineated; they are based upon a general rule of 20 feet per space. A total of 30 parking spaces are estimated on the eastside of Roanoke Avenue between West Main Street and Railroad Avenue. A 2-hour parking limit is posted from 9AM -5:30 PM. A total of 9 parking spaces are estimated on the west side of Roanoke Avenue between E 2<sup>nd</sup> Street and 3<sup>rd</sup> Street with no time restriction.

*Maple Avenue between E 2<sup>nd</sup> Street and East Main Street* – Parking is permitted on the west side of the roadway. No spaces are delineated; they are based upon a general rule of 20 feet per space. A total of 19 parking spaces are estimated on the west side of Maple Avenue. There are no restrictions on the parking on Maple Avenue.

*Union Avenue between E 2<sup>nd</sup> Street and East Main Street* – Parking is permitted on the west side of the roadway. No spaces are delineated; they are based upon a general rule of 20 feet per space. A total of 17 parking spaces are estimated on the west side of Union Avenue. A half-hour parking limit is posted from 9AM -5:00 PM.

*Ostrander Avenue between E 2<sup>nd</sup> Street and East Main Street* – Parking is permitted on the east side of the roadway. No spaces are delineated; they are based upon a general rule of 20 feet per space. A total of 13 parking spaces are estimated on the east side of Ostrander Avenue. A 1-hour parking limit is posted from 9AM -5:00 PM except for Sundays and Holidays.

*Court Street between Griffing Avenue and Cedar Street* – Parking is permitted on the north side of the roadway. No spaces are delineated; they are based upon a general rule of 20 feet per space. A total of 14 parking spaces are estimated on the north side of Court Street. There are no restrictions on the parking on Court Street.

*E 2<sup>nd</sup> Street between Griffing Avenue and Roanoke Avenue* – Parking is permitted on the both sides of the roadway between Griffing Avenue and Roanoke Avenue. A total of 36 parking spaces are estimated on this section of E 2<sup>nd</sup> Street. A 2-hour parking limit is posted from 9AM - 5:30 PM for a total of 13 spaces, a half-hour parking limit is posted for a total of 18 spaces and a total of 5 spaces has no time restrictions.

### **Additional Town of Riverhead parking areas**

*Aquarium Parking lots north of Railroad tracks* – The Aquarium parking lots on Ostrander Avenue north of the railroad tracks are unpaved with no striping. These two parking areas had a total peak parking of 47 vehicles during the weekday and a total peak parking demand of 124 vehicles on Saturday.

*Town of Riverhead parking lot between East Avenue and Maple Avenue* – The Town of Riverhead parking lot located between East Avenue and Maple Avenue has no striping but can handle approximately 44 parking spaces.

## **PARKING DATA**

### **Parking Accumulation Data**

A parking accumulation survey was conducted at the parking areas between the hours of 10:00 AM and 8:00 PM on a half-hourly basis on Thursday May 16, 2013 and on Saturday May 18, 2013. The following tables show the existing parking surveys conducted at the parking areas shown above.

Table 4: Weekday Observations of Parked Vehicles - Public/Quasi Public Parking Areas

Time of day	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	TOTAL
	115 spaces	35 spaces	237 spaces	79 spaces	83 spaces	24 spaces	118 spaces	119 spaces	180 spaces	73 spaces	142 spaces	287 spaces	59 spaces	57 spaces	71 spaces	36 spaces	52 spaces	27 spaces	43 spaces	33 spaces	84 spaces	167 spaces	2121 Spaces
10:00 AM	39	3	178	54	45	0	22	87	165	66	61	129	23	1	55	34	22	6	0	4	15	50	1059
10:30 AM	43	3	135	54	48	0	22	85	156	62	61	124	24	1	63	33	52	9	0	8	21	53	1057
11:00 AM	43	3	129	54	48	0	22	85	151	62	83	124	24	1	54	33	47	9	0	8	21	53	1054
11:30 AM	52	4	114	58	42	0	24	72	152	48	99	113	27	2	51	31	46	13	2	8	22	70	1050
12:00 PM	52	4	103	58	42	0	24	72	150	47	99	113	27	2	51	31	46	13	2	8	22	70	1036
12:30 PM	55	4	97	57	43	0	24	47	126	46	105	101	28	2	50	26	42	12	3	9	20	72	969
1:00 PM	55	4	92	57	43	0	24	47	129	46	105	101	28	2	50	26	41	12	3	9	20	72	966
1:30 PM	57	4	88	51	37	0	15	46	153	52	77	101	24	3	36	26	41	9	3	10	20	70	923
2:00 PM	57	4	84	51	37	0	15	46	155	52	77	101	24	3	36	24	39	9	3	10	20	70	917
2:30 PM	55	4	84	46	31	0	13	50	125	53	90	84	26	2	36	25	39	9	1	5	3	30	811
3:00 PM	55	4	84	6	31	0	13	50	123	53	90	84	26	2	36	25	36	9	1	5	3	30	766
3:30 PM	30	1	9	28	18	0	9	26	79	45	99	84	23	3	36	17	36	6	0	1	3	71	624
4:00 PM	30	1	9	28	18	0	9	26	71	45	99	84	23	3	36	17	34	6	0	1	3	71	614
4:30 PM	31	1	10	21	21	0	21	7	29	21	88	69	15	2	18	7	34	2	0	5	16	60	478
5:00 PM	31	1	10	21	21	0	21	7	29	21	88	68	15	2	18	7	24	2	0	5	16	60	467
5:30 PM	31	1	6	17	17	0	4	2	28	17	120	55	20	3	24	4	24	2	0	5	18	90	488
6:00 PM	31	1	6	17	17	0	4	2	28	17	120	55	20	2	24	4	19	2	0	5	18	90	482
6:30 PM	29	1	5	13	12	0	6	1	21	17	85	57	20	2	24	3	19	2	0	4	18	70	409
7:00 PM	29	1	5	13	12	0	6	1	21	17	85	56	20	2	24	3	15	2	0	4	18	70	404
7:30 PM	21	1	3	8	8	0	3	1	22	11	93	21	11	0	16	2	15	0	1	2	22	73	334
8:00 PM	21	1	3	8	8	0	3	1	22	11	93	21	7	0	16	2	15	0	1	2	22	73	330
Peak Occupancy	50%	11%	75%	73%	58%	0%	20%	73%	92%	90%	85%	45%	47%	5%	89%	94%	100%	48%	7%	30%	26%	54%	50%

Table 5: Saturday Observations of Parked Vehicles - Public/Quasi Public Parking Areas

Time of day	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	TOTAL
	115 spaces	35 spaces	237 spaces	79 spaces	83 spaces	24 spaces	118 spaces	119 spaces	180 spaces	73 spaces	142 spaces	287 spaces	59 spaces	57 spaces	71 spaces	36 spaces	52 spaces	27 spaces	43 spaces	33 spaces	84 spaces	167 spaces	2121 spaces
10:00 AM	58	0	11	25	0	0	0	0	10	17	51	21	16	23	47	23	46	2	4	5	4	35	398
10:30 AM	44	0	11	26	0	0	0	0	9	15	79	26	20	39	47	29	51	3	2	13	10	43	467
11:00 AM	47	0	11	26	0	0	0	0	9	15	70	26	20	39	47	29	51	3	2	13	10	43	461
11:30 AM	46	0	11	16	0	0	4	0	7	15	67	30	26	46	36	19	49	5	1	19	10	44	451
12:00 PM	61	0	11	16	0	0	4	0	7	15	67	30	26	46	36	19	49	5	1	19	10	44	466
12:30 PM	47	0	11	14	0	0	9	0	7	18	77	32	27	50	19	6	46	5	1	24	10	62	465
1:00 PM	47	0	11	14	0	0	9	0	7	18	77	32	27	50	19	6	46	5	1	24	1	62	456
1:30 PM	47	0	11	10	0	0	1	0	6	19	69	25	24	38	19	6	49	8	1	26	1	47	407
2:00 PM	47	0	14	10	0	0	1	0	6	19	69	25	24	38	19	6	49	8	1	26	7	47	416
2:30 PM	42	0	14	11	0	0	6	0	6	19	69	19	25	26	20	3	50	11	1	26	7	70	425
3:00 PM	43	0	14	11	0	0	6	0	6	19	69	18	25	26	20	3	50	11	1	26	3	70	421
3:30 PM	27	0	12	11	0	0	14	0	6	17	55	18	28	23	23	5	29	6	0	13	3	69	359
4:00 PM	27	0	0	11	0	0	14	0	6	17	55	18	28	23	23	5	29	6	0	13	3	69	347
4:30 PM	26	0	0	11	0	0	14	0	6	17	55	18	28	24	23	5	32	6	0	13	3	69	350
5:00 PM	25	0	0	11	0	0	14	0	6	17	55	18	28	24	23	5	32	6	0	13	5	69	351
5:30 PM	21	0	0	11	0	0	14	0	6	16	55	17	27	24	23	5	26	6	0	11	5	68	335
6:00 PM	21	0	0	11	0	0	14	0	6	16	55	17	27	24	23	5	26	6	0	11	2	68	332
6:30 PM	14	0	0	10	0	0	12	0	3	15	51	15	16	20	22	3	11	5	0	9	2	58	266
7:00 PM	13	0	0	10	0	0	12	0	3	15	51	15	16	19	22	3	11	5	0	9	2	58	264
7:30 PM	11	0	0	10	0	0	10	0	3	11	41	15	14	16	22	2	17	3	0	7	2	49	233
8:00 PM	11	0	0	10	0	0	10	0	3	11	4	15	14	11	22	2	17	3	0	7	2	49	191
<b>Peak Occupancy</b>	53%	0%	6%	33%	0%	0%	12%	0%	5%	26%	56%	11%	47%	88%	66%	81%	98%	41%	9%	79%	12%	42%	22%

A review of Tables 4 and 5 reveal that the weekday and weekend peak parking demand times for the individual Public/Institutional parking areas vary considerably. Parking Lots I, J and K (near the court), O and P (near the Town Hall) and Q (Riverfront parking) are highly utilized during weekdays with overall peak utilization ranging from 85% to 100%. Parking Areas C and H (near the courts) and D (Cornell) have peak parking utilizations of 75%, 73% and 73% respectively during weekdays. The rest of the public/institutional parking lots are underutilized during weekdays. However, the public/institutional parking lots are also highly underutilized on Saturday, except for parking lots N and T (near the aquarium), Q (Riverfront parking) and P (Town Hall).

**Table 6: Weekday Observations of Parked Vehicles - Private Parking Areas**

Time of day	1	2	3	4	5	Total
	177 spaces	62 spaces	47 spaces	53 spaces	14 spaces	353 Spaces
10:00 AM	62	8	9	23	7	109
10:30 AM	49	19	9	22	6	105
11:00 AM	49	18	9	22	6	104
11:30 AM	42	19	15	24	4	104
12:00 PM	42	19	15	24	4	104
12:30 PM	26	17	19	26	4	92
1:00 PM	26	17	19	26	4	92
1:30 PM	34	19	11	9	3	76
2:00 PM	34	19	11	9	3	76
2:30 PM	22	23	10	13	4	72
3:00 PM	22	23	10	13	4	72
3:30 PM	19	19	9	16	4	67
4:00 PM	19	19	9	16	4	67
4:30 PM	24	21	10	1	10	66
5:00 PM	24	21	10	1	10	66
5:30 PM	12	21	8	6	9	56
6:00 PM	12	21	8	6	8	55
6:30 PM	7	8	2	6	5	28
7:00 PM	7	8	2	6	5	28
7:30 PM	6	26	2	8	2	44
8:00 PM	6	26	2	8	2	44
<b>Peak Occupancy</b>	35%	42%	40%	49%	71%	31%

**Table 7: Saturday Observations of Parked Vehicles - Private Parking Areas**

Time of day	1	2	3	4	5	Total
	177 spaces	62 spaces	47 spaces	53 spaces	14 spaces	353 spaces
10:00 AM	16	27	8	20	3	74
10:30 AM	17	34	5	25	5	86
11:00 AM	17	34	5	25	5	86
11:30 AM	19	32	3	26	4	84
12:00 PM	19	32	3	26	4	84
12:30 PM	12	39	6	11	3	71
1:00 PM	12	39	6	11	3	71
1:30 PM	11	25	8	4	2	50
2:00 PM	11	25	8	4	2	50
2:30 PM	12	33	10	11	1	67
3:00 PM	12	33	10	11	1	67
3:30 PM	13	36	10	8	3	70
4:00 PM	13	36	10	8	3	70
4:30 PM	13	37	10	8	3	71
5:00 PM	13	37	10	8	3	71
5:30 PM	13	36	8	8	3	68
6:00 PM	13	36	8	8	3	68
6:30 PM	9	37	7	6	3	62
7:00 PM	9	37	7	6	3	62
7:30 PM	9	36	4	4	3	56
8:00 PM	9	36	5	4	3	57
<b>Peak Occupancy</b>	11%	63%	21%	49%	36%	24%

A review of Tables 6 and 7 reveal that the peak parking demand times for the individual private parking areas varies considerably during the course of the day for weekdays and occurs between 11AM and 1PM on Saturday. The private parking areas are underutilized. The peak parking demand on these private lots are under 50% on weekdays and Saturdays except for Lot 5 (for the aquarium) that has a peak parking demand of 71% on weekdays and Lot 2 (community center opposite Howell Avenue) that has a peak parking demand of 63% on Saturdays.

**Table 8: Weekday Observations of Parked Vehicles - On-Street Locations**

	Griffing Ave	Roanoke Ave	Maple Ave	Union Ave	Ostrander Ave	Court St	E 2nd Street	Main St	Total
<b>Time of day</b>	30 spaces	39 spaces	19 spaces	17 spaces	13 spaces	14 spaces	36 spaces	68 spaces	236 spaces
10:00 AM	7	17	4	3	0	9	18	38	96
10:30 AM	12	21	4	2	0	10	27	46	122
11:00 AM	12	19	4	2	0	10	27	46	120
11:30 AM	9	17	4	2	5	9	19	29	94
12:00 PM	9	15	4	2	5	9	19	29	92
12:30 PM	6	16	4	2	3	5	10	32	78
1:00 PM	6	15	4	2	3	5	10	32	77
1:30 PM	7	10	4	2	2	6	15	42	88
2:00 PM	7	9	4	2	2	6	15	42	87
2:30 PM	5	9	4	2	1	6	19	37	83
3:00 PM	5	7	4	2	1	6	19	37	81
3:30 PM	5	6	4	2	0	3	7	23	50
4:00 PM	5	7	4	2	0	3	7	23	51
4:30 PM	5	5	4	4	0	3	6	20	47
5:00 PM	5	5	4	4	0	3	6	20	47
5:30 PM	4	5	2	6	0	3	5	47	72
6:00 PM	4	4	2	6	0	3	5	47	71
6:30 PM	4	3	2	6	0	2	4	31	52
7:00 PM	4	2	6	6	0	2	4	31	55
7:30 PM	2	3	6	3	2	1	2	34	53
8:00 PM	2	2	6	3	2	1	2	34	52
<b>Peak Occupancy</b>	40%	54%	32%	35%	38%	71%	75%	69%	52%

**Table 9: Saturday Observations of Parked Vehicles - On-Street Locations**

	Griffing Ave	Roanoke Ave	Maple Ave	Union Ave	Ostrander Ave	Courts St	E 2nd Street	Main St	Total
<b>Time of day</b>	30 spaces	39 spaces	19 spaces	17 spaces	13 spaces	14 spaces	36 spaces	68 spaces	236 spaces
10:00 AM	0	6	2	0	2	0	9	25	44
10:30 AM	0	7	2	0	2	0	9	36	56
11:00 AM	0	6	2	0	1	0	9	33	51
11:30 AM	0	9	3	0	1	0	9	42	64
12:00 PM	2	11	3	0	3	0	8	42	69
12:30 PM	2	6	2	0	2	0	8	44	64
1:00 PM	2	4	2	0	3	0	6	39	56
1:30 PM	2	5	0	0	3	0	6	31	47
2:00 PM	1	4	0	1	5	0	6	33	50
2:30 PM	1	3	3	1	4	0	6	32	50
3:00 PM	0	3	3	1	3	0	7	29	46
3:30 PM	0	5	3	1	3	0	3	27	42
4:00 PM	0	5	3	1	4	0	1	22	36
4:30 PM	0	2	3	1	3	0	2	28	39
5:00 PM	0	3	3	1	3	0	3	24	37
5:30 PM	0	3	3	1	3	0	2	27	39
6:00 PM	0	2	3	1	2	0	1	24	33
6:30 PM	0	3	1	1	2	0	1	21	29
7:00 PM	0	2	1	1	1	0	1	20	26
7:30 PM	0	1	1	1	1	0	1	18	23
8:00 PM	0	1	1	0	2	0	1	17	22
<b>Peak Occupancy</b>	7%	28%	16%	6%	38%	0%	25%	65%	29%

A review of Tables 8 and 9 reveal that the on-street parking spaces are highly underutilized in several areas. The peak parking demand on these on-street parking areas are under 50% on weekdays and Saturdays except for along E 2<sup>nd</sup> Street, West/East Main Street, Court Street and Roanoke Avenue with peak parking demands of 75%, 69%, 71% and 54% respectively on weekdays and along West/East Main Street with a peak parking demand of 65% on Saturday.

### **Parking Duration and Turnover Data**

During the parking accumulation counts, partial license plate numbers of vehicles parked in each parking space were recorded on a half hourly basis during the entire 10-hour study period (10AM to 8PM). This data was utilized to determine the length of time a space was occupied by a particular car (duration) and the number of different vehicles parked in a single space during the entire study period (turnover). The license plate survey data for each public/institutional parking area, each private parking area and on-street parking area studied was tabulated and analyzed. Additionally the parking duration and turnover for each of the parking areas was determined. The following tables summarize the weekday and weekend average parking duration and turnover for the parking lots and on-street parking areas.

**Table 10: Parking Duration and Turnover – Parking Lots**

Parking Area	Weekday		Weekend	
	Average Parking Duration (minutes)	Turnover (veh/space)	Average Parking Duration (minutes)	Turnover (veh/space)
<b>Public/Institutional</b>				
Lot A	166	1.3	107	1.8
Lot B	-	-	-	-
Lot C	134	1.2	-	-
Lot D	251	1.2	-	-
Lot E	219	1.0	-	-
Lot F	-	-	-	-
Lot G	-	-	-	-
Lot H	220	1.0	-	-
Lot I	182	1.8	-	-
Lot J	166	2.0	-	-
Lot K	159	2.5	241	1.1
Lot L	188	1.0	-	-
Lot M	171	1.4	256	1.0
Lot N	-	-	219	1.5
Lot O	192	1.7	228	1.0
Lot P	133	2.4	123	1.3
Lot Q	124	3.3	255	1.7
Lot R	161	1.0	208	1.0
Lot S	-	-	-	-
Lot T	79	1.4	265	1.1
Lot U	148	1.0	-	-
Lot V	158	1.6	239	1.0
<b>Private</b>				
Lot 1	-	-	-	-
Lot 2	99	1.9	118	2.8
Lot 3	98	1.3	85	1.1
Lot 4	150	1.1	119	1.2
Lot 5	51	4.5	82	1.6

Note – for example a 3.3veh/space turnover means an average of 3.3 different vehicles use a parking space over the 10-hour study duration. The average parking duration represents on average how long a vehicle park on a space.

Table 11: Parking Duration and Turnover – On-Street

Parking Area	Weekday		Weekend	
	Average Parking Duration (minutes)	Turnover (veh/space)	Average Parking Duration (minutes)	Turnover (veh/space)
<b>On-Street Parking</b>				
Griffing Ave between West Main St and Railroad Ave	163	1.6	-	-
Roanoke Ave between West Main St and Railroad Ave	103	3.3	128	1.1
Maple Ave between E 2nd Street and East Main St	-	-	-	-
Union Ave between E 2nd Street and East Main St	-	-	-	-
Ostrander Ave between E 2nd Street and East Main St	87	1.0	99	1.0
Court St between W Main St and Griffing Ave	105	2.7	-	-
E 2nd Street	117	1.8	-	-
West/East Main St between Griffing Ave and Union Ave	125	2.9	124	2.0

It can be seen from the review of Table 10 above that the average parking turnover rates at the public/institutional lots and private lots range from 1.0 vehicle per space to 4.5 vehicles per space over the duration of the count (10 hours) with a parking duration of up to 4 hours. The parking durations are consistent with the field observations. A vast majority of the vehicles were observed to park in these public lots between two (2) and four (4) hours. The parking turnover is significantly impacted by the number of underutilized parking spaces. Since these parking lots are not highly utilized for the entire parking count duration, the parking turnover rates are not consistent with the parking duration (the inclusion of numerous “zeros” in the calculation of the average skews the duration to a low number). It can also be seen that parking duration and turnover calculations were not conducted for some parking lots, especially on Saturday, since these lots are highly underutilized.

The average parking duration for the on-street parking areas ranges from 1.5 hours to 2.7 hours with average parking turnover rates ranging from 1 vehicle per space to 3.3 vehicles per space

over the 10 hour count duration. As with public lots, the on-street parking duration is not consistent with the parking turnover rates due to the underutilization of these parking areas.

## **FUTURE BUILD OUT SCENARIO**

The Full Build Out Scenario (based upon Alternative Development Scenario 2 included in the Nomination Study) will comprise of the following changes to the existing land uses over the next 6 years (all estimations are approximate):

- 123,302 SF of retail/commercial space
- 50,456 SF of restaurant space
- 50,028 SF of office space
- 28 multifamily/townhouse units
- 420 apartment units
- 63 camp site (recreational)
- 10,000 SF of open space/other public/quasi-public space
- 32,800 SF of lodging space (Bread and Breakfast)
- A reduction of 24,419 SF of industrial space
- A reduction of 5 single family housing units.

For the purpose of the Full Build Out scenario the parking analyses will concentrate on the following major area that are concentrated in the Downtown area especially the DC-1 District:

**D-1 (Transit Station Block)** – This area of the project is located in the area of the Riverhead Train Station bounded by Osborn Avenue to the west, Court Street to the south, Griffing Avenue to the east and Railroad Avenue to the north. The D-1 Concept will comprise of 10,000 SF of Retail/Commercial space, 10,000 SF (400 seats) Restaurant space, 10,000 SF of Office space and 95 apartment units.

According to the Riverhead Parking Code, Retail/Commercial uses require 1 space per 250 SF, restaurants require 1 space per 3 seats, and Office use requires 1 space per 200 SF. The Town Code parking requirement for apartments is unclear, however for downtown area we assume 1

space per dwelling unit. Based on the parking requirement, the proposed D-1 Concept will require a total of 318 parking spaces.

In order to provide parking for the D-1 Concept, an 882 parking space four level parking garage is envisioned to be built on the existing Train Station parking lot. Currently the existing Train Station parking lot contains total of 237 parking spaces with a weekday and weekend peak parking demand of 178 spaces (75%) and 14 spaces (6%) respectively. The Train station parking lot is mainly used by the courts on weekday and highly underutilized on weekends unless a large scale event is occurring in the downtown (as was observed during the October Country Fair in 2013 when all lots were generally full).

The parking lot on the Court property contains a total of 180 parking spaces and is highly utilized during weekdays with a peak parking demand of 165 spaces (92%). However, this lot is highly underutilized during weekend with approximately 5% occupancy. With the construction of a redevelopment and parking garage on the Train Station Block, there is the potential to relocate much of the court parking to the garage and free up assigned spaces in the downtown area. Of the 822 spaces included in the garage as envisioned, 318 spaces will be assigned to the D-1 Concept and the remaining 563 spaces will be adequate to serve the courts and the train station.

**D-4 (Grocery Concept)** – This redevelopment concept is located on the north side of West Main Street west of Griffing Avenue. Concept D-4 comprises of a total of 21,000 SF of Retail/Commercial space in two buildings. One of the buildings would occupy the southern portion of the Courts parking lot. A two level parking deck containing 120 spaces will be built on site to support the D-4 Concept. According the Town of Riverhead parking code, the 21,000 SF retail developments will require 84 spaces. The 120 parking spaces proposed to be provided is more than adequate to support the use. As previously mentioned, any Court parking spaces displaced will be accounted for in the proposed parking garage.

**D-6 (DC-1 District)** – This area of the project is in Downtown Riverhead. This area is on the north and south sides of Main Street between Griffing Avenue and slightly east of Ostrander

Avenue. The DC-1 District will comprise of 34,546 SF of Retail/Commercial space, 34,546 SF (460 seats) Restaurant space, 54,020 SF of Office space and 325 apartment units.

According to the Riverhead parking code, if multiple uses are provided within the same development in the DC-1 District, the parking demand generated by non-residential development can be accommodated by the parking provided through the parking district. However, in order to estimate the parking demand of the proposed uses within the DC-1 District, a combination of Town of Riverhead parking requirement and parking demand ratios developed by the Institute of Transportation Engineers published in their “Parking Generation Manual 4<sup>th</sup> Editions” was utilized. The estimated peak parking demand was also adjusted to account for shared parking in characteristics in a Central Business District. Shared parking is the use of a parking space to serve two or more individual land uses without conflict or encroachment. The ability to share parking spaces is the result of two conditions:

- Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and
- Relationship among the land uses that result in visiting multiple uses on the same auto trip.

The ITE’s “Shared Parking Planning Guidelines” and “Shared Parking from Urban Land institute” provides information on shared parking adjustments for land uses within downtown areas. In some case studies reductions of up to 50% were determined. However, to perform a conservative analysis a 20% shared parking reduction was applied for non-residential uses and a parking rate of 1 space per residential unit was used. Based on the Riverhead parking code and the 20% shared parking reduction, the proposed development in the DC-1 district will have a peak parking demand of 1,193 parking spaces.

The public parking lots within the DC-1 District contains a total 1,024 parking spaces. The parking counts conducted shows that the peak parking demand for the DC-1 District is 450 spaces (44%) on a typical weekday and 352 spaces (34%) on a typical Saturday. It should be noted the parking counts only represent existing conditions and did not account for all vacant uses

during the counts and all other planned projects that are not included in the Full Build Out Scenario for DC-1 District. The following planned projects were not accounted for in the 2013 parking counts (see Table 12).

**Table 12: Vacant uses and planned projects in DC-1 District**

Sites	Uses
80% of Vacant site within DC-1 District	61,141 SF of Retail and 9 apartment units
Apollo site	26,188 SF of Health Club, 6,392 SF Furniture Store and 19 apartment units
Summerwind site	200 seat restaurant, 52 apartment units and 2,590 SF Drive-in-Bank
Zenith Building	5,317 SF of retail space and 8 apartment units

The following parking requirements with a 20% shared parking adjustment was applied to the non-residential uses to estimate the peak parking demand of the vacant and other planned projects within the DC-1 District.

**Table 13: Parking Requirements**

Use	Parking Requirement	Source
Retail/Commercial	1 space/250 SF	Town of Riverhead Parking Code
Apartments	1 per dwelling unit	
Bank	5.67 spaces/1,000 SF	ITE Parking Generation 4 <sup>th</sup> Edition
Restaurants	1space/3seats	Town of Riverhead
Fitness Center	8.46 spaces/1,000 SF	ITE Parking Generation 4 <sup>th</sup> Edition

Based on the parking requirement on Table 13 and the 20% shared parking adjustment, the peak parking demand for the vacant uses and other planned projects within the DC-1 District is 578 parking spaces.

Based on the parking analyses, after the development of the Full Build Out scenario including the occupancy of the vacant uses and other planned project a total of 1,771 parking spaces will be required to meet the parking demand. However, based on the parking counts the peak parking demand for the DC -1 District on a typical weekday is 450 spaces (44%). Hence 574 spaces out of the 1,024 spaces in the DC-1 District are available. Therefore to meet the future parking demand a total of 1,197 new parking spaces will be required. The on-street parking was not figured into this number and is intended to serve as surplus parking.

In order to provide an additional 1,197 parking spaces a parking structure will need to be constructed. Though further analysis would be required to determine suitability, we feel that the best location for this structure would be on Lot L, located on the north side of East Main Street between Roanoke and East Avenues. This lot is centrally located in the downtown and should provide enough space for a parking structure.



## PARKING EVALUATION AND RECOMMENDATIONS

As stated previously, upon review of the parking data, it appears that Downtown Riverhead has adequate parking to support existing conditions. However, after the development of the future build out scenario, 1,197 additional parking required will be required to support the additional demand. The following is a brief summary of the improvement measures that could be considered to improve parking for the current and future conditions.

### Parking Structures

In order to provide an additional 1,197 parking spaces a parking structure will need to be constructed. We feel that the best location for this structure would be on Lot L, located on the north side of East Main Street between Roanoke Ave and East Ave. This lot is centrally located in the downtown and should provide enough space for a parking structure. Assuming that each parking stall requires 350 square feet (including 10' x 20' for the stall and 15' x 10' additional area to allow space for aisles/ramps), the surface area required for 1,200 parking stalls is 420,000 SF. The design of a structure would impact the coverage of the structure - for example, a four story structure with 8.5' high floors would require a footprint of approximately 105,000 SF; whereas a 5 story structure would require a footprint of approximately 84,000 SF.

### Town Parking Facilities

There are many parking fields located in downtown Riverhead, some public, others private. In order for motorists to take full advantage of the provided parking they must be guided to it via efficient signage. To achieve this we are recommending that Riverhead update/upgrade all parking signs within the downtown. We have provided recommendations for the design of and location of new parking signs.

Within the downtown, at and prior to key decision points, we recommend installing parking guide signs to properly route

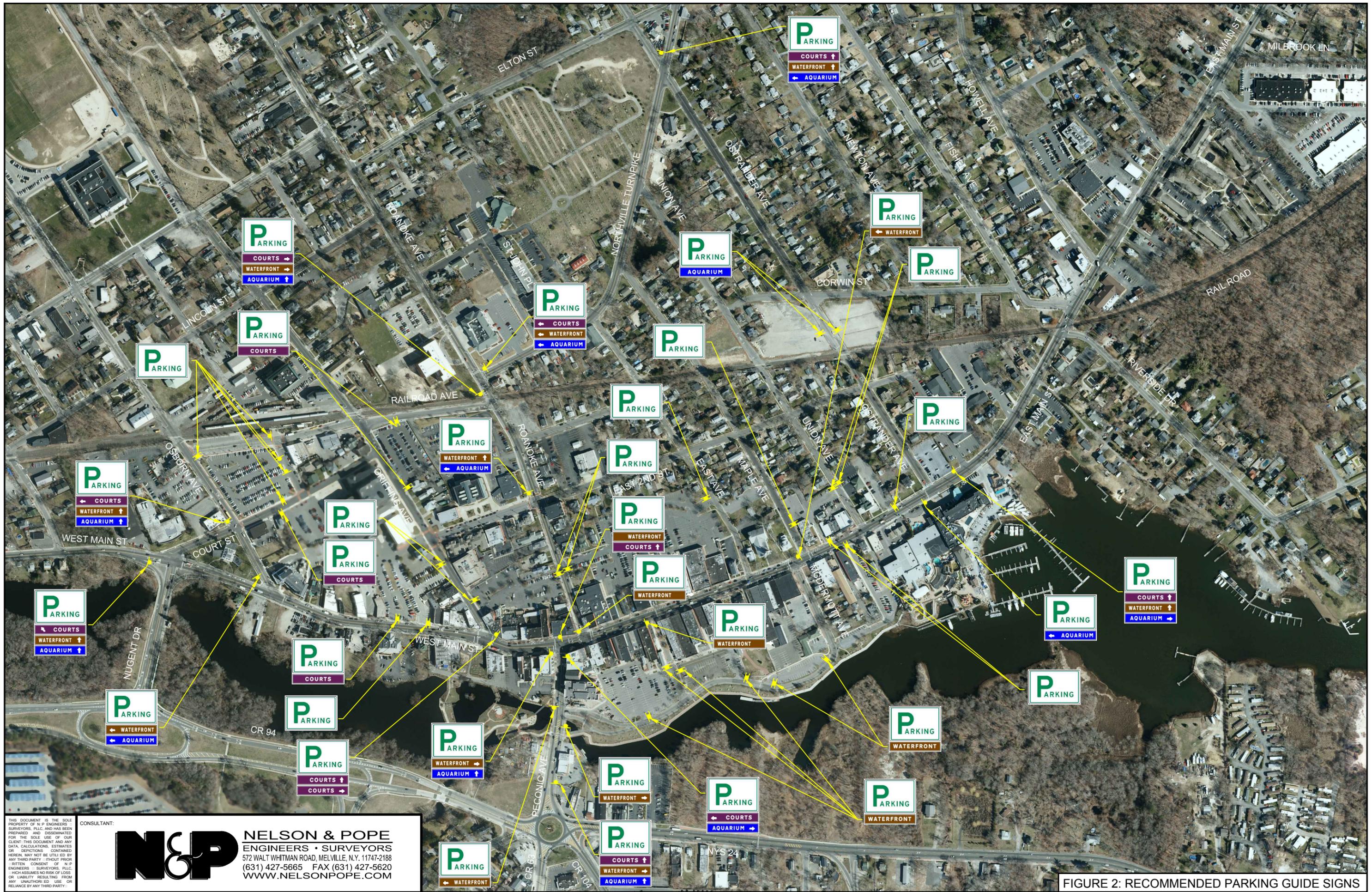


patrons to the parking lot closest their destination. Some of the main destinations of the downtown are the courts, waterfront and aquarium. Therefore we recommend installing signs like the one pictured to the right, at key locations and intersections in the vicinity of and within the downtown. Figure 2 located on the following page, depicts the location and configuration of the recommended parking guide signs.

At all access points to every parking lot, uniform signage should be installed to declare the lot for public or private use. The Town of Riverhead should clearly mark all municipal parking lots and should encourage private business with designated parking to clearly sign their lots as well. Currently, designated signage only exists for some lots and the signage utilized is not consistent throughout the downtown. The dirt lots on Ostrander Ave just south of Corwin Street currently utilized by the aquarium would benefit from installing asphalt pavement and formal parking space striping. This would provide patrons of the aquarium with a more uniform walking surface and the lots would likely benefit from increased capacity.

Spaces within municipal lots that have time restrictions should also be clearly defined with signage. We find that when striping is used to denote time restricted parking areas, it creates a maintenance issue and has limited effectiveness/visibility during inclement weather. Where practical, we recommend that time restricted parking be denoted with signs.

From an overall perspective, we want to stress the importance of having clear, concise, uniform signage that directs motorists to the main parking fields located within the downtown. This is achieved by providing guide signs at the extents of the downtown, as well as key locations within the downtown in order to direct motorists to the necessary locations, as discussed above. Field observations revealed that there are standard parking signs such as those in the MUTCD utilized at areas within the downtown. However, there are also fancier wooden signs used in other locations. While we understand the desire to use a more visually appealing sign than those pictured in the MTUCD, we find that at times these signs are difficult to read especially for older patrons. Furthermore, they do not promote continuity which we feel will not efficiently guide patrons looking for parking.



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FIGURE 2: RECOMMENDED PARKING GUIDE SIGNS

### **On-Street and Off-Street Parking Coordination**

Parking is generally permitted along West/East Main Street. The Town should attempt to limit this parking to short durations (less than the current 2 hour limit) to allow those motorists that are passing thru to utilize the various retail establishments for actions that require minimal time. Those individuals visiting the Town for lengthier stays, (i.e. Aquarium, Science Center, Court, restaurants) should be encouraged to utilize the off-street parking facilities. This could be accomplished with parking intervals of short duration, i.e. less than one hour, preferably thirty minutes, or perhaps the installation of parking meters. To be effective, these options would require appropriate enforcement.

### **Employee Parking**

Too often existing on-street parking is utilized by employees of local retail establishments since they generally arrive prior to the patrons of the local establishments. Employees need to be encouraged to park in the local municipal lots or in the private lots of the local establishments. If additional employee parking is required, some of the municipal lots could provide reserved parking for the employees especially if there are time restrictions within the municipal lots. As redevelopment occurs, and parking is in greater demand, the establishment of a parking lot outside of downtown may be appropriate. In addition, during summer months, nearby school parking may be considered for employee parking if an agreement can be achieved with the District.

### **Parking Shuttles**

In order to encourage the “park once” approach to residents and visitors to the “core” downtown of Riverhead, the use of shuttle service should be considered. Parking shuttles can connect remote off-street facilities to the Town “Core” utilizing a circular bus service. Typically the shuttle rides would be free of charge and their headways (the time between arrivals at each stop) should be of short duration (e.g. 10 minutes or less). The parking shuttles can assist with the employee parking by encouraging off-street parking participation. Promotion of the shuttle service would be an important part of the success of this program.

### **Public Valet**

Many businesses are known to utilize valet service to provide convenience to their patrons and supplement off-street parking for popular venues to assist with the operation of their establishment. However, another method to encourage better utilization of parking and promote connectivity to the off-street parking facilities is the use of public valet. Certain areas can be designated as “Public Valet Zones” along West/East Main Street. Motorists would drop their car off at these stops, walk and patronize the local establishments and then be afforded the opportunity to retrieve their vehicle without having to leave West/East Main Street. This option would work best if a designated and secure parking area is provided. This would also need to be promoted by the Town local chamber and the BID.

## **PUBLIC TRANSIT PLAN AND PEDESTRIAN/ BIKE PLAN**

As part of the Transit Oriented Development Plan (TOD) for Downtown Riverhead, the Transit Plan and the Pedestrian/Bicycle Plan focused on the existing transit, pedestrian bicycle facilities and the elements that could potentially be improved to serve as mitigation factors to the traffic and safety issues within the downtown as redevelopment occurs, as well as to illustrate and encourage the use of multimodal access within the study area. Numerous documents have been researched to determine some of the issues that need to be explored in order for the TOD plan to be effective.

Basic components of TOD plans are:

- The need to define what the objectives are, i.e., congestion reduction;
- Pollution reduction;
- Increased options for non-drivers; and
- Increased livability and accessibility of neighborhoods

The main objective of the Public Transit Plan and Pedestrian Bike Plan is to increase multi-modal transportation choices and reduce trip generation and congestion. In developing transportation improvements that may encourage fewer trips by car and more trips by walking, biking, transit or car sharing and “park once” strategies, the following were explored:

- Review possible streetscape improvements, i.e., improved sidewalks, street trees, benches and other amenities that may encourage pedestrian activity within the downtown.
- Review existing bus service and bus stop locations, spacing, where the stops are located, i.e., far side, near side, mid-block. Analyze whether there are sufficient crosswalks and whether the locations of crossings relative to bus stops minimize the potential for jaywalking. Consider future placement of shelters, lighting, benches, and new stops.
- Review LIRR ridership – assess how the LIRR connects with other local transit. Assess improvements that may be required.

- Parking – Analyze whether or not sufficient parking exists both on and off-street. Consider whether parking be limited to off-street parking, thereby making the downtown more pedestrian friendly.
- Pedestrian/Bike issues need to be explored. Inventory bike routes that exist and identify improvements and connections required. Research availability and potential success of a bike sharing program for this area.
- Assess whether or not the streets, sidewalks and other outdoor spaces are designed to enhance the pedestrian environment within the community.
- Study the direct pedestrian connections between the surrounding neighborhoods and the downtown to ensure that safe pedestrian and bicyclist access from the adjacent neighborhoods may be provided.
- Assess pedestrian circulation within parking areas with respect to safety and accessibility to destinations along the roadways. Identify areas where improvements should be considered.

### **Pedestrian Amenities**

Pedestrian amenities are crucial to providing walking patrons of downtown Riverhead with a safe means of travel. Marked crosswalks, pedestrian pushbuttons and pedestrian signals with countdown timers all provide a sense of security and clearly denote pedestrian routes. Pedestrian amenities are provided through the majority of downtown Riverhead, which include sidewalks, crosswalks, push buttons and pedestrian signals with countdown timers.

A cohesive and complete walking route is very desirable in a downtown setting. Pedestrian facilities give walkers confidence and a sense of safety. It also encourages and empowers them to walk because pedestrian routes are clearly defined and signed. Sidewalks are provided for the majority of the downtown area. Several areas of sidewalk within the downtown are cracked or broken, providing an uneven walking surface and presenting potential trip and fall hazards. Not

only would a refurbished sidewalk network provide enhanced pedestrian mobility, it would also improve the aesthetic of the downtown area.

New York State Department of Transportation recently completed a project to improve pedestrian safety and mobility by addressing the pedestrian infrastructure along the NYS Route 25 (East/West Main St) corridor from River Road to Union Avenue (~3.5 miles) which traverses downtown Riverhead. The project consisted of the repair and construction of pedestrian walkways that are in compliance with the Americans with Disabilities Act (ADA) which was constructed with Federal and State funding.

In addition to refurbishing the pedestrian walkways, pedestrian mobility and safety could be enhanced at several of the signalized intersections in the downtown. Pedestrian push buttons and pedestrian signals with countdown timers should be provided at all signalized intersections. The older traffic signals are equipped with old-style push buttons only and some have no pedestrian accommodations at all.

There are several areas within the downtown on side streets, where sidewalk should be refurbished or installed. Some areas are lacking pedestrian accommodations and other areas could benefit from updating existing features. Below is a list of locations that we feel would benefit from upgraded pedestrian amenities:

- *West Main Street and Center Drive/Court Street* – install crosswalk on the southbound approach (Court St) and install pedestrian push buttons and pedestrian signals with countdown timers for the existing marked crossing on the westbound approach.
- *Court Street* – Install new sidewalk on the southeast side of the roadway from NY 25 to Osborn Avenue to provide connectivity



*South side of Court Street – Install new sidewalk*

and continuous walking path around the Suffolk County Historical Society building and World War Memorial.

- *Osborne Avenue and Court Street* – Old style push buttons are provided on all approaches and a crosswalk is only provided on the westbound approach (Court Street). This location should be improved to include a crosswalk for the northbound and eastbound approaches and modern push buttons and pedestrian signals provided for the marked crossings.
- *Griffing Avenue* – Replace the majority of sidewalk on the west side of Griffing Avenue between 2<sup>nd</sup> Street and West Main Street.
- *Roanoke Avenue and 2nd Street* - old style push buttons and crosswalks are provided on all approaches. This location should be improved to include modern push buttons and pedestrian signals with countdown timers for all marked crossings.

- *Midblock Crossings on East Main Street*  
- On East Main Street between Roanoke Avenue and McDermott Avenue there are three midblock crosswalks provided for crossing East Main Street. The westerly crosswalk is located just east of a one-way southbound unnamed roadway that provides access to the



*East Main St - Midblock crossings*

parking area along the north side of Peconic Waterfront Park. The middle crosswalk provides direct access to the Suffolk Theater. The easterly crosswalk extends south from the southwest corner of East Avenue and provides access to the East End Community School of the Arts and retail uses. It may be desirable to install rapid flashing beacons to these pedestrian crossing signs to enhance visibility of the crossings for motorists.

- *East Main Street and McDermott Avenue/Maple Avenue* - The signalized offset intersection of East Main Street and McDermott Ave/Maple Avenue provides crosswalks on all approaches but only provides push buttons for crossing the eastbound and westbound approaches of East Main Street. No pedestrian signals are present. This

location should be improved to provide new style push buttons and pedestrian signals for crossing both East Main Street crossings.

- *Osborne Avenue* – Replace sidewalk fronting the property located on the northwest corner of Court Street and Osborn Avenue.
- *East Main Street near Ostrander Avenue* – On the north side of Main Street, approximately 80 feet east of Ostrander Avenue, in the vicinity of the S92/8A bus stop, the sidewalk and utility strip (between curb and sidewalk) is in poor condition and should be refurbished.
- *Ostrander Avenue* – Replace broken sidewalk on the west side of Ostrander Ave, between Main Street and 2<sup>nd</sup> Street.
- *Ostrander Avenue* – Replace broken sidewalk on the east side of Ostrander Avenue between Corwin Street and LIRR tracks which is in poor condition.
- *Ostrander Avenue* – Install sidewalk on the west side of Ostrander Avenue, between 2<sup>nd</sup> Street and Corwin Street. This is a frequently traveled route for pedestrians accessing the aquarium from the auxiliary parking lots on the south side of Corwin Street. The addition of sidewalk along this portion of roadway would improve accessibility and pedestrian safety.



*Aquarium patrons walking to parking area*

- *Peconic Avenue* - A midblock pedestrian crosswalk is provided on Peconic Avenue which connects the Peconic Riverfront Park on the east side of Peconic Avenue with Grangebel Park to the west. This crossing has an overhead sign mounted to a mast arm which reminds motorists that it is a State law to stop for pedestrians in the crosswalk. It may be desirable to supplement this overhead pedestrian crossing sign with Standard pedestrian crossing assemblies equipped with push button activated rapid flashing beacons to increase motorists awareness when pedestrians are present.

It may also be desirable to increase the width of the sidewalk on the east side of Peconic Avenue adjacent to the Vail Levitt Theater. This section of sidewalk is rather narrow and

is an area where patrons regularly congregate when attending a performance at the theater. In addition, the sidewalk is narrow at the southeast corner of Peconic Avenue and East Main Street adjacent to the Dark Horse Restaurant and should be widened if feasible. Widening these sections of sidewalk may be possible if certain traffic modifications are implemented, such as one-way travel on Peconic Avenue.

- *Grangebel Park* – Grangebel Park is located on the west side of Peconic Avenue opposite the Peconic Riverfront Park, south of Main Street. Grangebel Park has a network of walkways and foot bridges that meander over and around the Peconic River and provide sitting areas with river views. At its southern limit the walkway ends abruptly where the parcel meets property owned by the Suffolk County Department of Parks, Recreation and Conservation. We recommend that this walkway be continued onto the Suffolk County parkland in order to provide connectivity to the sidewalk along the north side of Nugent Drive (CR 94).

- *Alleyways* – There are several alleyways that provide connectivity to East/West Main Street from parking areas located behind commercial buildings. These alleyways should be emphasized with signage and should be provided with good lighting to encourage use and permit safe ingress/egress during nighttime hours. The Town may also wish to engage local art programs to paint murals on the walls of the alleyways. This would promote a friendlier atmosphere and would give local art programs a way to give back to and



*Alley connecting E Main St to parking area*

be active in the local community. Below are examples of signage that could be installed at the limits of the alleyways to make pedestrians more aware of the connecting routes.



*Recommended signs to highlight alleyways which provide connectivity between the waterfront, Main Street and parking areas*

**Bicycle Facilities**

There are limited bicycle accommodations in downtown Riverhead. The only location in the downtown with a striped bicycle lane is the roadway which runs along Peconic Waterfront Park from Peconic Avenue to East Main Street and is approximately 0.4 miles in length. This roadway changes to McDermott Avenue in the vicinity of East Main Street. The designated bicycle lane ends at East Main Street. The route then continues from McDermott onto East Main Street (as a shared route) for approximately 725 feet to the east and then turns north on Ostrander Avenue, which extends north to Middle Road, approximately 1.5 miles away. Other bicycle friendly roadways in the area are Elton Street, Fairway Avenue and Hubbard Avenue, which connect east of Ostrander Avenue. All of these roadways have small signs containing a green oval with white bicycle symbol and background. No pavement markings are provided.



*Bicycle route sign*

In order to provide a striped/signed bicycle lane through the downtown on E/W Main Street the elimination of on-street parking or widening of the roadway may be required, which is not a

practical or cost effective option. We feel that the designated bicycle lane provided along the Peconic Waterfront Park is the best and safest route through the heart of the downtown.

There are bike route signs on West Main Street (NYS 25) west of the downtown but no striped bicycle lane is provided. The section of NYS 25 west of the downtown has wide shoulders in some areas. The Town may wish to coordinate with NYSDOT to install formal striping where feasible and bike route guide/destination signs to route cyclists to the downtown area.

Some of the signs in the downtown denoting bicycle routes utilize text only. For example, there is a sign on the northeast corner of East Main Street and Maple Avenue that reads, “Riverfront Bike Route” with an arrow sign below. Text signs like these should be supplemented with bicycle icons signs, such as the sign pictured on the previous page, to raise cyclists’ awareness of the available routes. Text only signs may have limited effectiveness for several reasons. Icon signs are readily identifiable and can be understood by all eliminating a potential language barrier.

In order to encourage more people to travel via bicycle to, from and within the downtown, more secure bicycle storage should be provided at key locations. There are several locations where bike racks are provided, however they only provide enough positions to secure several bikes. Locating bike racks in a central area close to main destination points (apartments, stores & attractions) would make bike storage more convenient and may increase ridership. For example, providing bike racks in main parking lots in the vicinity of the alleyways that provide direct access to Main Street would give cyclists a convenient location for bike storage.

New residential developments (condos or apartments) may wish to include bicycle lockers in their building design in order to provide residents a secure location to store a bicycle without having it take up space within their dwelling. These lockers could be provided inside or outside the building. If future residential developments are required to provide some off street parking, the provision of bicycle storage could be used to reduce the required number of stalls.

Additionally, similar bicycle accommodations should be provided at future and currently proposed nearby developments such as the Enterprise Park at Calverton (EPCAL) which may encourage Riverhead residents who work nearby to commute to work via bicycle as opposed to a motor vehicle. Looking to the future, bicycle accommodations should be continuously explored to gradually build up cycling features in the surrounding area which will promote and encourage cycling and hopefully have a positive impact on intersection delay and Level of Service by lowering motor vehicle usage/trips.

We feel that with the combination of more visible bicycle signage along the roadways combined with more bicycle racks and storage, that it would promote cycling and increase the number of riders. Equivalent in importance to the parking sign discussion above, is the need for uniform bicycle signage in order to develop a concise and clear bicycle route.

## **PUBLIC TRANSIT PLAN**

Within the Town of Riverhead, public transit is provided primarily by Suffolk County Transit and the Long Island Railroad. The increased use of public transit is desired in order to reduce vehicle trips, ease roadway congestion and lower parking demand. At the present time, utilization of public transit in/around downtown Riverhead is low. Historically, in order to justify the time and expense for agencies to provide additional or more frequent public transit services, the demand must come first. The following discussions will outline the existing local bus and train service and explore options for increasing ridership and service.

### **Bus**

Suffolk County Transit (SCT) has six (6) bus lines that service locations in and around downtown Riverhead – 8A, S58, S62, S66, S90 and S92. The buses are operational Monday through Saturday and do not operate on Sundays, New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. Additionally, on Saturdays, some bus routes operate on a reduced schedule. The only route that provides Sunday service is S92 which runs from May-October.

Route 8A is a local route which mainly serves the Riverhead downtown and the CR 58 corridor. Routes S58, S62 and S66 provide service from western areas of Long Island (Hauppauge, East Northport, Patchogue, etc.) and stop at main destinations in Riverhead (County Center, LIRR, etc.). Route S90 provides connection from Riverhead to Center Moriches and Westhampton. Route S92 connects Riverhead to destinations on the eastern parts of the north and south “forks” of Long Island. More specific information about the individual routes is summarized below.

*Route 8A:* This route runs between Calverton Hills and Suffolk CC Riverhead Campus. Stops along this route include Peconic Bay Medical Center, Riverhead Railroad, Riverhead County Center and Riverhead Suffolk Community College. The bus operates on sections of West Main Street and on East Main Street within the study area. The bus operates approximately every hour and runs from 7am to 6pm, Monday through Friday with limited service on Saturdays.

*Route S58:* This route runs between East Northport (Huntington Square Mall) to the Riverhead County Center. Stops along this route include Smith Haven Mall, Selden Suffolk Community College, and Riverhead Tanger Outlets. The bus operates on West Main Street and Osborn Avenue within the study area. The bus operates approximately every hour and runs from 5:40 am to 8:40 pm Monday through Friday with minimally limited service on Saturdays.

*Route S62:* This route runs between The Hauppauge Industrial Complex and the Riverhead County Center on weekdays and between Smith Haven Mall and the Riverhead County Center on Saturdays. Stops along this route include Port Jefferson Shopping Plaza, Port Jefferson Rail Road Station, Rocky Point Shopping Plaza and Riverhead Tanger Outlets. The bus operates on portions of West Main Street within the study area. The bus operates approximately every hour and runs from 6:00 am to 7:50 pm with the west end of the route experiencing limited service in the morning and evening. Saturday service is limited and omits several stops in the Hauppauge area.

*Route S66:* This route runs between Patchogue and the Riverhead County Center. Stops along this route include Bellport Village, locations in Shirley, Mastic Beach, Mastic, Center/East

Moriches and Riverhead Suffolk Community College. The bus does not operate on roadways within the study area but does provide transfer locations to routes that do. The bus operates approximately every hour and runs from 5:35 am to 7:20 pm. Full service is available on Saturdays.

*Route S90:* This route runs between Center Moriches and the Riverhead County Center. Stops along this route include locations in East Moriches, Eastport, Speonk, Westhampton Beach, Quogue and East Quogue. The bus does not operate on roadways within the study area but does provide transfer locations to routes that do. The bus operates two times in the morning and evening with one route midday. Full service is available on Saturdays.

*Route S92:* This route runs between the Orient Point Ferry through Riverhead and then to the East Hampton Railroad. This route makes several stops along the north and south fork of Long Island as well as two stops in Riverhead. The bus operates on East Main Street and Osborn Avenue within the study area. The bus operates approximately every half hour or hour depending on the time of day and runs from 5:15 am to 8:45 pm. Full service is available on Saturdays.

Suffolk County Transit does provides adequate bus service to the Riverhead downtown; however, service should be modified or expanded based on future development of the downtown area. Looking forward, bus service should be provided near uses (residential or commercial) where frequent ridership is anticipated. This type of convenience will appeal to more patrons and may increase ridership. If modifying or adding SCT Bus routes is not possible in the future, the Town may wish to explore the possibility of providing a local shuttle that makes frequent trips through the downtown providing stops at any/all major destinations with minimal wait time. Currently, patrons of the downtown area wishing to utilize a bus to traverse the downtown via SCT Bus are currently required to wait approximately one hour to return to their point of origin. This wait time is excessive and not practical. It may be most practical to provide the shuttle only during peak season.

We have looked at existing Suffolk County Transit bus stop locations and placement and did not observe any operational issues with existing bus stops. Our only recommendation is to update the signs as they begin to fade to maintain maximum visibility and retroreflectivity.

Bus service is also provided to/from Manhattan, Melville, Ronkonkoma, Riverhead and Southampton via 7Bus. 7Bus is a private company offering first class charter service several times a day. The goal of 7Bus is to provide patrons with a comfortable setting where they can focus on business or relax. 7Bus has 3 pick-up/drop-off locations in Manhattan (40th St, 47th Street & 59th St). The Riverhead and Ronkonkoma pick-up/drop-off locations utilize Hilton and Marriot hotels respectively, the Melville location utilizes a park-and-ride off of the Long Island Expressway and the Southampton location utilizes the Long Island Railroad Station. 7Bus offers competitive fares that start as low as \$7.00. With proper planning downtown Riverhead could become a destination to which 7Bus would provide direct service.

## **Rail**

The Long Island Rail Road (LIRR), a division of the Metropolitan Transit Authority (MTA), provides passenger rail service to Suffolk County, Nassau County, Queens, Brooklyn and Manhattan. Major hubs provide transfer to several public transit options. Suffolk/Nassau locations provide transfer to Long Island bus services, Queens/Brooklyn locations also provide transfer to the subway/city bus and Penn Station in Manhattan adds transfer to New Jersey transit and Amtrak.

The majority of the LIRR utilizes electric trains; however diesel trains provide service to Yaphank, Riverhead or Greenport east of Ronkonkoma. Patrons travelling to destinations further west than Ronkonkoma, must switch trains at this station to ones that provide electric service. Transfers are timed such that departing trains are waiting for riders when they arrive at



*Riverhead LIRR Station*

the transferring station.

The Riverhead LIRR station is located in downtown Riverhead. The station is situated on the north side of Railroad Street between Osborn Avenue and Griffing Avenue. There are 5 trains per day, per direction at this station. This station is a stop for SCT Bus routes S58, S62, S90, S92 and 8A and serves as a transfer location. Train arrivals and departures are not coordinated with the SCT bus schedule and vice versa. Several bicycle racks are also provided at this location.

The ridership on this eastern section of the LIRR is low. The infrequent train service leaves commuters with few options when travelling to/from work. The current weekday schedule provides 5 trains daily for both eastbound and westbound travel. Weekend and holiday service is even more limited with just 2 trains per direction, per day. According to the most recent ridership information available from the MTA/LIRR, at the Riverhead station, during the weekday AM peak, 16 patrons boarded the westbound train and no one boarded the eastbound train. During the weekday midday peak, 16 patrons boarded the westbound train and 14 patrons exited the eastbound train. During the weekday PM peak, no one boarded the westbound train and 6 patrons exited the eastbound train. The overall ridership for an entire day is 52 patrons entering/exiting the train at the Riverhead station. For comparison purposes, the Ronkonkoma train station services 17,278 patrons, in one day. The infrequent service, arrival/departure times and distance from other stations does not appeal to long distance commuters. As discussed previously, the demand for additional train service must present itself prior to the MTA analyzing or implementing additional train service.

## **FINDINGS AND CONCLUSIONS**

As part of the Transit Oriented Development (TOD) Growth Plan, Nelson & Pope conducted a Parking and Public Transportation Study.

The following provides the conclusions from the Parking Utilization Study, and the Pedestrian, Bicycle and Transit Analyses:

Based upon a Study of the primary parking lots and on-street parking areas in Downtown Riverhead, the majority of parking lots are underutilized both during weekends and weekdays, with some exceptions.

On street parking is underutilized, though there are areas where spaces are used fairly continuously. On street parking would be better as short term parking to serve the retail businesses (for less than the current 2 hour limits).

Utilizing the existing parking data and information contained in The ITE's "Shared Parking Planning Guidelines" and "Shared Parking from Urban Land Institute" parking demand was estimated for the Full Build Out Scenario (Alternative Development Scenario 2) and it is estimated that a total of 1,197 new parking spaces will be required to support the additional growth.

In order to support an additional 1,197 parking spaces, it is expected that a parking structure will need to be constructed. While additional suitability analysis will be required, the lot north of East Main Street between Roanoke Avenue and East Avenue appears to be suitable as it is centrally located in the downtown and provides adequate space for a parking structure.

Other parking management options should be implemented to decrease the total number of spaces required in a parking garage and to alleviate parking issues in the short term. A comprehensive signing plan which includes new parking guide signs to be erected at key locations within the downtown is recommended.

Employee parking should be managed to free up the most conveniently located stalls for shoppers and visitors. Remote municipal lots private lots of the local establishments may be appropriate for employee parking.

In order to encourage the “park once” approach to residents and visitors to the “core” downtown of Riverhead, the use of shuttle service should be considered, especially during events.

Consider use of a public valet system with designated “Public Valet Zones” along West/East Main Street.

The Transit Plan and the Pedestrian/Bicycle Plan focused on the existing transit, pedestrian bicycle facilities and the elements that could potentially be improved to serve as mitigation factors to the traffic and safety issues within the downtown as redevelopment occurs, as well as to illustrate and encourage the use of multimodal access within the study area. The following provides the main findings from the study:

Several recommendations for improving pedestrian mobility and safety are provided throughout the downtown such as, refurbishing the pedestrian walkways, providing additional marked crossings and additional pedestrian push buttons and pedestrian signals with countdown timers.

There are limited bicycle accommodations in downtown Riverhead. The only location in the downtown with a striped bicycle lane is the roadway which runs along Peconic Waterfront Park from Peconic Avenue to East Main Street. Bicycle friendly roadways in the area are, East Main Street, Mc Dermott Avenue, Ostrander Avenue, Elton Street, Fairway Avenue and Hubbard Avenue. As redevelopment occurs, bicycle accommodations should be continuously explored and developed to gradually build up cycling features in the surrounding area.

It is believed that a combination of more visible bicycle signage along the roadways with more bicycle racks and storage, will increase the number of riders.

Public transit is provided primarily by Suffolk County Transit and the Long Island Railroad.

Bus service should be modified or expanded based on future development of the downtown area.

Looking forward, bus service should be provided near uses (residential or commercial) where frequent ridership is anticipated. If modifying or adding SCT Bus routes is not possible in the future, the Town may wish to explore the possibility of providing a local shuttle that makes frequent trips through the downtown providing stops at any/all major destinations with minimal wait time.

Private bus service is also available in the Riverhead area via 7Bus. As redevelopment occurs, the need may arise to provide additional bus service or provide a stop in downtown Riverhead to satisfy the needs of commuters.

The Long Island Rail Road (LIRR) provides passenger rail service to Suffolk County, Nassau County, Queens, Brooklyn and Manhattan.

Current ridership on this eastern section of the LIRR is low. The infrequent train service leaves commuters with few options when travelling to/from work and without demand, it is not feasible to provide additional train service as it is not cost effective; however as growth and new demands occur, adjustments in the levels of service can be justified.