

FINAL



PARKING ANALYSIS FOR THE CAPITOLA VILLAGE AREA

Prepared for the City of Capitola



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EXECUTIVE SUMMARY

The parking needs analysis attempts to better match parking supply and demand in the Village area of the City of Capitola for the purposes of planning for development as required by the Coastal Commission and the City's Local Coastal Plan. RBF Consulting conducted a Visitor Intercept Survey and a survey of parking turnover and parking occupancy in the Village on four separate days in Summer 2007 and Winter 2008. Parking supply and demand data was reviewed and evaluated. Parking needs assessment was based upon a typical busy summer Saturday, and not on the very high demand special event days. The surveyed parking demand and data collected from the intercept survey were used to develop a parking demand model for the Village area, which can be used for future development applications. Existing parking supply and requirements per the existing City Code and subsequent parking shortfall was calculated.

Parking supply: Based upon a detailed census of the entire village conducted by the City of Capitola, there are currently 1,036 parking spaces in the Village area, which includes the Pacific Cove parking lot. A map of the Village area is included as Exhibit 2.

Parking Occupancy: During the summertime (typical weekdays and Saturdays) and on Saturdays during the winter, maximum parking demand exceeds capacity for the Village area. The maximum parking demand exceeds capacity during the summer on a Saturday and is at 94% of capacity on a Thursday. On a winter Saturday, the maximum demand is also exceeded though on a Thursday it is 65%. The parking demand thus exceeds the capacity during the summer and on winter Saturdays, but not winter weekdays.

During the summertime the Pacific Cove lot is fully utilized. The Crossroads parking lot is underutilized. According to the Visitor Intercept Survey, this is mainly because visitors are not aware of the Crossroads lot and also because of its remote location.

Shared Use: The Visitor Intercept Survey revealed that many visitors to the Village visit multiple destinations, but use only one parking space. For example, a family might go to the beach, but also visit a restaurant and/or go shopping at a Village store on one trip. This results in reduced parking demand due to multiple uses utilizing only one space.

Furthermore, different land uses have varying peak parking characteristics based upon the time of day. For example, beach use is high during the day while restaurant is high in the evening, and the same space can be used for both types of use. These shared use factors (Multiple Use and Time of Day peaking) were incorporated in calculating the Village parking demand, and the subsequent reduction of parking need was thus incorporated.

Parking Demand: The net parking demand was calculated based on industry standards according to the Institute for Transportation Engineers (ITE), incorporating the multiple use and time of day factors. The analysis concluded that parking demand based upon current land uses (including the beach) in the Village is 1,212 spaces.

Parking Shortfall: Given supply of 1,036 spaces and the calculated demand of 1,212 spaces, there is shortfall of 176 parking spaces in Capitola, based upon existing land uses. Please note that these recommendations apply to average summer weekend days – not peak event days in the Village when peak demand can be expected to exceed capacity. Also, note that these supply and demand calculations are based on static data and represents current uses only. It is intended to show the minimum need for additional parking spaces, but does not reflect growth, increases in demand, or improve traffic circulation.

Parking Management: Parking management techniques are strongly recommended for the Village. These have been found within the transportation industry to be highly successful in alleviating high parking demand. Parking management techniques which could work well in the Village include parking fees that vary according to time of day and level of demand, valet parking using off-site lots, and variable message signs that indicate when parking is full, and direct the visitor to an alternative parking location, among others.

Increase Parking Supply: Given that 176 spaces are needed to address the existing parking shortfall in the Village, additional sources of parking should be considered, including a parking structure. Planning for this should take into account that for ease of circulation, it is recommended that parking be designed to be at 85% capacity. Such a structure could be incorporated into design for re-use and new development of currently identified under-utilized sites, including the Theatre site, the current City Hall site, or the Pacific Cove parking lot.

Review of City’s Parking Zoning Code: A comparison of Capitola Parking Requirements to other coastal City code requirements indicated that the current City parking code is conservative (more spaces are required for typical land uses in the Village, when compared to other cities and to standards used by ITE.) The ITE parking generation rates presents data from sites all over the US and is generally accepted as the national standard by which parking demand is calculated.

Given the stringent nature of Capitola’s parking code, the following recommendations are suggested as a starting point for revising parking standards, specifically for the Village area. These recommendations are not for the citywide parking zoning requirements. The goal of these Village recommendations is to allow restaurants and retail uses more flexibility to expand their businesses, or change uses and improve economic development in the Village, particularly given that there is adequate parking in the Village during non-peak winter weekdays. These suggested requirements also bring residential parking requirements more in line with industry standards.

Land Use	Existing City Zoning Code Requirement	ITE Requirements
Office	1 space per 240 sq ft	1 space per 300sq ft
Retail	1 space per 240 sq ft	1 space per 300 sq ft
Hotel	1 space per room	1 space per room
Restaurant	1 space per 60 sq ft	1 space per 60 sq ft
Residential (SF)	2-3 spaces per unit	2 spaces per unit
Residential (Condo/Apartm)	2-2.5 spaces per unit	3 spaces per unit

A comparison of the recommended zoning code revisions with the ITE parking demand showed that the total spaces required by the recommended code is almost identical to industry standards as defined by ITE.

Recommendations and Next Steps:

1. Develop a Village Parking Management Implementation Strategy, in order to analyze, quantify and provide financial review of the following parking management strategies:
 - a) A fee collection system that is real time and demand based. Thus higher parking fees would be charged when demand is high and vice versa.
 - b) A valet parking program for existing and new commercial land uses in the village area, with agreements to utilize available parking areas outside of the Village Area for this purpose. Financing could be a combination of valet parking fees and local business funding.
 - c) Encourage and improve the shuttle system during the summer months, including review of other parking lots from which the shuttle could operate. Consider scheduling the shuttle to also pick up visitors parking at the Pacific Cove parking lot.
 - d) Install variable message signs indicating available parking, both in the Village area and in the off-street parking lots. Technology is currently available to manage a parking system effectively in this manner. The VMS signs could also promote the shuttle and the system could be linked to the City's web site for the provision of real time parking data.
 - e) Review a combination of private and public funding to implement successful parking management strategies.
 - f) Develop a funding program that identifies revenues to implement these strategies.
2. Conduct a thorough review of parking zoning standards for the Village Area in order to identify methods to allow restaurants and retail uses more flexibility to rehabilitate and/or expand their businesses and improve economic development in the Village.
3. Provide 176 additional parking spaces to make up the existing shortfall in parking supply for the Village area. Several possible locations exist and include a parking structure at the Pacific Cove lot, the mobile home park, the current City Hall site, and the Theatre site.

1 INTRODUCTION

Parking in the City of Capitola Village area is a primary concern for visitors and the City. Historically the Village area has always been parked above capacity during the annual summer vacation, holiday weekends and warm summer days. This is because the Village is a highly sought destination for local and regional visitors.

The Village provides a variety of recreational activities for tourists, including the beach, specialized retail, and restaurants. Some offices, hotels and many vacation homes are also located in the Village area. During the summer months the roadways are often congested and parking demand exceeds the capacity. Parking in the Village area is primarily provided along the streets, in parking lots, and at residences and businesses.

Exhibit 1 indicates the project location map of Capitola and **Exhibit 2** the study area.

The current high parking demand in the Village area and related traffic congestion hinders the approval of rehabilitation projects that may increase use. Also, the Coastal Commission has expressed concern about allowing new development or expansion of existing businesses that would require additional parking in the Village and that would generate additional traffic. It is important to note that according to California laws, it is not legal to require new development to mitigate existing traffic conditions. Requirement codes for new development may only require that the development mitigate the parking and traffic caused by that development.

The City of Capitola retained RBF Consulting to provide a quantitative analysis of parking supply, and parking demand in the Village, to review the current parking zoning code, and to make preliminary recommendations to address parking shortfall. The analysis included conducting Visitor Intercept Survey and parking space occupancy surveys, during Winter and Summer, one weekend and one weekday.

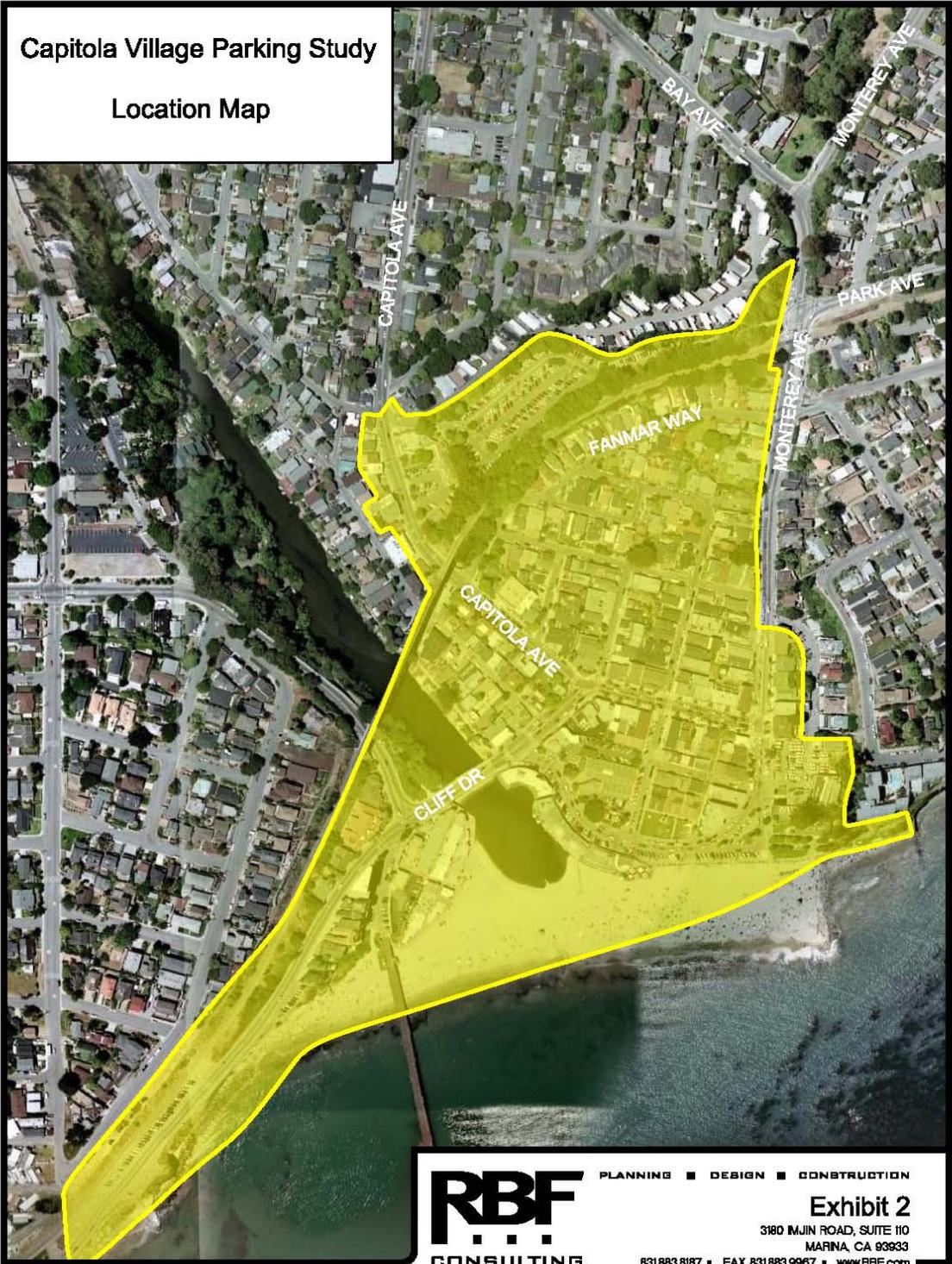
The California Coastal Act requires the state Coastal Commission to protect public access to the ocean prior to certifying any change in the City's Local Coastal Plan or Zoning Code. This study provides baseline data that can be used by both City staff and the Coastal Commission to gauge the effects of potential changes to City administrative policies, infrastructure, or the City's Local Coastal Plan in the Village area.

1.1 Project Description

The study area includes the Village area as indicated in **Exhibit 2**. In general the study is bound by Capitola Beach to the south, Monterey Road to the east, Pacific Cove Parking lot (Pac Cove) to the north and Capitola Avenue to the west. The study includes an analysis of parking in the Village area during the summer and the winter for both weekend and weekday time periods. Ultimately the high-demand period during the summer would determine the parking needs in the Village, which would apply for at least 3 months of the year. Parking demand in the Village is also high most weekends of the year, and thus the parking demand would also incorporate weekend demand.



Capitola Village Parking Study
Location Map



1.2 Scope of Work

The scope of work included the collection of existing summer and winter (Thursday and Saturday) parking and visitor information. Parking supply data was also collected for the Village area (both business and residential) and included on street and off street parking spaces. Parking demand was determined based on the Institute of Transportation Engineers (ITE) parking demand data. Shared parking reductions were based on the survey data and the Urban Land Institute (ULI) shared parking information.

The parking study included the collection of parking occupancy and duration information. A Visitor Intercept Survey was conducted on a Thursday and Saturday in the summer and the winter. The purpose of the intercept survey was to obtain general visitor information, parking information and travel related characteristics. Parking occupancy and duration were also surveyed in the Village area on the days the intercept survey was conducted.

A shared parking model based on ULI and ITE standards was developed for the Village area to determine the impact of additional development in the Village. The Village area was surveyed to review the potential to provide additional parking spaces. The City of Capitola Zoning Code requirements for parking provision were compared to other coastal city parking codes.

2 EXISTING PARKING SUPPLY IN THE VILLAGE AREA

The City of Capitola conducted an extensive parking supply study. The data collection included the establishment of a detailed inventory list of parking supply by Assessor’s Parcel Number (APN).

Table 1 indicates a summary of the parking supply. There are 354 on-street spaces in the Village, and 448 off-street spaces, for a total of 802 spaces in the Village proper. Pacific Cove lot provides an additional 234 spaces, for a total supply of 1,036.

Table 1: Summary of Parking Supply in Capitola Village

Land Use	Off-Street	On-Street	Total Parking Supply
Pacific Cove Lot	234		234
Privately Off site Parking Lots	120		120
Hotel/Motel	29		29
Medical Office	5		5
Office	50		50
Residential	185		185
Restaurant	5		5
Retail	54		54
On Street Supply in Village Area		354	354
Total Supply	682	354	1,036
Total Supply (Excl. Pac Cove & Crossroads)	448	354	802

Private Off-Site Parking lots include: Theatre Lot, Mercantile Lot and other small lots.

3 PARKING USE SURVEYS

Parking occupancy and duration was surveyed during the summer and wintertime for the on-street and off-street lots. The Pacific Cove lot was only surveyed on the summer Saturday.

Table 2 indicates the survey data on all the survey days for the Village area. All data below is excluding the Pacific Cove lot.

**Table 2: Summary of Parking Survey Information in Capitola Village
(Not including Pacific Cove Lot)**

Parking Area	Saturday August 18			Thursday August 23		
	Average Duration (hrs)	Occupancy (Average/Max)	Average Turnover (veh/space)	Average Duration (hrs)	Occupancy (Average/Max)	Average Turnover (veh/space)
Village Area Survey	2.75	99% / 99%	1.63	1.95	87% / 94%	2.04
Parking Area	Saturday January 19			Thursday January 17		
	Average Duration (hrs)	Occupancy (Average/Max)	Average Turnover (veh/space)	Average Duration (hrs)	Occupancy (Average/Max)	Average Turnover (veh/space)
Village Area Survey	1.75	97% / 99%	2.31	1.28	59% / 65%	1.69

Note: Average Turnover is the number of cars per space during the survey period. Pac Cove lot not included.

In general, on Saturdays, parking in the Village is at its highest (maximum of 99% at the peak), both in the summer and the winter time. The average duration during the winter is lower than in the summer. On Thursdays during the summer the parking demand is higher when compared to the winter.

The Crossroads lot was surveyed on a summer Saturday and had a maximum occupancy of 20%, or 15 vehicles, given a total capacity of 75 vehicles. During summer weekends the shuttle service runs between the Crossroads lot and the Village area.

The Pacific Cove lot was surveyed on the summer Saturday and the maximum occupancy was 100%. The average parking occupancy in the Pacific Cove lot was 84% and the average duration 3.3 hours. The survey period was 11 AM to 5 PM.

A comparison of average versus maximum parking occupancy shows that parking demand is almost constant during the survey period of 11am to 5pm, regardless of weekend or weekday, or season (though it is appreciably lower on the winter weekday). In addition, the surveys indicate parking occupancy peaks of over 94% for Saturdays during both winter and the summer.

4 BEACH PARKING DEMAND

For the beach, the number of visitors on a busy summer Saturday was counted at 1,333 people. Typically families visit the beach and vehicle occupancy of 2.8 persons is estimated for the beach visitors. At average vehicle occupancy of 2.8 persons per vehicle, which is conservative, the gross parking demand for the beach is 476 vehicles.

The San Diego Association of Governments (SANDAG) indicates a trip generation for the beach at 600 daily trips per 1,000 feet of shoreline. The Capitola Beach shoreline is approximately 1,350 feet long, which generates approximately 810 trips per day, or 405 vehicles. Not all of these vehicles visit the Village at the same time, thus the maximum parking demand would be less.

For the purposes of this study, the more conservative figure of 476 vehicles was used. This is higher than the SANDAG rates, but is based on local data and provides for a more conservative analysis.

The intercept survey indicated that approximately 79% of visitors to the beach on a summer weekend used a private vehicle and the remainder use alternative transportation(and therefore did not use a parking space.) In addition, there are shared use factors discussed later in this report, such as visitors going to multiple uses (beach plus restaurant), which also affect the actual parking demand of beach-goers. These factors were used to calculate net beach demand, using Institute for Transportation Engineers (ITE) standards, to be 376 spaces on an average summer weekend.

5 VISITOR INTERCEPT SURVEY

Four intercept surveys were conducted at two different time frames of the year in the Village. Saturday and Thursday surveys were performed in August 2007 and in January 2008. The purpose for the four surveys was to provide comparisons between weekday and weekend periods during peak and off-peak tourist seasons (summer and winter).

Individuals walking in the Village area were requested to participate in the short, in-person intercept survey. The surveyor asked the participant the questions and the answers provided were recorded on an answer sheet. A token of appreciation was presented to each participant upon completion of the questionnaire (i.e. a pencil or keychain). The questionnaire is attached in **Appendix C**.

Table 3 indicates the number of questionnaires completed on each day. While the number of surveys was higher on busier days, a good sample was attained for all four survey days.

Table 3: Number of Visitor Intercept Surveys Completed

Date	Number of Questionnaires Completed
Saturday August 18, 2007	249
Thursday August 23, 2007	153
Saturday January 19, 2008	130
Thursday January 17, 2008	92

Visitor Intercept Survey Results

A complete summary of the responses to the survey questions is provided in **Table 4** and charts for each question are provided in **Appendix D**. The following paragraphs provide a description of each survey question.

Table 4: Summary of Intercept Survey Results

PARKING SURVEY RESULTS SUMMARY		Saturday 18-Aug		Thursday 23-Aug		Saturday 19-Jan		Thursday 17-Jan	
		#	%	#	%	#	%	#	%
1	What mode of transportation did you take to get to the Village?								
	a Walk	30	12%	12	8%	32	25%	37	41%
	b Bicycle	6	2%	6	4%	12	9%	3	3%
	c Bus (not Shuttle)	6	2%	4	3%	4	3%	0	0%
	d Beach Shuttle	3	1%	1	1%	0	0%	0	0%
	e Car/Motorcycle	203	82%	129	84%	81	63%	50	56%
	Total Questions Answered/Recorded	248	100%	152	100%	129	100%	90	100%
2	Are you a ...								
	a Capitola Resident	39	16%	15	10%	44	34%	43	47%
	b County of SC Resident	26	10%	37	24%	37	29%	26	29%
	c Monterey Bay area/within a 40 mile radius	22	9%	10	7%	28	22%	11	12%
	d Outside Monterey Bay Area	163	65%	91	59%	20	16%	11	12%
	Total Questions Answered/Recorded	250	100%	153	100%	129	100%	91	100%
3	What places did you visit in the Village area? (Primary reason for visit)								
	a Recreational	239	96%	223	90%	123	95%	89	85%
	I Shopping	53	21%	60	24%	14	11%	9	9%
	II Beach	132	52.8%	75	30%	64	49%	40	38%
	III Restaurant	30	12%	60	24%	32	25%	30	29%
	IV Other	24	10%	28	11%	13	10%	10	10%
	b Work/Business	11	4%	26	10%	7	5%	16	15%
	I Employee	7	3%	10	4%	5	4%	11	10%
	II Business Owner	1	0.4%	2	1%	1	1%	1	1%
	III Other	3	3%	14	6%	1	1%	4	4%
	Total Questions Answered/Recorded	250	100%	249	100%	130	100%	105	100%
4	What other places did you visit in the Village area? (Secondary reason for visit)								
	a Recreational	231	99.6%	109	91%	85	100%	42	98%
	I Shopping	74	32%	27	23%	16	19%	12	28%
	II Beach	31	13.4%	32	27%	32	38%	12	28%
	III Restaurant	105	45%	44	37%	34	40%	13	30%
	IV Other	21	9%	6	5%	3	4%	5	12%
	b Work/Business	1	0.4%	11	9%	0	0%	1	2%
	I Employee	1	0.4%	3	3%	0	0%	0	0%
	II Business Owner	0	0%	0	0%	0	0%	1	2%
	III Other	0	0%	8	7%	0	0%	0	0%
	Total Questions Answered/Recorded	232	100%	120	100%	85	100%	43	100%
5 & 6	Average Duration of Visit (hours)	3.40		3.41		3.15		3.20	
7	Where did you park?								
	a On the street in the Village Area	36	17%	53	36%	55	71%	39	72%
	b On the street outside the Village Area	11	5%	30	21%	11	14%	7	13%
	c Pacific Cove Lot	130	63%	24	16%	11	14%	4	7%
	d Crossroads Lot	7	3%	0	0%	0	0%	0	0%
	e Elsewhere	23	11%	39	27%	1	1%	4	7%
	Total Questions Answered/Recorded	207	100%	146	100%	78	100%	54	100%
8	Are you aware of the Pacific Cove Lot								
	a Yes	77	57%	80	56%	43	57%	32	58%
	b No	58	43%	63	44%	33	43%	23	42%
	Total Questions Answered/Recorded	135	100%	143	100%	76	100%	55	100%
9	If there were a free shuttle from the Pacific Cove Lot, would you park there?								
	a Yes	152	74%	76	52%	41	53%	28	51%
	b No	53	26%	71	48%	36	47%	27	49%
	Total Questions Answered/Recorded	205	100%	147	100%	77	100%	55	100%
10	Are you aware of the beach shuttle from the Crossroads Lot?								
	a Yes	40	20%	61	41%	24	30%	13	24%
	b No	162	80%	87	59%	57	70%	42	76%
	Total Questions Answered/Recorded	202	100%	148	100%	81	100%	55	100%

Notes:

1 Not all questions were answered by respondents

2 See attached questionnaire for background to results

Review of Visitor Intercept Survey Results

Question 1

What mode of transportation did you take to get to the Village?

The results of the survey indicate that the most common mode of transportation to Capitola Village was “Car/Motorcycle”. This was observed in the August survey with 82% using this mode on Saturday and 84% on Thursday and in the January survey with 63% on Saturday and 56% on Thursday.

The significant percentage difference between the August survey and January survey can be attributed to the fact that there were fewer tourists in the Village area in January (off peak) than in August. Therefore, there are a higher percentage of Capitola residents in the Village area during off peak times. A chart indicating the percentage for all respondents’ responses is provided in **Appendix D**

Question 2

Are you a Capitola Resident, County of Santa Cruz Resident, from the Monterey Bay area / within 40 mile radius, from outside the Monterey Bay area / greater than a 40 mile radius, or other?

The most common response to this question in the August survey was “Outside the Monterey Bay Area/Greater than a 40 mile radius” with 65% of the respondents on Saturday and 59% on Thursday.

The January survey observed that the most common response was “Capitola Resident” with 34% on Saturday and 47% on Thursday. “County of Santa Cruz Resident” was the second most common response with 29% on both Saturday and Thursday.

These results support the fact that the peak tourist season is in August and the off peak season is in January. A chart indicating the percentage for all respondents’ responses is provided in **Appendix D**

Question 3

What places did you visit in the Village area? (Primary reason for visit)

The most common response to this question in both the August and January surveys was “Recreational – Beach.” The results from the August survey indicate that 52.8% of the respondents on Saturday and 30% on Thursday visited the Village area primarily for the beach. In the January survey, 49% of the respondents on Saturday and 38% on Thursday indicated they visited the Village area primarily for the beach. A chart indicating the percentage for all respondents’ responses is provided in **Appendix D**

Question 4

What places did you visit in the Village area? (Secondary reason for visit)

“Recreational – Restaurant” was the most common response for the secondary reason for visiting the Village area in both the August and January surveys. The August survey indicated that 45% of the respondents on Saturday and 37% on Thursday visited the Village area secondarily for the restaurants. In the January survey, the percentage of respondents was 40% on Saturday and 30% on Thursday indicating restaurants. A chart indicating the percentage for all respondents’ responses is provided in **Appendix D**

Questions 5 & 6

What was the duration of your visit?

Responses were obtained from visitors walking to their vehicles in parking areas around Capitola Village. People were asked at what time they arrived. The duration of the respondents visit was then calculated based on the time of the survey.

The results of the August survey indicate that the respondents’ average visit duration was 3.40 hours on Saturday and 3.41 hours on Thursday.

The respondents’ average visit duration in the January survey was 3.15 hours on Saturday and 3.20 hours on Thursday.

These results are the combined average of all the parking areas, which consists of on street parking in the Village area, on street parking outside the Village area, the Pacific Cove Lot, the Crossroads lot, and elsewhere. A breakdown of all the parking locations and the average parking duration at each location is provided in **Table 9**. A chart indicating the average parking duration is provided in **Appendix D**

Question 7

Where did you park?

The most common response to this question was in the “Pacific Cove” lot during the August Saturday survey with 63% of the respondents. However, on a summer Thursday, only 16% visitors parked at Pacific Cove. The summer survey results indicate that “on street parking in the Village area” was the most common response with 71% and 72% on the January survey for Saturday and Thursday, respectively.

The different responses to the most common parking location between the August Saturday survey and the three other surveys can be attributed to the August Saturday survey occurring on a peak weekend during the peak tourist season. At the time of the survey, parking demand would be very

high and vehicles would have to park farther away from the Village area. A chart indicating the percentage for all respondents' responses is provided in **Appendix D**

Question 8

Are you aware of the Pacific Cove Lot?

The results of all the surveys indicate that slightly over 50% of the respondents were aware of the Pacific Cove Lot. The percentage of respondents that were aware of the Pacific Cove Lot were 57%, 56%, 57%, and 58% for the August Saturday and Thursday and January Saturday and Thursday surveys, respectively. A chart indicating the percentage for all respondents' responses is provided in **Appendix D**

Question 9

If there was a free shuttle from the Pacific Cove Lot, would you park there?

During the August Saturday survey, 74% of the respondents indicated that they would use a free shuttle, if it were available from the Pacific Cove Lot. The percentage was almost 50/50 for the other three surveys. The August Thursday and January Saturday and Thursday respondents indicated they would use the free shuttle with 52%, 53%, and 51% positive responses, respectively.

The difference in percentage of positive responses between the August Saturday and the other three surveys can be attributed to the fact that the August Saturday survey was being performed during a peak day of the week during the peak visitor time of year. Parking demand during this time of year is very high and visitors are more likely to park farther away when parking is limited. The other surveys were performed during off peak times when parking close to the Village area is more readily available.

Table X indicates the respondents' reasons for their choice of whether or not they would use a free shuttle if it were available. A chart indicating the percentage for all respondents' responses is provided in **Appendix D**

Question 10

Are you aware of the beach shuttle from the Crossroads Lot?

The results of all the surveys indicate that less than 50% of the respondents were aware of the beach shuttle from the Crossroads Lot. The percentage of respondents that were aware of the beach shuttle from the Crossroads Lot were 20%, 41%, 30%, and 24% for the August Saturday and Thursday and January Saturday and Thursday surveys, respectively. A chart indicating the percentage for all respondents' responses is provided in **Appendix D**.

6 SHARED PARKING DEMAND IN THE VILLAGE AREA

The City of Capitola Village area offers a multitude of attractions for visitors. Over the summer season and on weekends, visitors and tourists come to Capitola for their annual vacation, weekend trips and day trips. The main attraction during sunny days is the beach. Beach goers do however also visit the retail stores, restaurants, conduct business and vice versa. Thus multiple land uses are visited, yet only one parking space is occupied.

Also, demand for Village uses varies during different times of the day. Empirical data on this have been collected by the ITE, and shared time of day parking rates developed for specific land uses. The Urban Land Institute (ULI) also published the second edition Shared Parking Manual, which was used to evaluate shared time of day parking reductions for the Village. The intercept survey provided information to determine multiple trip purposes for visitors, which was also used to calculate net parking demand.

6.1 Beach, Restaurant and Retail Shared Uses

On a warm summer Saturday, 1,333 people were counted on the beach. According to the Visitor Intercept Survey, visitors going to the beach as a primary purpose also visit retail stores (commercial land uses) and eat at the restaurants. Likewise, the Intercept Survey showed that visitors who selected a restaurant as their primary destination often also go to the beach and/or go shopping as secondary purposes.

The Visitor Intercept Survey captured quantified data for primary and secondary visits. The beach is a primary destination for the most visitors to the Village and restaurants are the highest secondary destination.

Table 5 indicates this relationship between the different land uses in the Village with:

1. The Beach as primary destination and the Restaurant and Commercial uses as secondary destinations.
2. The Commercial as primary destination and the Beach and Commercial uses as secondary destination.
3. The Restaurant as primary destination and the Commercial and the Beach uses as secondary destination.

These results indicate that visitors make multiple trips between the beach and other uses in the Village area, but only occupy one parking space while doing so, whether they move their car to a new parking space or decide to walk.

Table 5 indicates that these subsequent activities vary between 13% and 51% as obtained from the Visitor Intercept Survey data.

Table 5: Multiple Trip/Visit Purpose

	Uses	Subsequent Activities
Primary Destination	Beach - 53%	
Secondary Destination	Retail	45%
Secondary Destination	Restaurant	51%
Primary Destination	Retail - 21%	
Secondary Destination	Beach	42%
Secondary Destination	Reataurant	47%
Primary Destination	Restaurant - 12%	
Secondary Destination	Retail	37%
Secondary Destination	Beach	13%

Note: Example of Subsequent Activity – 45% of respondents who selected beach as a primary destination selected retail as a secondary destination.

ITE call these type trips for subsequent activities “internal trips/capture” for which trip and parking reductions can be taken. Typical internal reductions, not related to transit, are about 10%. The City of Santa Cruz also allows a 10% reduction for “internal” trips.

Typically there would be overlap between visitors to the beach, retail and restaurant. Thus taking full credit for each multiple use would be too liberal. Visitors that go to the beach, also go eat at the restaurants and visit the shops in the Village. These activities do however not occur at the same time and peaking at the restaurants occurs over meal times, not throughout the day. Shopping may occur before or after meal times, thus the shared credit dos not apply to the uses at the saem time, but are scattered throughout the day. For the shared parking demand model in this Study, a multiple use offset of 10% is assumed for the commercial uses for both primary and secondary destination, and 25% for the restaurant, which is a high secondary destination for beach goers. For commercial uses, restaurant multiple use reduction was assumed to be 10% as well.

6.2 Shared Parking Demand Model

A parking demand model was developed for the Village area based on ITE data, the parking data and the visitor intercept survey data, incorporating shared use factors. This model can be utilized for evaluating future development applications in the Village area. The model was calibrated for the average summer Saturday. This shared use model is tiered off the Urban Land Institute shared use model. Adjustments were made to reflect Capitola Village conditions. The model is slightly conservative in estimating parking demand and thus presents a worst case scenario.

The model identifies two types of shared use offsets: Multiple-Use and Time of Day. Multiple-Use offset quantifies the findings from the Intercept Survey that many visitors to the Village visit multiple destinations. The Time of Day offset takes into account that different land uses have varying peak parking characteristics based upon the time of day. These shared use factors (Multiple Use and

Time of Day peaking) were incorporated in the calculations for parking demand in the Village, and the subsequent reduction thus incorporated.

7 CALCULATION OF VILLAGE PARKING DEMAND

Based on the ITE data and inclusion of the shared parking model from ULI and the Visitor Intercept Survey data, with shared parking offsets as defined above, the existing parking demand is 1,212 parking spaces as indicated in **Table 6**.

Table 6: Summary of Parking Demand per Institute of Transportation Engineers (ITE)

	ITE Demand Parking Spaces
Parking demand based on land use codes	1,352
Estimated beach demand	376
Multiple Use Offset	(314)
Time of Day Offset	(202)
TOTAL Peak demand	1,212

See Section 6.2 for definitions of the offsets.

8 VILLAGE PARKING SHORTFALL

Based in the existing land use, and using the Shared Use Demand Model described above, the existing parking shortfall in the Village area is 176 parking spaces as indicated in **Table 7**.

Appendix E indicates the shared parking worksheet calculations.

Table 7: ITE Parking Demand Shortfall

Item	ITE Demand Parking Spaces
Peak demand	1,212
Existing Supply (including Pac Cove)	1,036
Parking shortfall	176

9 SOLUTIONS TO PARKING SUPPLY SHORTAGE

9.1 Additional Parking

Under current traffic and circulation conditions, no opportunity exists in the Village area to stripe additional on-street parking. The off-site lots are also fully striped. The parking lot at the theater uses tandem parking to optimize the available space. In the Pacific Cove lot, many parking spaces are compact/sub-compact, which results in vehicles using two spaces because they cannot fit into a single space.

The City has identified two locations for additional parking within the Union Pacific Railroad (UPRR) corridors. These parking areas would have to be paved and striped and would have to be leased from UPRR. The one area is on the southeast corner of the intersection of Park Avenue and Monterey Avenue. This area could accommodate approximately 10 additional spaces. The second area is the extension of the existing parking area leased from UPRR on Cliff Drive further southwards. It is estimated that this area could accommodate approximately 30 additional spaces. Thus far, Union Pacific has not indicated a willingness to lease this property, though negotiations could be continued.

The Parking shortfall is an existing deficiency in traffic operations and management in the Village area. The shortfall of parking spaces results in parking demand exceeding capacity during the summer and winter weekends on the streets in the Village area. In turn the shortfall of parking results in vehicles circulating, trying to find parking, which in turn results in traffic congestion.

The supply of additional spaces will be taken up immediately due the existing latent demand and the fact that additional parking spaces may generate additional visitors to the area. Continued growth in the area and also in the south San Francisco Bay area will result in an ever-increasing demand for parking. Thus the solution to the parking problem is not merely providing additional parking spaces, but also managing how the spaces are utilized and thus optimizing traffic flow, parking usage and the visitor experience in the Village area.

A 2006 study completed by RBF Consulting identified that the western end of the Pacific Cove Mobile Home Park could be converted to surface parking. Repaving and striping this area would accommodate approximately 110 parking spaces.

Given the number of spaces required, additional sources of parking should be considered, such as a parking structure. Such a structure could be incorporated into design for re-use and new development of currently identified under-utilized sites, including the Theatre site, the current City Hall site, or the Pacific Cove lot.

9.2 Parking Management

Parking management techniques have been found within the transportation industry to be very successful in alleviating high parking demand. Parking management techniques applicable to the Village include parking fees that vary according to time of day and level of demand, valet parking using off-site lots, and variable message signs that indicate when parking is full and direct the visitor to an alternative parking location. The goal of parking management, especially in areas where parking is at or over capacity, is to increase the customer experience by guiding the driver to vacant parking spaces through an intelligent real-time parking management system. Such a system decrease vehicles circulating multiple times around the block looking for parking, whilst optimizing fee collection. Approaches to solving parking issues in the Village would be to implement an intelligent parking management system that would track parking occupancy, optimize parking fee collections. Parking management solutions support strategic planning objectives:

- More compact, multi-modal community planning (smart growth)
- Encourage use of alternative modes and reduced motor vehicle travel
- Improved user options
- Ability to accommodate new uses and new demands
- Reduced development costs and increased affordability

Parking Management Benefits:

- Facility Cost Savings for the City and developers
- Flexibility in parking provision and planning for City staff and developers
- Revenue generation for the City of Capitola
- Decreased demand for new land for parking
- Promotes, indirectly the use of alternative transportation, like the beach shuttle
- Supports mobility within the Village Area – better parking management will result in less vehicular travel and emissions.
- Supports Smart Growth
- Reduced storm water management and pollution
- Livable Village Community by creating an efficient urban environment, less paving, flexible design, increased walkability, improved parking design.

In particular, valet parking is increasingly used in urbanized settings and could be utilized effectively in the Village area. This could be funded through user fees and contributions from Village businesses, and would increase visitors to the Village by parking vehicles outside of the Village area -- e.g. the Crossroads lot over weekends when the lot is not utilized or even at the Pacific Cove lot during the week. The DMV and AAA offices also provide opportunity for this use (approximately 200 spaces).

9.3 Circulation Management

The City has also contracted with RBF to conduct a One-Way Village Street Circulation study, which identified the provision of angled parking opportunities along the Village streets if one-ways are implemented. This approach would provide additional 28 on-street parking spaces in the Village. In order to implement a one-way system, either a new road through the existing Pacific Cove Parking lot would need to be constructed, at a cost of 79 existing spaces, or other circulation improvements would have to be implemented, such as at the intersection of Bay and Capitola Avenues.

In terms of circulation, parking is typically deemed to be at capacity when parking spaces are occupied at 85%. If parking occupancy is higher, vehicles start circulating around the block multiple times to find available parking spaces, and traffic congestion occurs. Therefore, for optimal circulation, the existing parking demand of 1,212 spaces would be increased by 15% (or to 1,426 spaces). In this scenario, a total additional 390 spaces (1,426 spaces less supply of 1,036 spaces = 390), would be considered for optimal traffic circulation in the Village.

10 REVIEW OF THE EXISTING PARKING ZONING CODE

10.1 Existing Zoning Code

Table 8 indicates the existing City of Capitola Zoning Code parking requirements for the current land uses in the Village area. A Copy of the City of Capitola Existing Zoning Code for Parking is included in **Appendix A**. The existing units of development are also indicated in **Table 8**.

Table 8: Capitola Existing Zoning Code Requirements in the Village Area

Land Use	City Zoning Code Requirement	Units	Parking Spaces Required
Office	1 space per 240 sq ft	28,458 sq ft	118
Retail	1 space per 240 sq ft	67,591 sq ft	282
Hotel	1 space per room	36 rooms	36
Restaurant	1 space per 60 sq ft	26,976 sq ft	450
Residential	2-3spaces per unit	226 units	571
Total			1,457

Note: Refer to City Zoning Code in Appendix A for detail of requirements

10.2 Zoning Code Comparison with Coastal Cities

The City of Capitola Zoning Code parking requirements were compared to other coastal cities with similar characteristics to that of Capitola. **Table 9** indicates a summary of the data. The following cities were researched.

- City of Santa Cruz
- City of Monterey
- City of Carmel by the Sea
- City of Pacifica
- City of Sausalito

Also, the ITE parking generation rates, which are commonly used to calculate parking demand, were also included in the comparison. The data indicates that the City of Capitola is conservative in its parking requirements when compared to similar Cities. This requires more parking spaces to be provided for a land use compared to other cities, and compared with ITE standards.

Table 9: Comparison of City Zoning Codes

City Parking Requirements							
City	General Retail	Office	Residential Single Family Detached**	Residential - Multi-Family**	Government	Hotel	Restaurant
Capitola	1 per 240 sf	1 per 240 sf	2 per SFD under 2,000 Sq. Ft.	2 per unit or 2.5 per unit if more than 4 units on site	N/A	1 per room	1 per 60 sf
			3 per SFD 2,001 to 2,600 Sq. Ft.				
			4 per SFD 2,601+ Sq. Ft.				
ITE	1 per 300 sf	1 per 300 sf	2.14 per SFD	1.46 per unit	1 per 163 sf	1.14 per room	1 per 53 sf
Santa Cruz	1 per 250 sf	1 per 300 sf	2 per SFD	1.5 per 1 bdrm unit	N/A	1 per room	1 per 120 sf + 1 per 50 sf space devoted to takeout
				1 per bdrm for units over 1.5 bdrms			
Monterey	1 per 400 sf	1 per 275 sf	2 per SFD	1.2 per Studio Unit	1 per 275 sf	1 per room + additional 2 per 50 rooms	1 per 50 sf
				1.5 per 1 bdrm unit			
				2 per 2 bdrm unit			
				2.5 per 3+ bdrm unit			
				2 per unit if building has 25+ units			
Carmel-by-the-Sea**	1 per 600 sf	1 per 600 sf	1 per SFD	1 per unit	N/A	1 per room	1 per 600 sf
Pacifica	1 per 300 sf	1 per 300 sf	2 per SFD	1.5 per 1 bdrm unit	N/A	1 per room	1 per 50 sf + 1 per 200 sf of all other floor areas
				2 per unit of 2 bdrms or more			
Sausalito	1 per 300 sf	1 per 250 sf	2 per SFD	1.5 per unit	1 per 400 sf	1 per room + 1 per 250 sf of office	1 per 4 person occupancy + 1 per 60 sf of seating area

SFD = Single Family Dwelling Unit, sf= Square Feet, bdrm= bedroom

*Source: Parking Generation 3rd Edition, 2004, Institute of Transportation Engineers

** Requirement for a standard unit with no accessory structures

*** City of Carmel-by-the-Sea is not included in the total average

10.3 Zoning Code Comparison with ITE Standards

Table 10 compares Capitola's existing parking zoning code with the standards used by ITE. Note that for retail, office and residential units, Capitola's requirements are more stringent than the demand assumed by ITE. Capitola's stringent parking requirements, when compared to other coastal cities and to ITE standards, have become a hindrance to even modest business expansion and rehabilitation in the Village. It is recommended that those requirements be reconsidered for the Village area as part of the City's overall review of the City's zoning code as part of the General Plan Update.

Table 10: Summary of Recommended Parking Rate Requirement

Land Use	Existing City Zoning Code Requirement	ITE Requirements
Retail	1 space per 240 sq ft	1 space per 300 sq ft
Hotel	1 space per room	1 space per room
Restaurant	1 space per 60 sq ft	1 space per 60 sq ft
Office	1 space per 240 sq ft	1 space per 300sq ft
Residential (SF)	2-3 spaces per unit	2 spaces per unit
Residential (Condo/Apartm)	2-2.5 spaces per unit	3 spaces per unit

Table 11 shows required parking spaces for all current Village land uses if they had been built under Capitola’s existing parking zoning code, versus demand assumed by ITE. The chart shows the shared used offsets (Multiple Use and Time of Day). It indicates that according to ITE, current land uses in the Village create a demand for 1,212 spaces, while the current parking zoning code would require 1,289 spaces. New development and businesses are currently required to provide more parking than is necessary to meet the specific demand of their particular use.

Table 11: Summary of Parking Demand, Supply and Shortfall

	Existing Code Parking Spaces	ITE Demand Parking Spaces
Parking demand based upon current land use	1,457	1,352
Estimated beach demand	376	376
Multiple Use Offset	(314)	(314)
Time of Day Offset	(230)	(202)
TOTAL Peak demand	1,289	1,212

Given the stringent nature of Capitola’s zoning parking code, a thorough review is recommended, in order to identify zoning code changes and other approaches to enhance economic development and new opportunities for expansion in Capitola Village.

11 RECOMMENDATIONS AND NEXT STEPS

1. Develop a Village Parking Management Implementation Strategy, in order to analyze, quantify and provide financial review of the following parking management strategies:
 - a) A fee collection system that is real time and demand based. Thus higher parking fees would be charged when demand is high and vice versa.
 - b) A valet parking program for existing and new commercial land uses in the village area, with agreements to utilize available parking areas outside of the Village Area for this purpose. Financing could be a combination of valet parking fees and local business funding.
 - c) Encourage and improve the shuttle system during the summer months, including review of other parking lots from which the shuttle could operate. Consider scheduling the shuttle to also pick up visitors parking at the Pacific Cove parking lot.
 - d) Install variable message signs indicating available parking, both in the Village area and in the off-street parking lots. Technology is currently available to manage a parking system effectively in this manner. The VMS signs could also promote the shuttle and the system could be linked to the City's web site for the provision of real time parking data.
 - e) Review a combination of private and public funding to implement successful parking management strategies.
 - f) Develop a funding program that identifies revenues to implement these strategies.
2. Conduct a thorough review of parking zoning standards for the Village Area in order to identify methods to allow restaurants and retail uses more flexibility to rehabilitate and/or expand their businesses and improve economic development in the Village.
3. Provide 176 additional parking spaces to make up the existing shortfall in parking supply for the Village area. Several possible locations exist and include a parking structure at the Pacific Cove lot, the mobile home park, the current City Hall site, and the Theatre site.