



June 28, 2007

Mr. Dewey Cashwell
City Manager
Town of South Padre Island
4501 Padre Boulevard
South Padre Island, TX 78597

RE: Parking and Traffic Study
Town of South Padre Island

SUBJ: Report Supplement

Dear Dewey:

Based on public and stakeholder comments received during the study process, we are submitting this supplemental report to provide additional information related to parking ratios for key land use categories. Comments from the public input process indicated some concern that parking requirements in the current zoning ordinance for retail and restaurant land uses may be higher than needed in this community.

During the study process, the study team researched zoning information from 25 beachfront communities primarily on the east and gulf coasts. The focus of this research was related to information provided in the FINAL REPORT on requirements for condominium developments. We have since compiled summaries of parking requirements for major land use categories from those communities. This supplemental report will summarize that information and provide some comparisons to the zoning requirements on South Padre Island.

The following is a summary of parking requirements in current South Padre Island zoning ordinance for the two land use categories of specific concern - Restaurant and Retail. The requirements are expressed in two formats that are commonly used.

Land Use Category	Spaces Required	Spaces Required
Restaurant	1 space per 150 Sq. Ft.	6.67 spaces per 1,000 Sq. Ft.
Retail (including service retail)	1 space per 250 Sq. Ft.	4 spaces per 1,000 Sq. Ft.

Summary and Comparison Information

Table 1 summarizes parking requirements for principal land use categories found in the 25 beach communities during our research. In this table, all of the requirements are expressed in the same terms used in the ordinances.

Table 2 provides the same information, but converts requirements, where possible, into the number of spaces required per 1,000 Sq. Ft. of floor space for better comparison.



The graphs that follow Table 2 provide a comparison of parking requirements, ranked highest to lowest, including the current requirements for South Padre Island. A red line is positioned across each graph to better illustrate the South Padre requirements in comparison to those other communities.

Limitations in the Comparisons

In a number of cases, a direct conversion is not possible because the ordinance requires a minimum number of spaces or there is some combination of requirements. An example would be a requirement for 1 space for every 250 sq. ft. of floor area plus 1 space for every 3 employees. In other cases, the requirements are based on the number of square feet of customer service area, particularly for food and beverage categories. Some ordinances use a ratio of parking spaces to seating capacity, which does not translate well for comparison to the square footage ratio used in the South Padre Island ordinance.

In developing the comparative graphs only those ordinance which could be reasonable compared were used. Where an ordinance used a combination of a ratio and some other requirement, only the ratio was used in producing the graph. Notes are attached to those exceptions with explanations. The result is that the graph understates the requirement in those cities because it includes only the "ratio" portion of the minimum parking requirement. Consequently, the parking requirements for South Padre Island will appear marginally higher in comparison to those communities that they actually are. Recognizing this limitation, the graphs still provide a good framework for comparing requirements for this group of comparable communities.

Conclusions - Retail and Restaurant Land Use Categories

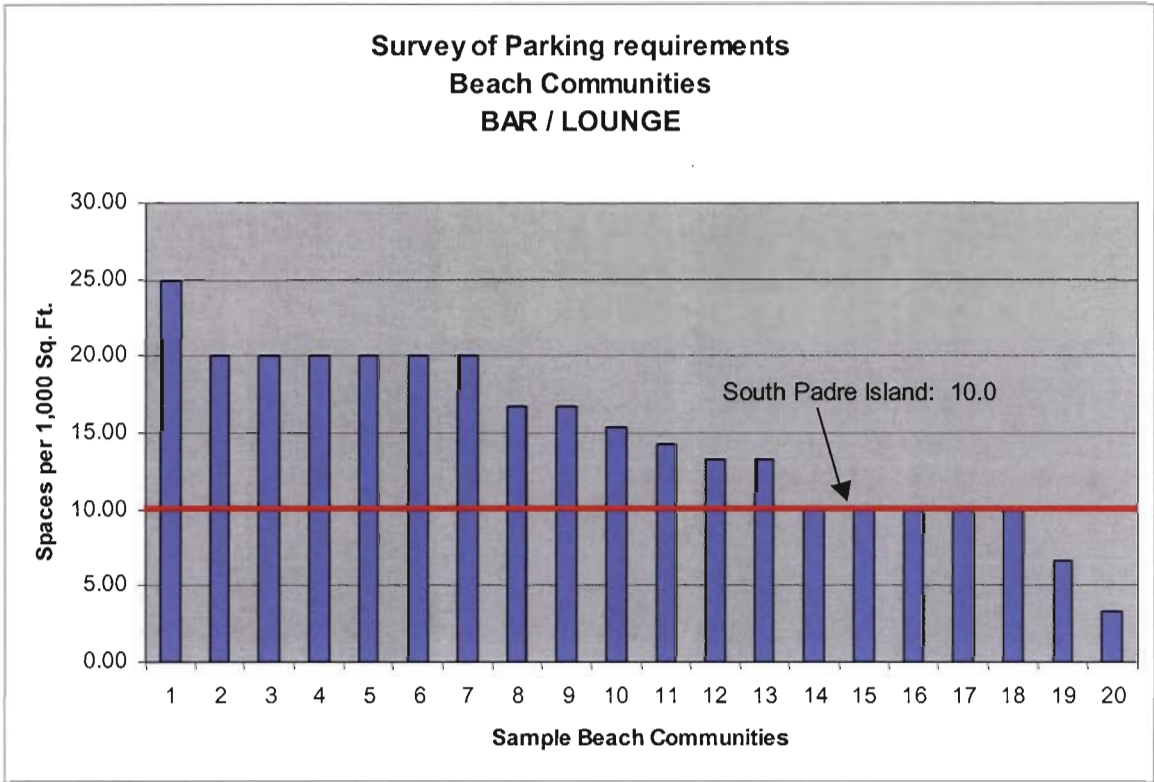
The issues identified during the community input process were focused exclusively on condominium, retail and restaurant requirements. Condominium requirements were addressed thoroughly in the FINAL REPORT.

The general concerns related to retail and restaurant requirements was that the current ratios may be too high for the actual parking demand experienced on the island. Examples were given of an ice cream shop that generated very little automobile traffic but was required to provide parking spaces equivalent to a "typical" restaurant that may generate higher parking demand.

Restaurant Category

The comparative information collected from the research places the current (as of 1994) SPI ratio of 1 space for each 100 sq. ft. of floor area (or 10 spaces per 1,000 sq. ft.) places SPI at the middle of the range. The Town's ordinance applies the same ratio to all land uses related to food and beverage establishments. Other communities apply different ratios to "fast food" restaurants and another to "Bars and Lounges." Separate graphs are provided for all three of these categories, with a comparison to the Town's broader single category in each. In the case of restaurants and fast food establishments, the SPI requirements are in the middle of the range. For Bars and Lounges, the SPI requirements are at the lower end of the range.



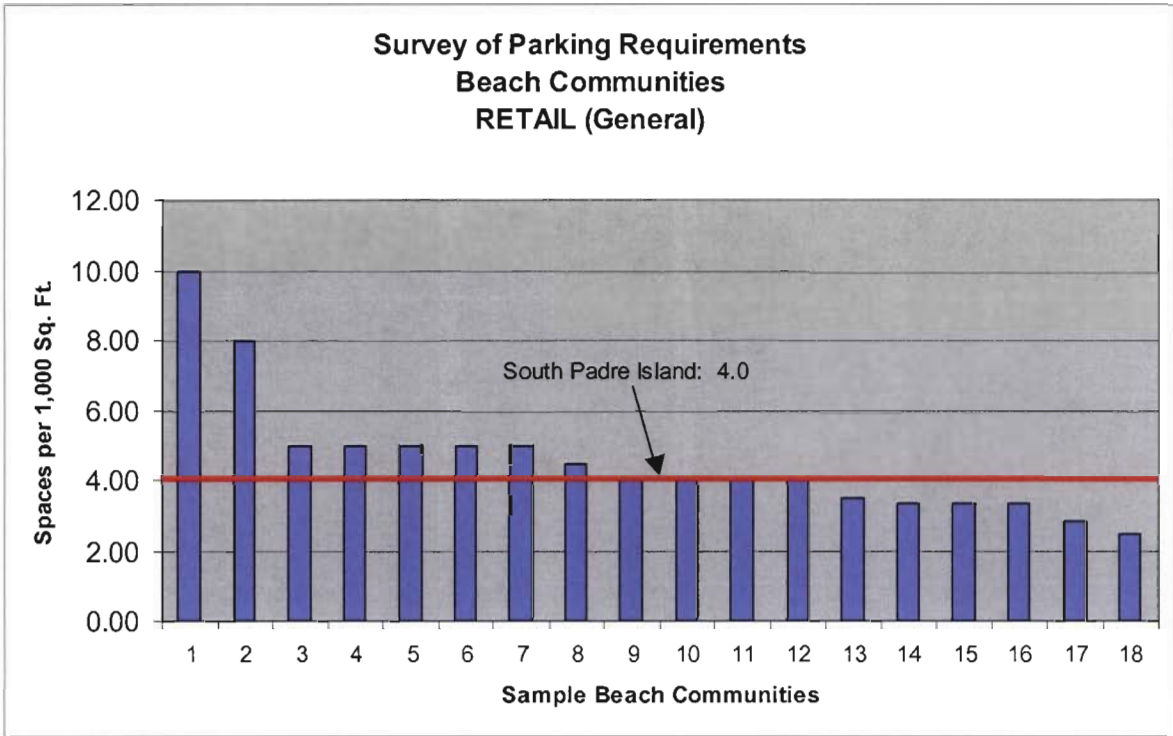


Retail Category

The Town's ordinance applies the same ratio of 1 space for each 250 sq. ft. of floor space to a single category for retail and office. In most zoning ordinances, the ratio for office space is lower than that for the retail category, so combining the two land uses in a single category would not mean that the retail requirement is higher because it is being combined with the office category.

The current ratio of 1:250 sq. ft. places the Town in the middle of the range of requirements found in the research. Six (6) other ordinances required less parking and seven(7) requirement more. Because there is a wider gap between the SPI requirements and those which are higher than those with lower requirements, a comparison of average requirements would move the SPI requirements further toward the lower end of the scale.

Lower ratios are required for certain low demand retail establishments defined as "Furniture, Appliance, and Antique Retailers" which have a very consistent pattern of a lower customer to floor area ratio. As described in the next section, this lower ratio carries the risk of insufficient parking provision if the use of the building changes to another retail use that generates a higher demand.



Challenges in Establishing the "Right" Ratios

One of the challenges in developing zoning ordinances, particularly for retail and food/beverage land use categories is the wide variety of businesses that fit into that category. Communities, for the most part, try to arrive at a reasonable requirement that can be applied to most businesses that fall into that category, understanding that trying to tailor zoning requirements to a myriad of sub-categories could be chaotic.

The larger issue, however, is the volatility of the retail market itself. Buildings and storefronts currently in use for one type of business may be replaced by a totally different type of business several times during the life cycle of the building. Each of those different businesses could have a very different parking generation pattern. Since parking requirements in zoning ordinances generally establish the number of parking spaces that must be created to support a particular building space when that space is first put into use, the zoning requirements have relatively "permanent" impacts. Subsequent conversion of that space to a use that generates more parking demand could limit the use of the space or create a parking shortage. Variances that reduce requirements for a particular business category can also have significant consequences if that business is replaced. As a result, communities often take a "one size fits all" approach, using broad categories, as the most conservative approach in avoiding parking shortages.

If more sub-categories are included in the ordinance and building owners are allowed to tailor parking requirements to small business sub-categories in order to provide the least amount of parking possible, the Town would have to resist requests for waivers of parking requirements in if the use of that space



changes in the future. This may limit property owners in their ability to market their properties or lease space. Pressure from property owners for exceptions would likely be much greater than it is now.

Shared Parking Impact

Another issue to be considered are the impacts of shared parking opportunities in reducing parking requirements where multiple businesses share parking spaces. The principle of "shared parking" is based on two operative factors. The first is the "captured market" effect where the close proximity of various businesses and daytime populations results in customers whose cars remained parked in spaces serving their offices, residences or other businesses. Where there is a significant percentage of customers who do not drive to the business establishment, but are already in the area for other purposes (including their workplace), those "walk over" customers do not generate additional parking demand when they patronize area businesses. The second factor is "non-concurrent demand." Non-concurrent demand means that peak demand for the various parking generators that share parking space does not occur at the same time. A good example is a mix of non-event hotel, office and fine restaurant land uses in a mixed-use development. The hotel generates its peak parking demand overnight, with much lower demand during normal daytime business hours. The office component generates its highest demand through normal daytime business hours. The fine restaurant, particularly if it does not serve lunch, generates its parking demand during the evening when space used by office workers has been vacated. Less parking capacity is needed to support these three land uses in a shared parking arrangement that would be needed if the demand for each land use was computed separately.

In the case of South Padre Island, most retail parking demand is concurrent, taking place at the same time of the day. The exception are those areas where there is a mix of daytime businesses and evening entertainment destinations. This currently takes place, to some extent in the island's Entertainment District, but there is a limited amount of retail in that area to maximize the effect. There are opportunities in the future, as laid out in the main body of the Parking Study, to achieve shared parking benefits in that area through the shared use of common use parking facilities. However, in order to assure stability over time, those parking facilities would have to be controlled in a way that assures their ongoing availability to those businesses who area granted waivers from their normal on-site parking requirements. Municipal involvement may be required in providing or controlling such parking, but requirements for long-term lease agreements that are protected from dissolution upon the sale of the property could be allowed. Such protected lease agreements could provide the assured long-term parking availability that would make shared parking feasible and provide the Town with the stability needed to apply shared parking reductions. Again, this is not a solution for retail businesses that have the same business activity patterns, but would apply when there is non-concurrent parking demand.

If you have any questions about this research, please feel free to give me a call. It has been a pleasure working with you and the Town of South Padre Island. I hope that you will call on us for any additional help you may need as the Town considers the recommendations of the Parking Study and plans for its future.

Yours truly,
Carl Walker, Inc.

Lee Bourque
Principal / Senior Planner



DATA TABLES

The tables that follow provide a summary of the research done for this supplemental report.

TABLE A is a summary of the current zoning requirements for parking on South Padre Island.

TABLE B is a summary of parking requirements for principal land use categories at other beachfront communities (25).

TABLE C is a conversion of those requirements into a common format (spaces per 1,000 sq. ft.) wherever possible for direct comparison.

TABLE D shows the distribution of ratios for those communities with specific ratios for the stated land used. These are the ratios included in the graphic comparisons that are provided on the final pages.



TABLE A SUMMARY OF CURRENT SPI REQUIREMENTS	Single Family District A	Multi-Family District B	Business District C	Entertainment District C-2	Resort Area District D	Resort Area District D-1	Park District D-2	Low Density Single Family & Townhouse E
Single Family	2 per unit							
Multi-family	NA	2 per unit	2 per unit	2 per unit	2 per unit	2 per unit		2 per unit
Private Clubs & Lodges	NA	1 per 150 SF	1 per 150 SF	1 per 150 SF	1 per 150 SF	1 per 150 SF		1 per 150 SF
Places of Assembly	NA	1 per 5 seats	1 per 5 seats	1 per 5 seats	1 per 5 seats	1 per 5 seats		1 per 5 seats
Churches	NA	1 per 5 seats	1 per 5 seats	1 per 5 seats	1 per 5 seats	1 per 5 seats		1 per 5 seats
Schools	NA	1 per 15 students + 1 per teacher	1 per 15 students + 1 per teacher	1 per 15 students + 1 per teacher	1 per 15 students + 1 per teacher	1 per 15 students + 1 per teacher		1 per 15 students + 1 per teacher
Hospitals	NA	1 per 5 beds	1 per 5 beds	1 per 5 beds	1 per 5 beds	1 per 5 beds		1 per 5 beds
Clinics	NA	1 per 250 SF	1 per 250 SF	1 per 250 SF	1 per 250 SF	1 per 250 SF		1 per 250 SF
Hotels	NA	1 per unit + 50% of requirement for other uses	1 per unit + 50% of requirement for other uses	1 per unit + 50% of requirement for other uses	1 per unit + 50% of requirement for other uses	1 per unit + 50% of requirement for other uses		1 per unit + 50% of requirement for other uses
Rooming & Lodging Houses	NA	1 per each 2 guest accommodations	1 per each 2 guest accommodations	1 per each 2 guest accommodations	1 per each 2 guest accommodations	1 per each 2 guest accommodations		1 per each 2 guest accommodations
Condominiums	NA	2 per unit	2 per unit	2 per unit	2 per unit	2 per unit		2 per unit
Townhouses	NA	2 per unit	2 per unit	2 per unit	2 per unit	2 per unit		2 per unit
Theaters	NA	NA	1 per 5 seats	1 per 5 seats	1 per 5 seats	1 per 5 seats		1 per 5 seats
Nightclubs	NA	NA	1 per 100 SF	1 per 100 SF	1 per 100 SF	1 per 100 SF		1 per 100 SF
Restaurants & Cafes	NA	NA	1 per 100 SF	1 per 100 SF	1 per 100 SF	1 per 100 SF		1 per 100 SF
Retail Stores	NA	NA	1 per 250 SF	1 per 250 SF	1 per 250 SF	1 per 250 SF		1 per 250 SF
Office	NA	NA	1 per 250 SF	1 per 250 SF	1 per 250 SF	1 per 250 SF		1 per 250 SF
Bowling Alley	NA	NA	NA	NA	2 per alley	2 per alley		2 per alley
Other							Per Concession	

**Parking Requirement Ratios
Island and Coastal Communities**

Retail / Restaurant / General Commercial

	Bank, Savings & Loan	Bar, Saloon, Lounge, Dance Hall	Convenience Store	Restaurant	Restaurant, Drive-In	Retail, General	Retail, Furniture & Appliance	Commercial Development	Theater	Auditorium, dancehall, assembly, exhibition hall, club or lodge	Shopping Centers
Rockport, TX	1 per 250sf	1 per 50sf	1 per 200sf	Greater of: 1 per 100sf or 1 per 4 fixed seats, plus minimum of 1 per staff	1 per drive-in stall, plus 1 per 100sf	1 per 250sf					
McAllen, TX		1 per 75sf						>5000sf: 4 per 1st 400sf, plus 1 for each addl 400sf		1 per 100sf	
Destin, FL	1 for every 200sf	1 per 75sf	1 per 150sf	1 per 75sf		1 per 200sf	1 per 500sf				1 per 250sf
Panama City Beach, FL		Greater of: 1 per 4 fixed seats or 1 per 60sf, plus 2 for each 5 employees		Greater of: 1 per 4 fixed seats or 1 per 60sf, plus 2 for each 5 employees		2 per 250sf		2 per 250sf			5 per 1000sf
Sanibel, FL		1 per 2 seats, or 5 spaces + 1 space per 50sf		15 spaces plus 1 per 3 seats in excess of 20 seats; or 1 per 75sf (excluding bar/lounge area)	20 spaces + 1 per 2 seats in excess of 20 seats, or 1 per 62.5sf			<1000sf: 1 per 200sf; >1000sf: 5 spaces			
Daytona Beach, FL (Shores)		1 per 50sf of customer service area, or 1 per 250sf for those establishments without customer service areas (take out windows only, etc.)		1 per 50sf of customer service area, or 1 per 250sf for those establishments without customer service areas (take out windows only, etc.)		3.5 per 1000sf					5 per 1000sf
Miami Beach, FL	1 per 300sf	1 per 4 seats + 1 per 60sf of non-seated area		1 per 4 seats		1 per 300sf	1 per 400sf			1 per 4 seats or 1 per 60sf	1 per 300sf
Fort Lauderdale, FL	1 per 250sf	<4000sf: 1 per 65sf; >4001sf: 1 per 50sf	<2000sf: 1 per 100sf; >=2000sf: 1 per 150sf	<=4000sf: 1 per 100sf including outdoor dining area; >4000sf: 1 per 30sf of customer service area including outdoor dining area + 1 per 250sf		1 per 250sf	1 per 800sf		1 per 4 seats		(Multiple Uses) 0-25,000sf = Total parking reqments for all uses; 25,001-60,000sf = 95% of total for all uses; 60,001-400,000sf = 90% of total for all uses; 400,001+sf = 80% of total for all uses
Biloxi, MS	1 per 250sf	1 per 100sf	1 per 150sf + 1 per gas pump	1 per 150sf	1 per 150sf	1 per 200sf	1 per 500sf		1 per 4 seats		
Virginia Beach, VA	1 per 125sf			1 per 100sf, including outdoor dining area	1 per 50sf	1 per 200sf	1 per 900sf		1 per 100sf, or at least 1 per 5 fixed seats (whichever is greater)		(More than 8 uses) 5-10acres: 1 per 200sf of uses except restaurants, churches & theaters; 1 per 200sf of restaurants & theaters occupying 10% or less of total floor area; 1 per 75sf of restaurants thereafter; 1 per 100sf of theaters thereafter 10-30acres: 1 per 200sf of uses except restaurants, churches & theaters; 1 per 200sf of restaurants & theaters occupying 10% or less of total floor area; 1 per 75sf of restaurants thereafter; 1 per 100sf of theaters thereafter 30+acres: 1 per 200sf of uses except restaurants, churches & theaters; 1 per 200sf of restaurants & theaters occupying 15% or less of total floor area; 1 per 75sf of restaurants thereafter; 1 per 100sf of theaters thereafter
Myrtle Beach, SC	1 per 275sf	1 per 100sf		1 per 100sf		1 per 250sf		1 per 500sf			
Ocean City, MD	1 per 200sf	1 per 50sf, 5 spaces min.	1 per 100sf, 5 spaces min.	1 per 50sf, 5 spaces min.	1 per 50sf, 5 spaces min.	1 per 100sf, 5 spaces min.	1 per 300sf, 5 spaces min.		1 per 5 persons rated capacity	1 per 5 persons rated capacity	1 per 120sf + reqments for restaurants & theaters
Jacksonville Beach, FL	1 per 250sf	1 per 100sf		1 per 100sf		1 per 200sf			1 per 3 seats	1 per 3 seats	Up to 399,999sf: 1 per 250 sf 400,000 to 599,999sf: 1 per 225sf 600,000+sf: 1 per 200sf
Melbourne, FL	1 per 300sf + 1 per 2 employees	1 per 2 seats, or 1 per 65sf (whichever is greater)	1 per 300sf + 2 employees spaces + 5 bicycle spaces	1 per 3 seats + 1 per employee on the largest working shift + 2 bicycle spaces per 100 seats		1 per 300sf, excluding storage area + 1 bicycle space per 10,000sf	1 per 2 employees + 1 per 800sf		50,000 to 79,999sf: 1 per 6 seats 80,000 to 99,999sf: 1 per 7 seats 100,000+sf: 1 per 8 seats	1 per 2 seats or 1 per 60sf (whichever is greater)	

**Parking Requirement Ratios
Island and Coastal Communities**

Retail / Restaurant / General Commercial

	Bank, Savings & Loan	Bar, Saloon, Lounge, Dance Hall	Convenience Store	Restaurant	Restaurant, Drive-In	Retail, General	Retail, Furniture & Appliance	Commercial Development	Theater	Auditorium, dancehall, assembly, exhibition hall, club or lodge	Shopping Centers
Clearwater, FL (Tourist)		10 per 1000sf		7-15 spaces for 1000sf		4-5 spaces for 1000sf					
Hilton Head, SC	1 per 225sf	1 per 70sf	1 per 200sf	1 per 100sf, including outdoor dining area	1 per 100sf, including	1 per 350sf (department or discount store)	1 per 1000sf				1 per 335sf
Cocoa Beach, FL	1 per 200sf	1 per 3 seats or 1 per 150sf (whichever is greater) + 1 per 2 employees on the largest shift		1 per 3 seats or 1 per 150sf (whichever is greater) + 1 per 2 employees on the largest shift	1 per 3 seats or 1 per 150sf (whichever is greater) + 1 per 2 employees on the largest shift	2 spaces min., or 1 per 400sf (whichever is greater)			1 per 3 seats	1 per 3 seats	
Dania Beach, FL	1 per 150sf or 5 spaces (whichever is greater)	1 per 40sf; 1 per 30sf if provide live entertainment	1 per 150sf or 5 spaces (whichever is greater)	1 per 40sf	1 per 30sf + 1 per 2 outdoor seats	1 per 250sf	1 per 400sf		1 per 4 seats	1 per 4 seats	100% of total for all uses
Fort Walton Beach, FL	1 per 300sf	1 per 100sf		1 per 100sf	1 per 100sf	1 per 300sf	1 per 500sf		1 per 4 seats		
Neptune Beach, FL		1 per 4 seats + 1 per 2 employees		1 per 4 seats + 1 per 2 employees	1 per 4 seats + 1 per 2 employees	1 per 300sf + 1 per 1000sf or outside buildings used for sales or display			10 for 1st 100 seats + 1 per addl 5 seats		1 per 300sf
St. Pete Beach, FL		1 per 50sf	1 per 200sf	1 per 100sf		1 per 200sf			1 per 3 seats		



TABLE C Conversion to Common Basis for Comparison	Bank, Savings & Loan	Bar, Saloon, Lounge, Dance Hall	Convenience Store	Restaurant	Restaurant, Drive-In	Retail (General)	Retail, Furniture & Appliance	Commercial Development
Rockport, TX	4.00	20.00	5.00	10+	10+	4.00	0.00	0.00
McAllen, TX	0.00	13.33	0.00	0.00	0.00	0.00	0.00	10 + 2.5
Destin, FL	5.00	13.33	6.67	13.33	0.00	5.00	2.00	0.00
Panama City Beach, FL	0.00	16.67+	0.00	16.67+	0.00	8.00	0.00	8.00
Sanibel, FL	0.00	20+	0.00	13.33	16.00	0.00	0.00	5.00
Daytona Beach, FL (Shores)	0.00	20+	0.00	20 or 4	0.00	3.50	0.00	0.00
Miami Beach, FL	3.33	16.67	0.00	1 per 4 seats	0.00	3.33	2.50	0.00
Fort Lauderdale, FL	4.00	<4000sf: 15.4 > 4001sf: 20.0	<2000sf: 10; >=2000sf: 6.67	<=4000sf: 10; >4000sf: 33.33 + 4	0.00	4.00	1.25	0.00
Biloxi, MS	4.00	10.00	6.67+	6.67	6.67	5.00	2.00	0.00
Virginia Beach, VA	8.00	0.00	0.00	10.00	20.00	5.00	1.11	0.00
Myrtle Beach, SC	3.63	10.00	0.00	10.00	0.00	4.00	0.00	2.00
Ocean City, MD	5.00	20.00	10.00	20.00	20.00	10.00	3.33	0.00
Jacksonville Beach, FL	4.00	10.00	0.00	10.00	0.00	5.00	0.00	0.00
Melbourne, FL	3.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
Clearwater, FL (Tourist)	0.00	10.00	0.00	7-15 (range)	0.00	4.50	0.00	0.00
Hilton Head, SC	4.44	14.30	5.00	10.00	10.00	2.86	10.00	0.00
Cocoa Beach, FL	5.00	6.67+	0.00	6.67+	6.67+	2.50	0.00	0.00
Dania Beach, FL	6.67	25.00	6.67	25.00	33.33	4.00	2.50	0.00
Fort Walton Beach, FL	3.33	10.00	0.00	10.00	10.00	3.33	2.00	0.00
Neptune Beach, FL	0.00	1 per 4 seats + 1 per 2 employees	0.00	1 per 4 seats + 1 per 2 employees	1 per 4 seats + 1 per 2 employees	3.33+	0.00	0.00
St. Pete Beach, FL	0.00	20.00	5.00	10.00	0.00	5.00	0.00	0.00

Note: A "+" symbol indicates that there are additional requirements related to the number of employees, etc. that are not included in the final comparison. As a result, the requirements for some communities are **understated**.



TABLE D - Distribution of Converted Ratios Used for Comparison

Bank	Bar/Lounge	Conv. Store	Restaurant	Fast Food	Retail	Furniture / Appliance
8.00	25.00	10.00	25.00	33.33	10.00	10.00
6.67	20.00	10.00	20.00	20.00	8.00	3.33
5.00	20.00	6.67	20.00	20.00	5.00	3.33
5.00	20.00	6.67	16.67	16.00	5.00	2.50
5.00	20.00	6.67	15.00	10.00	5.00	2.50
4.44	20.00	5.00	13.33	10.00	5.00	2.00
4.00	20.00	5.00	13.33	10.00	5.00	2.00
4.00	16.67	5.00	10.00	6.67	4.50	2.00
4.00	16.67	3.33	10.00	6.67	4.00	1.25
4.00	15.40		10.00	3.33	4.00	1.11
3.63	14.30		10.00		4.00	
3.33	13.33		10.00		4.00	
3.33	13.33		10.00		3.50	
3.33	10.00		10.00		3.33	
	10.00		10.00		3.33	
	10.00		7.00		3.33	
	10.00		6.67		2.86	
	10.00		6.67		2.50	
	6.67					
	3.33					