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# 2013 HVS-STR U.S. HOTEL VALUATION INDEX

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# 2013 HVS-STR U.S. HOTEL VALUATION INDEX

The 2013 edition of the HVS-STR U.S. Hotel Valuation Index is quite optimistic. In fact, many hotels have or are expected to reach prior peak occupancy levels. Annualized room nights sold increased by 3.0% in 2012, and outpaced the 2007 previous peak levels by 60 million rooms (1.09 billion rooms in 2012 versus 1.03 billion in 2007). Room rates for hotels increased by over 4.0%, resulting in industry-wide RevPAR growth of roundly 7.0%.

### **KEY TAKEAWAYS**

- 1. Increased levels of transactions and refinancing
- 2. CMBS to continue to be stronger and more competitive
- 3. Average rate will drive RevPAR and NOI growth
- 4. Capitalization rates are expected to remain stable for the remainder of the year.
- 5. Extended period of increased values through 2016, especially in secondary markets

### **U.S. Economic Trends**

In the fourth quarter of 2012, growth occurred at a relatively slow pace as the U.S. real gross domestic product (GDP) increased by as little as 0.4% after inflation, when compared with earlier estimates of 1.0%. A dramatic 15% drop in government spending dragged on economic activity. Defense outlays were cut the most, falling by 22.2%, the largest decreased in defense since the Vietnam War's end in 1972. Private business inventories, meanwhile, also decreased. The reduced spending and inventories wiped away 1.6 percentage points from GDP growth, and reversed the strong 3.1% GDP growth recorded in the third quarter. Despite the stumble at year's end, the U.S. still grew more in 2012 than it did a year earlier; economic growth increased to 2.2% from 1.8% in 2011. GDP increased at an annual rate of 2.5 percent in the first quarter of 2013 (that is, from the fourth quarter to the first quarter), according to the "advance" estimate released by the Bureau of Economic Analysis. The increase in real GDP in the first quarter primarily reflected positive contributions from personal consumption expenditures (PCE), private inventory investment, exports, residential investment, and nonresidential fixed investment that were partly offset by negative contributions from federal government spending and state and local government spending. Imports, which are a subtraction in the calculation of GDP, increased.

The unemployment rate in the U.S. reached its peak of 10.0% in October of 2009 and has since continued to decline. The rate has remained stagnate around 7.9% in the second half of 2012, which exceeded earlier forecast of 8.0%. In April of 2013, the national unemployment rate was 7.5%; a decline of 0.6% percentage points, when compared with April 2012 (8.1%). The sequestration, which took effect on March 1<sup>st</sup> 2013, could potentially have a major effect on unemployment rates. However, the number of unemployed government workers has actually dropped to 715,000 from 786,000 in April 2012, lowering their unemployment rate to 3.3% from 3.7%. Roughly three-quarters of the decline in government jobs in April came from the federal government.

The housing market continues to recover. The S&P/Chase-Schiller index, which measures property values in 20 cities, continued to show solid increases. In 16 of the 20 cities annual growth rates rose from the last month; Detroit, Miami, Minneapolis and Phoenix saw slight annual deceleration ranging from -0.1 to -0.4 percentage points. Phoenix continued to stand out with an impressive year-over-year return of +23.0% while Atlanta and Dallas had the highest annual growth rates in the history of these indices since 1992 and 2001, respectively. The data indicate that the housing market continues to recover from the latest economic recession. As of February 2013, average home prices across the United States are back to their autumn 2003 levels for both the 10-City and 20-City Composites.



Home prices are expected to increase by approximately 5.0% in 2013 and 3.5% in 2014, on average.

Corporate profits at U.S. companies listed on the Standard and Poor's 500 continue to increase; however, less than half, 200, of the companies in the Standard & Poor's 500 have reported 5% or higher revenue gains in their most recent quarter, says data from S&P Capital IQ. And just 131 companies have boosted revenue by 10% or more. As growth in China and Europe slowed, growth of corporate profits has also decelerated. Profits from current production (corporate profits with inventory valuation and capital consumption adjustments) increased 6.8 percent in 2012, compared with an increase of 7.3 percent in 2011.

Interest rates have been extraordinarily low in 2012 and 2013. Rates are expected to remain at historical lows for the remainder of 2013.

Most indicators reflect a positive outlook for the U.S. economy and indicate an ongoing recovery from the latest recession. The Federal Reserve's easing is anticipated to have a positive impact, mostly in the latter half of 2013 and 2014. Interest rates are expected to remain low, the unemployment rate continues to decrease and the housing sectors noted solid increases in value. However, the global slowdown tied to the Euro zone's debt crisis, the federal's government fiscal difficulties, and the implementation of the Affordable Health Act ("Obama care") create uncertainty for business.

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## **U.S. Hospitality Trends**

Fiscal cliffs, hurricanes, the election and the general uncertainty within the government did not deter positive 2012 year-end results. The continued limited supply growth paired with a strong increase in demand, helped boost all three key performance metrics in 2012. According to Smith Travel Research (STR), the hotel industry's occupancy increased by 2.5% to 61.4%, and average rate increased by 4.2% to \$106.10, which resulted in an increase in RevPAR of 6.8% to \$65.17.

Following in the path of the U.S. economy, the U.S. hotel industry continues to recover in 2013. The upward trend seen in 2012 continued throughout the year-to-date period April 2013. The hotel industry's occupancy rose to 63.8%, and average rate increased to \$110.02. This resulted in a RevPAR of \$70.24, representing a \$5.07 increase when compared with the year-end 2012 level. Increases in RevPAR in 2012 and in the year-to-date period through April 2013 were attributed primarily to higher average rates.

The limited amount of financing available for new developments led to very few new developments in 2012. Limited supply growth paired with a strong increase in demand, helped boost all three key performance metrics in 2012. However, according to the April 2013 STR Pipeline Report, the picture is changing: The total active U.S. hotel development pipeline currently comprises 2,700 projects totaling 319,482 rooms. This represents a 9.2-percent increase in the number of rooms in the total active pipeline compared with April 2012, and an 18.5-percent increase in rooms under construction. The total active pipeline data includes projects in the In Construction, Final Planning and Planning stages but does not include projects in the Pre-Planning stage. The data shows movement in the upper-end segments of the business. The luxury segment showed the largest increase in rooms in the active pipeline, rising 60.5% and including 7,451 rooms. Both the upper-upscale (+10.4%) and upscale (+25%) segments had double-digit increases in their active pipelines. However, these projects typically take 3-5 years and are not expected to temper RevPAR growth in the near term.

The U.S. Hotel Industry Leading indicator (HIL) is a monthly leading indicator for the industry. The HIL was built as a composite indicator that uses nine different components that, on average, when put together have led the industry four to five months in advance of a change in direction in the industry business cycle. Seven of the forward looking indicators of business activity that comprise HIL had a positive contribution to its change in April: Jobs Market; Hotel Profitability; Foreign Demand; Yield Curve; New Orders; Oil Prices and Vacation Barometer. Two indicators of future business activity had a negative or zero contribution to HIL's change in April: Hotel Worker Hours and Housing Activity. HIL's six-month



growth rate posted a positive rate of 2.5% during April, the same rate as in March. This compares to a long-term annual growth rate of 3%, the same as the 30-year average annual growth rate of the industry's gross domestic product.

The analyses for this year's Hotel Valuation Index are supported by HVS's forecasts for occupancy and average rate. HVS presently anticipates modest RevPAR growth of 5.0% to 7.0% for 2013, which is supported by continued occupancy growth and strong increases in average rates. Given the current pace and outlook for the economic recovery, RevPAR is anticipated to exceed its pre-recession level by the end of 2013. However, the Sequestration could negatively affect markets that depend heavily on government demand.

While most consulting firms focus on RevPAR results, HVS believes that value trends are significantly more meaningful to hotel owners, operators, and lenders. Through the Hotel Valuation Index (HVI), HVS monitors hotel value changes in 66 individual U.S. markets and the United States as a whole. The HVI looks at hotel supply, demand, occupancy, and average rate trends for each market area and creates an income-and-expense projection based on local operating costs. It then capitalizes the resulting net income by an appropriate capitalization rate, producing an estimate of value for a typical hotel in that market. The HVI tracks historical hotel values back to 1987 and offers projections through 2016/17. This tool points out the high and low points of each cycle, the velocity of the declines and the recovery, and the overall value volatility of each market.

# U.S. Lodging Sales Activity and Investment Metrics

### SALES ACTIVITY 2005 THROUGH 2012

A useful barometer to the income approach of hotel valuation is the presence of comparable sales data. The following graph illustrates the history of U.S. hotel sales priced at \$10,000,000 and above between 1990 and 2012.





The profound impact of the latest recession on lodging sales activity is exemplified by the trends of 2008 and 2009. Between 2007 and 2009, the number of hotel transactions declined by over 80%, while the average price per room declined by approximately 15%. Net operating income (NOI) suffered drastic losses in 2009 in particular, causing numerous hotel defaults.

In 2010, the per-room pricing increased by approximately 10%. As markets demonstrated signs of recovery, buyers and sellers became more compatible. Cash-rich buyers were actively seeking realistically priced hotels in order to reap the benefits of the forthcoming stronger rebound phase. In response, lenders were providing reasonable levels of financing for such investors, albeit primarily for assets that were in tier-one markets and were not hindered by any extenuating



circumstances. By the end of 2010, per-room pricing had already recovered to 2007 levels, and the number of hotel transactions increased for the first time since 2007, by nearly 80%.

In 2011, total transactions of sales \$10 million and over jumped 40%, following the 80% gain in 2010 over the 2009 market nadir. The average price-per-key increased by 16%, from \$185,000 to \$214,000. As occupancy and NOI started to rebound in the beginning of 2010, major sales activity throughout the first half of the year was robust. REIT acquisition activity dominated the major hotel transactions market; however, due to the US debt ceiling debacle, the bond rating downgrade, and the European financial crisis, share prices declined and the economic conditions hindered many transactions during the latter half of 2011.

Even though REIT share prices have experienced a recovery in 2012, REITs have been cautious about acquisitions. Only 16% of hotel acquisitions were by REITs, a notable decline from 2012 (35%). Concerns over the fiscal cliff, the presidential election, and a willingness of owners to hold assets possibly contributed to a transaction slowdown. Investment activity dropped from \$19.4 billion (2011) to \$12.5 billion in 2012. However, the average price per key remained fairly stable. Roundly 12% of transactions involved distressed assets in 2012; a notable decline from 2012 (30%).

#### MOST ACTIVE MARKET IN THE FIRST HALF OF 2013

The following table shows the six most active markets in the first half of 2013. New York led the list in terms of number of properties sold, followed by California, whereas California achieved the highest dollar-amount-per-room paid. Even though hotel investment activity in New York decreased in 2012, Manhattan is the most active hotel investment market in the world. The city's largest transaction in 2012 was Strategic Hotels & Resorts and KSL Capital Partners' purchase of the 509-room Essex House for \$362 million. In 2012, private equity firms and REITs accounted for 54% of purchases by volume in Manhattan. In general, these markets are attractive to investors given their rapid recovery from the recession, high barriers to entry, and a rather diversified demand base.

### NEW YORK TOPS MOST ACTIVE MARKET FOR TRANSACTIONS IN FIRST HALF OF 2013

Market	Sales	Volume	Rooms	\$ / Room
New York	7	\$964,350,000	1,385	\$696,282
California	5	463,400,000	523	886,042
Massachusetts	2	260,000,000	1,663	156,344
Louisina	2	119,350,000	356	335,253

#### **INVESTEMENT METRICS**

Given the preceding data, the following figures detail the recent prevailing investment metrics such as the loan-to-value ratio, interest rates, equity yield, and total property yield rates by property type. HVS prepared these data through analysis of recent sales, appraisal work, and extensive interviews with market participants.

#### **TYPICAL FINANCING TERMS**

	<u>Leverage</u>	Interest Rate	Equity Yield	<u>Total Property Yield</u>
Trophy (Top 3%)	70 to 75%	4.5 to 5%	17 to 20%	9 to 9.5%
High Quality	65 to 70%	4.25 to 5.25%	17 to 20%	9.75 to 10.75%
Middle Quality	60 to 65%	5 to 6%	18 to 20%	11 to 12%
Lower Quality	60%	5.5 to 6.5%	18 to 21%	> 12%

In the initial months of the latest downturn, equity yields increased, reflecting the elevated level of the perceived risk of the hospitality sector and the uncertainty concerning the length and depth of the downturn. As cash flows improved significantly and only a limited number of assets were available for sale, equity yields, as well as total property yields trended downward over the last years. Other investment metrics such as loan-to-value ratios and interest rates also improved.

	Cap Rate based on Historical NOI		Cap Rate based on 1st Yr. Projected NOI		Unlevered Discount Rate		Equity Yield	
2012	6.2	%	7.5	%	10.8	%	16.7	%
2011	6.1		7.1		11.7		16.8	
2010	4.6		5.4		11.8		15.9	
2009	8.0		6.4		13.7		16.9	
2008	6.7		5.8		11.6		19.3	
2007	6.0		6.8		11.6		21.3	
2006	5.5		5.7		10.8		18.9	
2005	5.2		6.9		11.4		19.7	
2004	5.8		7.4		12.2		19.7	
2003	7.9		8.2		14.0		21.4	
2002	8.9		9.8		13.6		21.0	
2001	8.2		9.8		14.6		22.2	
2000	9.2		10.4		14.0		21.0	

### CAP RATE BASED ON HISTORICAL NOI (SELECT SET OF FULL-SERVICE HOTELS)

Capitalization rates based on historical and projected first year net income (select set of full service hotels) trended up slightly from 2011 to 2012 and unlevered discount rates have declined by 90 basis points, reflecting a moderation of projected future gains in NOI and extremely low interest rates. At the same time equity return requirements remained fairly stable from 2011 to 2012, and well below their rates prior to 2009.

The following table compares the 2011 and 2012 derived capitalization rates for full-service, select-service and extended-stay, and limited-service hotels derived from all sales data in the HVS Sales Database.

	2012		2011	
Property Type	Average (%)	Range (%)	Average (%)	Range (%)
Full Service Incl. Luxury	6.3	2.0 - 11.7	5.4	0.05 - 10.9
Select and Extended-Stay	8.4	2.4 - 13.0	7.7	3.2 - 12.6
Limited Service	9.7	1.6 - 16.3	9.5	0.03 - 30.0

### DERIVED CAPITALIZATION RATES BY PRODUCT TYPE

Full-service hotels, and especially luxury and trophy assets, showed strong declines in performance in 2009 and in the first half of 2010; powerful recoveries were anticipated for these assets in 2011. As the hotel industry continued to recover, the upside potential for these assets decreased slightly; therefore, derived capitalization rates trended upwards in 2012, and we believe are at a point of stabilization.

## Understanding the HVI

The Hotel Valuation Index (HVI) tracks hotel values in 66 major markets and the United States as a whole. Created in 1987 by HVS, the HVI is derived from an income capitalization approach, utilizing market area data provided by Smith Travel Research (STR) and historical operational information from HVS's extensive global experience in hotel feasibility studies and valuations. The data are then aggregated to produce a pro-forma performance for a typical full-service hotel in each respective market of the United States. Based upon our experience of real-life hotel financing structures gained from valuing thousands of hotels each year, we then apply appropriate valuation parameters for each market, including loan-to-value ratios, real interest rates, and equity return expectations. These market-specific valuation parameters are applied to the net operating income (NOI) for a typical full-service hotel in each city.

The HVI is an indexed value that uses the 1987 value of a typical U.S. hotel (1987 = 1.0000) as a base. Each market area is then indexed off this base, with a number showing the value relationship of that market area to the base. For example, in 1987, the index for New York was 1.3121, which means that the value of a hotel located in New York was approximately 31% higher than that of a similar hotel in the U.S. in 1987.

Another useful comparison highlights the value differences between hotels in two different U.S. cities. For example, if a hotel in Philadelphia, Pennsylvania sold in 2008 for \$100,000 per room and a similar hotel located in New York sold for \$464,922 per room, the figure is calculated by taking the 2008 HVI for New York and dividing it by the 2008 HVI for Philadelphia to determine the value adjustment.

### 2008 HVI New York (12.7412) / 2008 HVI Philadelphia (2.7405) = 4.6492

The 2008 sales price of \$100,000 per room is then multiplied by the amount of the previously calculated factor of 4.6160, yielding the estimated 2008 sales price per room for New York.

### \$100,000 x 4.6492 = \$464,922



To calculate the percentage change of hotel values in the same market at different points in time using the HVI, divide the HVI for the last year by the HVI for the first year, and then subtract 1 from this calculation. For example, in 2006, the HVI for Miami was 6.1717, and in 2008, the HVI for the city was 6.8243. To calculate the estimated percentage change in value for a typical Miami hotel from 2006 to 2008, divide the 2008 HVI for Miami by the 2006 HVI, and then subtract 1 to get an approximate 11% increase in value from 2006 to 2008.

(7.0004/6.1370) - 1 = 0.1413, or 14%



### 2013 HVI – Overall U.S Values

The two following graphs show the HVI for the United States as a whole. The first graph illustrates the value change on a per-room basis in dollar amounts from 2000 through 2016, whereas the second graph demonstrates the value change on a per-room basis in percentages from 2000 through 2017.

### **U.S HOTEL VALUES PROJECTED TO SURPASS 2006 PEAK IN 2013**



Based on the HVI, U.S. hotel values peaked in 2006 at \$100,000 per room. The low point during the recent downturn occurred in 2009, with values dropping to \$56,000 per room. We project that U.S. hotel value growth will persist through 2016, surpassing 2006 values by 2013, as the graphs above illustrate.



### **U.S VALUE GROWTH PROJECTED TO GRADUALLY SLOW DOWN THROUGH 2017**

After the U.S. hotel values peaked in 2006, values started to decrease during the latest downturn, which set in during the fourth quarter of 2007 and was exacerbated by the collapse of the real estate lending market. The resulting recession led hotel values to decline by 15% in 2008 and 31% in 2009.

U.S. hotel values started to recover in 2010 as the potential growth of RevPAR was increasing. Hampering the recovery somewhat in 2010 was the lack of available financing, and most hotel buyers were buying "all cash", which continued through 2011.

Many hotel markets are anticipated or have reached prior peak occupancy and average rate levels in 2013. Future increases in revenue and net income are still anticipated as average rate continues to rise above inflation, resulting in continued RevPAR growth in 2013. However, it is uncertain just how much and how fast revenue will continue to climb in 2013. At the same time, we are beginning to see increases in supply, particularly in the extended-stay and select service segment.



Most hotel investors remain very confident about future net income gains, due to the increase in demand; nevertheless, investors are becoming less aggressive in their forecasts of future operating performance, mainly due to the cautious of overpaying in a market laden with uncertainty. Therefore, U.S. values growth is projected to gradually slowdown through 2017.

# 2013 HVI – Highlights

### HISTORICAL VALUE CHANGES

We previously discussed our value projections for the U.S. as a whole. The following tables provide insight into the changes in per-room value in dollar amounts in 2012 over 2011 for the ten markets that fared the best and for the ten markets that experienced the worst declines, along with the U.S. average.

### OAHU AND SAN FRANCISCO VALUES INCREASED MOST FROM 2011 TO 2012

<u>Rank</u>		
1	Oahu	\$136,613
2	San Francisco	\$97,079
3	New York	\$74,236
4	Los Angeles	\$61,177
5	Miami	\$58,310
6	Boston	\$57,214
7	Chicago	\$52,028
8	New Orleans	\$50,619
9	San Jose	\$50,273
10	Oakland	\$42,246
28	United States	\$15,687
	Source: HV	S

#### WASHINGTON DC VALUES DECREASED MOST FROM 2011 TO 2012

<u>Rank</u>		
57	Wilmington	\$3,685
58	Baltimore	\$3,530
59	Phoenix	\$1,467
60	Tucson	\$1,332
61	Las Vegas	(\$1,602)
62	Hartford	(\$2,353)
63	Santa Fe	(\$2,375)
64	Huntsville	(\$7 <i>,</i> 078)
65	Albuquerque	(\$7,548)
66	Washington DC	(\$27,842)
	Source: HVS	

The lodging industry has experienced positive value growth year-over-year since 2010; with a strong increase of approximately 20% in 2012 compared to 2011 levels. In 2012, the U.S. average change in per-room value equated to an increase of \$15,700 (rounded), which ranks 28 out of the 66 major markets evaluated.

Ranking first in 2012 with the most significant per-room increase was Oahu, followed by San Francisco. The limited supply of new hotel developments in Oahu, in combination with increased international leisure demand from Asia, has supported strong RevPAR increases by \$22.00 from 2011 to 2012. As a result, the per-room value in Oahu increased by approximately \$137,000 (rounded) in 2012. San Francisco experienced a similar scenario; very little new supply in 2012 and significant demand increases in the meeting and group sector as well as corporate travelers, led to RevPAR increased of roundly \$17.00 from 2011 to 2012. Consequently the per-room value in San Francisco increased by approximately \$97,000 in 2012.

Ranking last in 2012 with the most significant per-room value decline was Washington D.C. by a significant margin, followed by Albuquerque and Huntsville. However, only a total of six markets showed a decrease in value in 2012. The uncertainty within the government sector and the coherent spending cuts on various governmental programs led to a decrease in the meeting and group segment in 2012. These dynamics translated into a decrease in per-room value by roundly \$28,000 for the Washington D.C. market. However, with the opening of the 1,175-room Marriott Marquis, which is expected to open by May of 2014, the local

market is expected to recover in the meeting and group sector in the coming years. Nevertheless, value growth is expected to remain minimal.

Albuquerque experienced a decrease in per-room value in 2012, largely due to the strong decrease in meeting and group demand, as the city of Albuquerque is lagging the convention center facilities as well as the full-service hotel supply. However, the Albuquerque convention center currently is undergoing an extensive renovation, which will be completed at the beginning of 2014, which is expected to increase group and meeting supply in the near future. Nevertheless, government and military demand is the major demand generator in the local market of Albuquerque and therefore, average rate is closely tied to the Per Diem rate in the market. As a result, average rate and occupancy are forecast to remain flat throughout the project period.

Due to the large military presence in Huntsville the local market is heavily dependent on government demand. The uncertainty within the government sector and the coherent decrease within the meeting and group sector led to a decrease in per-room value of roundly \$7,000.

The following tables provide insight into the changes in per-room value, expressed as a percentage, in 2012 over 2011 for the ten markets that fared the best and for the ten markets that experienced the worst declines, along with the U.S. average.

<u>Rank</u>	<u>&lt;</u>	
1	Cleveland	60%
2	Tampa	58%
3	Indianapolis	50%
4	Oakland	49%
5	New Orleans	43%
6	Norfolk	43%
7	Houston	41%
8	Oahu	40%
9	WPB - Boca Raton	39%
10	Omaha	37%
31	United States	20%
	Source: HVS	

### CLEVELAND VALUES INCREASED THE MOST FROM 2011 TO 2012

#### TUSCON VALUES DECREASED THE MOST FROM 2011 TO 2012

<u>Rank</u>			
57	Tucson	5%	
58	Pittsburgh	4%	
59	Baltimore	3%	
60	Phoenix	2%	
61	Santa Fe	-2%	
62	Las Vegas	-2%	
63	Hartford	-4%	
64	Washington DC	-10%	
65	Huntsville	-12%	
66	Albuquerque	-18%	
	Source: HVS		

Ranking first in 2012 with most significant increase in per room value expressed in percentage is Cleveland, closely followed by Tampa and Indianapolis. In 2012, downtown Cleveland experienced a decline in room count of approximately 15.0%, as the Embassy Suites is being converted to an apartment complex and the former Crowne Plaza is being re-branded to a Westin. Consequently, occupancy and average rate in the downtown area increased significantly and therefore, value increased by approximately 60% in 2012. However, with new supply in the pipeline and the reopening of the Westin Downtown, average rate and occupancy levels are expected to return to more normalized levels in the near future.

Overall, only six markets experienced a decline in per-room value from 2011 to 2012, with the strongest value decrease expressed in percentage in Albuquerque. As previously mentioned, due to the large military and governmental presence in Albuquerque the local market is heavily dependent on the government sector. The uncertainty within the government sector and the coherent decrease within the meeting and group sector led to a decrease in per-room value by 18% in 2012.

#### **PROJECTED VALUE CHANGES FOR 2013**

The following figures present the per-room values forecast for the top ten and bottom ten markets for 2013. We note that the annual HVI represents per-room values as of the end of the year. Increases in occupancy, average rate, and demand, along with limited growth in supply, are anticipated to result in relatively strong growth in net operating income (NOI). These improving dynamics coupled with a reduced amount of buying opportunities are expected to yield a positive per-room value change for the U.S. in 2013.

# CONVENTION CITIES PROJECTED TO CAPTURE LARGEST VALUE GROWTH IN 2013

<u>Rank</u>		
1	Tampa	31%
2	WPB - Boca Raton	31%
3	Miami	29%
4	New Orleans	27%
5	Richmond	25%
6	Phoenix	23%
7	Detroit	22%
8	Oahu	21%
9	Indianapolis	21%
10	Raleigh-Durham	20%
39	United States	12%
	Source: HVS	

#### **TUSCON VALUE EXPECTED TO DECLINE THE MOST IN 2013**

<u>Rank</u>			
57	New Haven	6%	
58	Santa Fe	6%	
59	New York	6%	
60	Denver	4%	
61	Tallahassee	3%	
62	Milwaukee	1%	
63	Norfolk	-2%	
64	Washington DC	-3%	
65	Albuquerque	-9%	
66	Tucson	-22%	
	Source: HVS		

As occupancy and average rate are expected to increase and corporate travel continues to grow, per-room values are forecasted to rise in 2013, with the strongest increase in the Florida market. Three major cities in Florida (Tampa, WPB-Boca Raton, and Miami) are expected to capture the largest value growth in 2013. With record years for both domestic and international visitation, well surpassing New York City and Las Vegas, and in combination with increased corporate travelers, occupancy and average rate are expected to increase significantly in 2013. As a result, per-room value is forecasted to increase by approximately 30% in all three markets in 2013.

Ranking last in the forecasted per-room value change in 2013 is the city of Tucson. Occupancy in Tucson peaked in 2006 at 68.0% (rounded) and declined to 53.0% (rounded) by 2009. Average rate peaked in 2008 at \$103.00 (rounded) and declined to \$89.00 (rounded) in 2012; average rate has remained flat through the most recent year-to-date period in 2013. Historically, Tucson has been a less pricy option to Phoenix, especially for the meeting and group segment. As Phoenix experienced major declines in average rate during the latest economic recession, the price difference between the two cities is minimal, and Phoenix has been capturing most of the meeting and group demand historically captured by Tucson. Due to the slow recovery of occupancy and average rate in Tucson as well as no changes in RevPAR levels are anticipated for 2013; therefore, Tucson's per-room value is expected to decrease the most within our selected set of 66 markets. However, only four markets are forecasted to decline in per-room value through 2013.

### PROJECTED VALUE CHANGES THROUGH 2016 (PERCENTAGE)

The following tables provide insight into the changes in per-room value, on a percentage basis, through 2016 for the ten markets that are anticipated to fare the best, and the ten markets that are anticipated to experience the worst declines, along with the U.S. average.

# SIX MARKETS IN FLORIDA ARE EXPECTED TO SHOW THE MOST SIGNIFICANT VALUE INCREASES THROUGH 2016

<u>Rank</u>		
1	Richmond	73%
2	Tampa	71%
3	Miami	65%
4	Jacksonville	64%
5	Phoenix	61%
6	WPB - Boca Raton	58%
7	West Palm Beach	48%
8	Orlando	46%
9	Cleveland	45%
10	Oahu	44%
19	United States	40%
	Source: HVS	

<u>Rank</u>	•		
57	Denver	19%	
58	Los Angeles	17%	
59	Dayton	17%	
60	Albuquerque	16%	
61	Wilmington	14%	
62	Boston	14%	
63	New Haven	13%	
64	Tucson	12%	
65	Rochester	12%	
66	Washington DC	6%	
	Source: HVS		

# CITIES WITH THE SMALLEST VALUE APPRECIATION PROJECTION THROUGH

As previously mentioned, the strong performance of the Florida market is expected to continue through 2016, as Tampa, Miami, Orlando WPB-Boca Raton, West Palm Beach, and Jacksonville are among the top ten markets to show the most significant value increases through 2016. Largely due to favorable economic conditions, as well as expected increase in national and international leisure travel. However, Richmond is expected to experience the strongest increase in perroom value through 2016, with an increase of 73%, mainly due to the increase in corporate demand, especially in the insurance and finance sector, which was heavily impacted in the recent economic recession. With demand rebounding, average rate is expected to increase above inflation throughout the projected period, resulting in strong value increases through 2016.

As previously discussed, Washington D.C. experienced a decrease in per-room value in 2012, which can be largely attributed to the Federal budget and spending cuts on various governmental programs. Washington D.C. is considered a very stable market with very little volatility and per-room value is forecast to experience only minimal growth through 2016. Denver, Los Angeles and Boston experienced a quick recovery from the economic downturn in 2009, already registering positive gains in both occupancy and average rate by mid-year 2010. These dynamics translated into staunch value growth in 2010 and 2011. As a result from the strong value growth in 2010 and 2011, the upside potential through 2016 is limited; therefore, per-room value change for Denver, Los Angeles and Boston is anticipated to experience minimal growth by 2016.

# **HVS**

### PROJECTED VALUE CHANGES THROUGH 2016 (DOLLAR AMOUNTS)

The following tables provide insight into the changes in per-room value in dollar amounts through 2016 for the ten markets that fared the best and the ten markets that experienced the worst declines, along with the U.S. average.

# MIAMI IS EXPECTED TO SHOW THE MOST SIGNIFICANT VALUE INCREASE THROUGH 2016

	Source: HVS		
<u>Rank</u>			
1	Miami	\$238,390	
2	Oahu	\$210,722	
3	New York	\$145,157	
4	San Francisco	\$139,378	
5	West Palm Beach	\$79,846	
6	Austin	\$67,933	
7	New Orleans	\$64,938	
8	WPB - Boca Raton	\$63,844	
9	Fort Lauderdale	\$62,474	
10	San Diego	\$58,671	
29	United States	\$37,966	
	Source: HVS		

# CITIES WITH THE SMALLEST VALUE APPRECIATION PROJECTION THROUGH 2016

Rank			
57	Memphis	\$16,685	
58	Washington DC	\$13,294	
59	Wilmington	\$9,549	
60	New Haven	\$9,434	
61	Rochester	\$7,919	
62	Dayton	\$7,245	
63	Norfolk	\$6,456	
64	Albuquerque	\$5,671	
65	Tallahassee	\$5,025	
66	Tucson	\$3,638	
	Source: HVS		

On a dollar basis, Miami, Oahu, New York, and San Francisco are expected to register the most growth throughout 2016. Historically, these four markets have been one of the top markets in terms of highest per-room values. With increases in corporate travel as well as meeting and group business, these four markets are expected to continue to increase in value on a dollar basis. Tucson, Tallahassee, and Albuquerque are expected to show the lowest increase in value on a dollar basis through 2016, as demand levels are expected to remain relatively flat for the projected period.

### LONG-TERM HOLD: 1987-2017

The following tables provide insight into the average annual compounded changes in value, on a percentage basis, from 1987 through 2017.

# VALUE-PER-ROOM RANKINGS - AVERAGE ANNUAL COMPOUNDED CHANGE 1987 THROUGH 2017

<u>Rank</u>		
1	Miami	11%
2	Austin	10%
3	New York	9%
4	Omaha	8%
5	Oahu	8%
6	Houston	7%
7	San Francisco	7%
8	Portland	7%
9	Denver	6%
10	New Orleans	6%
30	United States	5%
	Source: HVS	

### VALUE-PER-ROOM RANKINGS – AVERAGE ANNUAL COMPOUNDED CHANGE 1987 THROUGH 2017

<u>Rank</u>		
57	Detroit	1%
58	Winston-Salem	1%
59	Rochester	1%
60	Dayton	0%
61	Wilmington	0%
62	New Haven	0%
63	Albuquerque	0%
64	Hartford	0%
65	Tucson	0%
66	Norfolk	-1%

Source: HVS



The following figures present the historical and projected estimates for the Hotel Valuation Index (HVI), per-room values expressed as U.S. dollar amounts, and the change of values expressed as a percentage for all 66 markets. The HVI covers the period from 1987 through 2017. The tables presenting the per-room values expressed in U.S. dollar amounts, as well as the tables presenting the change in value expressed as a percentage, cover the period from 2002 through 2017. We have presented the HVI results between 1987 and 2001 in the first two tables, followed by the data for the 2002 through 2017 in the subsequent tables.

### HOTEL VALUATION INDEX – 1987 THROUGH 2001

							Histori	cal Estimate	es						
Market	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Albuquerque	1.2920	1.2715	1.5875	1.5734	1.6285	1.6788	1.8569	1.8257	1.7577	1.5838	1.5771	1.1705	1.0065	1.1055	0.9709
Anaheim	1.3220	1.3788	1.4348	0.9901	0.7907	0.6258	0.8377	0.7409	1.1265	1.3862	1.6576	1.5586	1.6188	2.2215	2.3113
Atlanta	1.3769	1.2371	1.1933	1.0519	1.0225	1.2162	1.6778	2.0243	2.4677	2.7416	2.2445	2.2484	2.2969	2.2976	1.7564
Austin	0.4026	0.3563	0.5460	0.6557	0.8001	1.0672	1.3956	1.6581	2.4003	2.2708	2.5258	2.4184	2.4491	3.0232	2.0045
Baltimore	1.5679	1.3252	1.2837	0.9079	0.7761	0.8607	0.9616	1.2048	1.5362	1.8092	2.3617	2.5493	2.8316	3.3735	2.9723
Boston	2.5818	2.7100	2.3341	2.4638	1.8156	2.0223	2.4704	3.2629	4.1331	4.7363	6.4296	6.7406	7.0526	8.2119	5.3784
Buffalo	1.3577	1.2744	1.5676	1.5366	1.5453	1.3009	1.2092	1.1350	1.1933	1.2126	1.4041	1.2384	1.3451	1.4229	1.1680
Charlotte	1.1752	1.1515	1.0878	0.7622	0.5690	0.6310	0.7102	0.9964	1.3629	1.7435	1.9974	1.9619	1.9436	1.6175	1.0227
Chicago	1.6638	1.5886	1.4107	1.4237	1.1719	1.2102	1.4625	2.0694	2.5550	3.1012	3.9502	3.9924	4.0650	4.1994	2.7134
Cincinnati	1.1507	1.1976	1.1589	1.0955	1.0211	1.0882	1.1119	1.2457	1.3744	1.5046	1.6930	1.5996	1.5388	1.4425	0.9982
Cleveland	0.8412	0.9144	0.9650	0.7681	0.6968	0.7707	0.9699	1.2645	1.7626	1.7037	1.9670	1.7775	1.6925	1.5655	1.0733
Columbia	0.9707	0.7868	0.7969	0.6885	0.6438	0.8242	0.9175	0.9378	1.2234	1.3502	1.4703	1.1178	1.1224	1.1511	1.0047
Dallas	0.9158	0.9921	1.2213	1.1479	1.1720	1.4451	1.5963	1.9861	2.4586	2.6649	2.8754	2.7874	2.4799	2.5687	1.6208
Dayton	1.2155	1.0771	1.0549	0.7039	0.6457	0.6370	0.7526	0.7700	0.9031	0.8630	1.0575	1.1995	1.1486	1.1149	0.8473
Denver	0.8627	0.7986	0.7790	0.9151	1.0690	1.2679	1.6377	1.8619	2.2055	2.4472	2.9071	2.6529	2.2352	2.3987	1.8420
Detroit	1.4729	1.1607	0.8725	0.5206	0.3356	0.4456	0.5763	0.9547	1.2811	1.3976	1.5774	1.7080	1.9692	2.1074	1.4822
Fort Lauderdale	1.0922	1.0125	1.1409	0.9734	0.8139	1.5293	1.2991	0.9826	1.3665	1.6356	2.2332	2.0381	2.2238	2.3203	2.0057
Hartford	2.2797	1.8703	1.6280	1.4373	0.6834	0.4723	0.4006	0.5338	0.8879	1.1120	1.5246	1.7161	2.0695	2.4242	2.0685
Houston	0.5425	0.7471	0.8188	1.0504	1.1241	1.1621	1.1389	1.1461	1.3044	1.3886	1.8970	1.9673	1.6587	1.8104	1.9034
Huntsville	0.7336	0.7406	0.6022	0.5231	0.5383	0.6268	0.4712	0.3714	0.4308	0.5154	0.8995	0.5814	0.6918	0.7322	0.6612
Indianapolis	1.2020	1.1052	1.1558	0.9654	0.9451	1.0561	1.1855	1.3968	1.7341	1.7079	1.8536	1.5875	1.4771	1.7648	1.5896
Jacksonville	0.9167	0.8587	0.9240	0.7338	0.5498	0.7611	0.8748	1.0915	1.4381	1.6797	1.9306	1.5955	1.7102	1.8666	1.7122
Kansas City	1.0065	1.0162	0.9501	0.7564	0.6739	0.8148	1.1001	1.2921	1.6921	1.9008	2.0984	1.8235	1.6157	1.5515	1.3244
Las Vegas	0.9709	0.9550	1.0098	1.1577	0.7161	0.8506	1.3528	2.1396	2.5351	3.2646	3.2266	2.6845	2.9730	3.8527	3.3034
Long Island	3.7511	2.8614	2.2323	1.2617	0.8457	0.7721	0.9392	1.2262	1.6720	2.0790	2.6719	3.1701	4.1177	5.2713	4.6146
Los Angeles	1.6381	1.5226	1.5360	1.5628	1.0026	0.5503	0.4267	0.8391	0.8682	1.2514	2.0195	2.4192	2.6858	3.3478	2.4974
Memphis	0.9265	0.6737	0.6653	0.5621	0.6510	0.7385	0.9397	1.2883	1.4858	1.4817	1.7249	1.5767	1.3095	1.1106	0.9133
Miami	0.7022	0.8259	1.0019	1.3447	1.2987	2.2474	1.7405	0.8268	1.5068	1.7537	2.4528	2.5272	3.0894	3.1259	2.1376
Milwaukee	0.9477	0.9234	0.8639	0.8291	0.6334	0.6232	0.7233	0.8108	0.9388	0.9276	1.1659	1.2225	1.2138	1.3326	0.9825
Minneapolis	1.0890	0.8881	0.7533	0.6402	0.8620	1.1571	1.4325	1.7551	2.0971	2.0760	2.3559	2.3711	2.2201	2.3837	1.8597
Nashville	1.1122	1.1671	1.2631	0.9806	0.9279	1.1347	1.3496	1.7230	2.0959	2.1308	2.3776	1.9660	1.8035	1.6579	1.2535
New Haven	2.1900	2.0101	1.5251	1.0611	0.6129	0.5238	0.5830	0.6510	0.8953	1.0444	1.5139	1.6908	1.9583	2.2499	2.0570
New Orleans	1.0694	1.3708	1.4632	1.5820	1.6898	2.1197	2.0835	2.6591	3.0457	2.9520	3.4061	3.5002	3.8719	4.1132	3.4306

### HOTEL VALUATION INDEX – 1987 THROUGH 2001 (CONTINUED)

							Histori	cal Estimate	es						
Market	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
New York	1.3206	1.3526	1.1206	0.8791	0.8400	0.7000	0.8400	0.5600	1.3223	2.6204	4.7244	6.3296	6.8688	8.2454	3.7129
Norfolk	1.4229	1.2036	1.1284	0.7885	0.6782	0.7215	0.7334	0.7562	0.9158	0.8428	1.0967	1.2007	1.0954	1.2071	1.1786
Oahu	2.1731	2.5234	3.2019	4.0329	3.4443	4.0135	2.8801	3.2432	4.5997	4.6308	5.1361	3.9666	3.5073	4.6769	3.4940
Oakland	1.2858	1.1938	1.2201	0.9780	0.9361	0.9564	0.8023	0.9009	1.2893	1.8070	2.7125	2.9486	3.0451	4.1668	3.2475
Omaha	0.2521	0.3668	0.5333	0.5227	0.4250	0.3792	0.5492	0.5475	0.8965	0.8424	1.0539	1.3025	1.2971	1.1308	1.0929
Orlando	1.7427	1.8349	2.3899	2.1577	1.8601	2.2025	2.0512	1.9557	2.2930	3.0056	3.7731	3.4544	3.2001	3.3441	2.2420
Philadelphia	2.0000	1.6032	1.3768	0.9477	0.6196	0.5226	0.7000	0.9970	1.3568	1.8549	2.4582	2.4044	2.2777	2.3355	1.7469
Phoenix	1.3473	1.0683	1.5524	1.4054	1.1810	1.3575	1.8604	2.6034	3.3186	3.6299	3.8814	3.1163	2.6131	2.6365	1.9808
Pittsburgh	1.2996	1.1740	1.2815	1.2016	1.1402	1.2954	1.3441	1.5243	1.5689	1.6825	1.6993	1.5525	1.6258	1.7130	1.2049
Portland	0.8518	1.1616	1.6861	1.7133	1.8194	1.7766	1.9633	2.0832	2.5541	2.7633	2.6941	2.1629	1.8572	1.7629	1.4151
Raleigh-Durham	1.0742	0.8954	0.7532	0.6306	0.5639	0.7677	1.0055	1.1203	1.6763	2.1133	2.3119	1.7094	1.5999	1.7330	1.3400
Richmond	1.4738	1.4007	1.3541	1.2126	0.9227	0.9193	1.0167	1.0541	1.1955	1.3679	1.6027	1.5673	1.3725	1.4317	1.1381
Rochester	1.8675	1.7140	1.8014	1.6344	1.7210	1.2988	1.1206	0.8620	1.1382	0.9914	1.1058	1.4347	1.4560	1.4177	1.0935
Sacramento	0.8567	0.8394	0.8817	0.7714	0.6878	0.8688	1.0145	1.1567	1.3535	1.2055	1.4609	1.6021	1.6374	2.0658	1.7794
Salt Lake City	1.1434	1.3807	1.6152	1.5786	1.6626	1.8287	2.1878	2.3809	2.6418	3.1358	3.1242	2.5234	1.9348	1.8458	1.7550
San Antonio	0.8280	1.1720	1.3629	1.3422	1.4708	1.9900	2.4248	2.3165	2.3186	2.0700	2.1981	2.3512	2.2863	2.4405	2.2635
San Diego	1.9083	1.7036	1.7118	1.2252	1.2475	1.1940	1.0631	1.2531	1.6683	2.0344	2.9677	3.7178	3.8892	4.3480	3.9056
San Francisco	2.6958	2.5092	2.4221	2.9083	2.4382	2.4394	2.8550	3.3297	4.2477	5.3369	7.3164	7.4897	7.4705	9.1211	5.2886
San Jose	1.5795	1.6694	1.8992	1.5814	1.2955	1.1755	1.2209	1.4760	2.2964	3.2188	4.4238	4.4579	4.6330	6.6049	4.0771
Santa Fe	1.8702	2.3636	3.1625	3.5264	3.4789	3.8165	4.5068	3.6704	3.4979	2.9822	3.5243	3.3694	3.3832	3.4129	3.2065
Seattle	1.4743	1.6337	2.0333	1.9978	1.8931	1.8965	2.0153	2.1661	2.8039	3.0369	3.4857	3.3868	3.0584	3.1144	2.4211
St. Louis	0.8202	0.7650	0.8172	0.7284	0.6811	0.7687	0.9689	1.1781	1.3748	1.4068	1.5015	1.3367	1.3647	1.4828	1.2393
Stamford	1.9880	1.9472	1.6794	1.3614	1.0938	0.9113	1.1321	1.1814	1.5701	2.1731	2.8795	3.5026	3.5251	4.1958	2.9487
Syracuse	1.5887	1.6937	1.8543	1.8606	1.4539	1.3561	1.1934	1.0770	1.2137	1.1496	1.2599	1.4434	1.5116	1.2639	1.1799
Tallahassee	0.3160	0.3488	0.3981	0.5988	0.4546	0.4125	0.5432	0.5395	0.6824	0.6504	0.8734	0.9545	1.0375	1.1335	0.9990
Tampa	0.6709	0.7050	0.9579	0.9063	0.8760	0.8962	0.9072	0.9532	1.0853	1.3772	1.8870	1.8540	1.9515	2.0454	1.8871
Tucson	1.1795	1.2057	1.3552	1.2396	1.1806	1.3318	1.8068	1.9363	2.5044	2.5524	2.5325	2.2769	2.1402	2.0867	1.6986
United States	1.0000	0.9836	1.0222	0.8609	0.7364	0.7922	0.8708	1.0029	1.2051	1.3419	1.6032	1.6217	1.6640	1.8804	1.4321
Washington DC	1.9342	1.9208	2.0131	1.7687	1.5105	1.7238	2.2830	2.2490	2.7928	2.7629	3.7566	3.7508	4.0621	4.6568	3.7005
West Palm Beach	1.5495	1.6308	1.7427	1.1884	0.8414	0.9895	1.2045	1.2398	1.5423	1.6928	2.5177	2.3516	2.5339	2.9818	2.7632
Wilmington	1.8966	2.1940	1.5176	1.0704	0.6065	0.5421	0.3675	0.4743	0.7626	0.9827	1.6121	1.7506	1.9014	1.8496	1.5164
Winston-Salem	1.3415	1.2236	1.3695	1.1490	1.0049	1.4527	1.6073	1.4500	1.7085	1.5861	1.6814	1.5154	1.2150	1.1949	0.9915
WPB - Boca Raton	1.1115	1.0475	1.0701	0.4940	0.2616	0.7171	1.2571	1.2228	1.4848	1.5800	2.2509	2.2807	2.3558	2.7831	2.4283

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### HOTEL VALUATION INDEX – 2002 THROUGH 2020

					Histori	al Estimate	s								Forec	ast			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Albuquerque	1.0489	0.9924	1.0410	1.2656	1.6037	1.5641	1.5334	1.1662	1.3029	1.1773	0.9660	0.8835	0.9464	1.0344	1.1248	1.2815	1.3863	1.5240	1.5689
Anaheim	2.0366	2.3280	2.9668	4.0345	4.7488	4.5611	3.8152	3.0397	3.5031	4.1800	5.1228	6.0271	6.6057	6.8702	6.6246	6.7486	6.5822	6.4184	6.5372
Atlanta	1.6440	1.3750	1.7842	2.4752	3.0479	2.6581	2.0717	1.5350	1.9981	2.0101	2.3200	2.5795	2.8800	3.2164	3.1343	3.2283	3.1826	3.1921	3.2018
Austin	1.5756	1.3636	1.4942	2.5216	3.7372	4.0058	3.9496	3.5311	3.6007	4.2520	5.2193	6.0721	6.7855	7.2408	7.1214	7.2078	7.0451	7.2561	7.4736
Baltimore	3.4288	3.4600	3.8090	4.0400	4.3445	3.7657	2.8233	2.5724	2.7314	2.9182	3.0170	3.4550	4.0136	4.3585	4.2489	4.3773	4.3718	4.5611	4.6980
Boston	4.6147	3.1960	4.4968	5.3515	6.0174	7.3324	6.4098	5.4485	7.1279	8.2956	9.8976	10.9919	11.1688	11.7411	11.2575	11.3468	11.0055	11.8341	12.0611
Buffalo	1.2246	1.1167	1.0424	1.3279	1.7112	1.8860	2.1442	2.4986	2.4273	2.6089	2.9180	3.3986	3.8937	4.0935	3.8509	3.7647	3.5798	3.6061	3.6320
Charlotte	1.0967	1.0586	1.2724	1.8433	2.7412	2.9671	2.5506	1.8975	2.3328	2.7901	3.6410	4.3070	4.8718	5.0208	4.7192	4.6854	4.5334	4.6238	4.7160
Chicago	2.5088	2.5632	2.7862	3.8860	5.5319	5.9115	4.6991	2.5116	3.4919	4.2433	5.7000	6.1189	6.4420	6.8994	7.2416	7.6476	7.5099	7.4509	7.5774
Cincinnati	1.1477	1.2379	1.4834	1.6740	2.0009	1.8205	1.7485	1.5065	1.5439	1.7487	1.9279	2.2569	2.7367	2.8868	2.7720	2.7244	2.6407	2.6247	2.6372
Cleveland	0.9576	0.8012	1.0150	1.0583	1.6327	1.5311	1.1224	0.7907	0.9985	1.1030	1.7608	2.0350	2.4094	2.7425	2.5603	2.5643	2.4725	2.4716	2.4707
Columbia	1.2394	1.2296	1.6677	2.1078	2.3271	2.1802	2.0262	1.6629	1.4383	1.7313	1.9703	2.2145	2.5345	2.6811	2.6816	2.7622	2.6536	2.7695	2.8529
Dallas	1.5102	1.2453	1.5642	2.3356	2.9913	2.7530	2.4869	1.7003	2.0463	2.6112	2.8574	3.3115	3.5817	3.7439	3.6575	3.7754	3.8147	4.0246	4.1048
Dayton	0.9554	1.0979	0.9944	1.0574	1.1990	0.9060	0.7056	0.7000	0.8026	1.0438	1.2103	1.2994	1.4058	1.4759	1.4131	1.4001	1.3251	1.3072	1.3448
Denver	1.6534	1.4386	1.7287	2.4253	3.4445	3.7059	3.6298	3.0334	3.7118	4.0561	4.5529	4.7329	5.1761	5.6470	5.3975	5.5594	5.4814	5.7025	5.8770
Detroit	1.1716	0.9524	1.1176	1.2907	1.6634	1.4194	1.1055	0.5600	0.7000	1.0480	1.3214	1.6183	1.9108	1.9685	1.8270	1.8824	1.8689	1.9249	1.9139
Fort Lauderdale	1.7743	2.1702	3.2712	3.8918	4.4773	3.9644	3.2108	2.3432	3.0186	3.4265	4.1102	4.6599	5.3034	5.8760	5.8595	5.8857	5.8034	5.8254	5.6916
Hartford	1.8746	1.4538	1.9213	1.7940	1.7923	1.6608	1.2806	0.7067	0.9535	1.6421	1.5762	1.8583	2.0981	2.2924	2.1502	2.1294	2.1845	2.2494	2.2712
Houston	1.7181	1.2541	1.4815	2.4503	2.9152	2.9946	3.5800	2.3946	1.9578	2.5383	3.5759	4.2608	4.6182	4.8022	4.5820	4.5700	4.3124	4.3447	4.3755
Huntsville	0.9894	1.0410	1.1833	1.4952	1.6042	1.8315	1.6178	1.3898	1.7471	1.7098	1.5117	1.7138	2.0176	2.2200	2.1646	2.0896	2.0604	2.1585	2.2610
Indianapolis	1.6392	1.6124	1.9579	2.0631	2.5268	2.2430	1.8745	1.4036	1.3804	1.7105	2.5580	3.0939	3.5101	3.5297	3.2768	3.2107	3.1645	3.3445	3.4451
Jacksonville	1.9977	2.3804	2.7350	3.3434	3.3860	2.9653	2.1324	1.2742	1.4109	1.4615	1.8814	2.1811	2.5097	2.8318	3.0890	3.4544	3.4924	3.5968	3.7562
Kansas City	1.3133	1.0277	1.2975	1.5044	1.8819	1.7793	1.5005	1.0919	1.2064	1.3410	1.5944	1.7464	1.9604	2.2466	2.2625	2.1760	1.9218	1.9051	1.8086
Las Vegas	3.5403	4.6216	5.9200	5.9863	5.4859	6.1184	4.5824	1.1541	0.8588	1.8084	1.7635	1.9337	2.0095	2.1292	2.4550	2.8526	2.8822	3.1015	3.2630
Long Island	4.0782	3.8859	3.7690	4.3596	4.1281	4.0458	3.4123	2.6535	2.7299	3.2158	4.1111	4.7519	5.3606	5.5213	5.3826	5.3966	5.1780	5.4073	5.5694
Los Angeles	2.4053	2.5214	3.7607	4.8978	5.4210	6.0583	5.3606	3.6102	4.5914	5.7663	7.4793	8.1785	8.4358	8.7827	8.7657	8.9222	8.6542	8.9135	8.9640
Memphis	1.0232	0.9702	1.2175	1.6713	2.1577	2.0520	1.4710	1.1789	1.1539	1.1522	1.5695	1.8749	2.0918	2.1587	2.0367	2.0972	2.0686	2.0595	2.0123
Miami	1.5460	2.0144	3.5379	5.8611	6.1549	7.9076	7.0101	4.4905	6.3356	8.6381	10.2707	13.2421	15.1183	16.3125	16.9456	17.6044	17.2210	17.3956	18.2427
Milwaukee	1.1305	1.1788	1.2744	1.5680	2.1980	1.9706	1.9630	1.0584	1.3096	1.4813	1.6106	1.6252	1.8529	2.1116	2.1942	2.3995	2.4856	2.5600	2.6368
Minneapolis	1.7835	1.5537	2.0306	2.5958	3.0732	2.8520	2.4620	1.6582	2.0754	2.5017	2.6641	2.9460	3.2473	3.4907	3.5458	3.6516	3.6007	3.5106	3.5643
Nashville	1.4259	1.5998	1.8593	2.0918	2.9809	2.8012	2.3328	1.9386	2.0360	2.8389	3.5781	4.1523	4.6224	4.9729	4.9490	4.9864	4.8616	4.9509	4.9312
New Haven	2.1013	1.8023	1.8652	1.8673	1.9292	1.9107	1.7455	1.6438	1.5959	1.8877	2.0977	2.2321	2.3885	2.4982	2.3618	2.4326	2.4360	2.5478	2.6659
New Orleans	3.3147	2.9978	3.2610	3.8305	3.2490	1.9758	2.3695	2.0768	3.0847	3.3166	4.7340	6.0090	6.3160	6.6489	6.5522	6.4650	5.9659	5.8694	6.1169

### HOTEL VALUATION INDEX – 2002 THROUGH 2020 (CONTINUED)

					Histori	ical Estimate	es								Fored	ast			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
New York	2.7576	2.8000	5.1991	8.7234	10.6699	13.9260	12.7747	8.3999	8.9599	10.7284	12.8070	13.5863	14.4459	15.8265	16.8713	18.7735	18.9240	19.4916	20.3181
Norfolk	1.7487	2.0629	1.9213	1.7938	1.8007	1.7919	1.0346	0.9093	0.5904	0.5251	0.7483	0.7356	0.7964	0.8875	0.9290	1.0922	1.1452	1.2151	1.3247
Oahu	3.6999	4.3721	6.3628	9.3778	9.5419	9.0342	7.6088	6.6860	8.5551	9.4530	13.2782	16.1189	17.1608	18.3309	19.1783	20.1252	19.8774	20.4736	20.6978
Oakland	2.2382	1.5632	1.7687	2.1878	2.8230	2.9007	2.2877	1.3008	1.5770	2.4244	3.6072	4.2690	4.8979	5.1571	4.9267	4.9813	4.8109	4.8525	4.8933
Omaha	1.1679	1.2219	1.4546	1.7448	2.3730	2.1424	1.9968	1.5233	1.5558	1.4363	1.9641	2.1557	2.3840	2.6038	2.5378	2.5391	2.3584	2.3550	2.4638
Orlando	2.3385	2.1925	3.2609	3.3104	3.5325	3.1956	2.5626	1.5577	1.8323	2.3287	2.6896	3.1085	3.4889	3.8043	3.9158	4.0286	3.8616	3.8631	3.9225
Philadelphia	2.1770	1.9846	2.4119	2.8745	3.3496	3.2872	2.7577	2.0255	2.0285	2.6066	3.0243	3.2792	3.6999	3.9928	3.9509	4.1312	4.1937	4.4458	4.7104
Phoenix	1.7697	2.0370	2.8989	3.7663	4.7970	4.3143	3.0930	1.3574	1.4866	1.8555	1.8966	2.3325	2.6509	3.1593	3.0610	3.0325	2.9901	3.2010	3.2547
Pittsburgh	1.2663	1.2224	1.4940	1.6317	2.4658	2.3816	2.8709	2.5762	3.2549	3.7703	3.9066	4.3712	4.8379	5.0814	4.9743	5.1236	4.9868	4.9840	5.0824
Portland	1.4187	1.3458	1.6532	2.3276	3.1051	3.2765	3.2741	2.7362	3.0838	3.5226	4.3283	4.9877	5.5237	5.8766	5.6720	5.7301	5.5415	5.3802	5.3232
Raleigh-Durham	1.2955	1.2559	1.5096	1.6531	2.2843	2.3124	1.8901	1.2625	1.2549	1.5071	1.6272	1.9547	2.1095	2.2538	2.2759	2.3437	2.3106	2.3805	2.4086
Richmond	1.1671	1.5825	1.7454	1.9673	2.2810	2.3485	1.8265	1.0525	1.0278	1.2550	1.5270	1.9049	2.3133	2.6364	2.6431	2.7982	2.7237	2.8420	2.8890
Rochester	1.2095	1.4298	1.3069	1.4663	2.0514	2.1240	1.8348	1.5116	1.7134	1.6992	1.9268	2.0572	2.2148	2.2046	2.1485	2.1733	2.1804	2.2448	2.3126
Sacramento	1.8439	1.9403	2.1637	2.3553	2.7923	2.1727	1.5959	0.8400	0.8960	0.8825	1.1080	1.2904	1.4995	1.6246	1.5846	1.5501	1.4875	1.5746	1.6646
Salt Lake City	2.8814	1.8432	2.0199	2.6815	3.5609	3.5066	3.1631	2.5921	2.6353	2.9834	3.3811	3.8190	4.0625	4.3697	4.2599	4.3876	4.2317	4.3582	4.3899
San Antonio	2.7398	2.4866	2.6517	3.2242	3.9425	3.3972	3.3135	2.3018	2.4787	2.5950	2.9989	3.4423	3.6703	3.9751	3.9706	3.8911	3.6448	3.5619	3.4721
San Diego	4.0719	4.4613	4.8355	5.3440	6.4097	6.0611	5.4015	4.0381	4.1378	4.5845	5.5132	5.8860	6.3389	7.0484	7.1560	7.6705	7.7029	7.9996	8.5713
San Francisco	3.2995	2.9188	4.1427	5.7092	6.7052	8.0145	8.3875	6.4644	8.5616	10.8347	13.5529	15.8841	16.4950	16.9757	17.4554	18.3047	18.0743	18.7879	19.5285
San Jose	2.4253	1.2986	1.6046	2.4609	3.6863	3.9227	3.5222	2.0983	2.8252	3.8858	5.2934	6.0760	6.4517	6.9249	6.7506	6.9529	7.1333	7.2742	7.4182
Santa Fe	3.8353	3.5570	3.8487	4.2211	4.3883	3.9857	3.2980	3.1379	3.3047	3.0422	2.9757	3.1568	3.4714	3.8204	3.9673	4.2374	4.2312	4.3077	4.3316
Seattle	2.1808	2.2719	2.8142	3.5761	4.8896	4.8030	4.3706	3.3113	3.6745	4.3784	5.2224	5.8063	6.0931	6.1336	6.3004	6.3890	6.5720	6.7004	6.8289
St. Louis	1.4229	1.1987	1.3271	1.5566	1.7589	1.7726	1.4937	1.1520	1.2801	1.3967	1.7231	2.0258	2.1829	2.2479	2.1910	2.2570	2.2639	2.3309	2.3997
Stamford	2.4728	2.0689	2.3213	2.6477	3.0387	2.8986	2.0620	0.9830	1.4306	1.9248	2.2872	2.7374	3.1550	3.3569	3.2734	3.3719	3.4323	3.5920	3.7003
Syracuse	1.5794	1.5757	1.5429	1.7938	1.8204	1.8675	1.7106	1.9186	2.2532	2.2172	2.4350	2.6498	2.8974	2.9752	2.9401	3.0285	3.0604	3.1529	3.2678
Tallahassee	1.2054	1.4349	1.8750	2.0323	2.0585	1.3218	0.6862	0.3751	0.3783	0.4902	0.5953	0.6129	0.7010	0.7871	0.7360	0.7912	0.8124	0.8712	0.9672
Tampa	1.6092	1.6001	2.1829	2.6496	2.8730	2.3632	1.6517	0.8737	0.8090	1.4306	2.2609	2.9672	3.3844	3.8053	3.8633	4.0325	3.9750	4.0386	4.1005
Tucson	1.5389	1.5122	1.8361	2.6173	3.3271	3.0565	2.2500	0.9230	0.9834	0.8005	0.8378	0.6528	0.6785	0.8748	0.9397	1.1043	1.1873	1.3731	1.3727
United States	1.4326	1.4170	1.8135	2.2856	2.7713	2.6584	2.2627	1.5606	1.8264	2.1905	2.6297	2.9580	3.4137	3.7201	3.6928	3.8037	3.6524	3.7621	3.8211
Washington DC	3.9938	4.2750	5.6979	7.2479	6.7334	7.4009	6.8742	7.4037	7.1496	7.5175	6.7379	6.5615	6.4637	6.8462	7.1102	7.5259	7.4974	7.9276	8.2732
West Palm Beach	2.7140	3.3276	5.0361	6.4109	6.5305	5.3181	4.3164	2.4316	2.6566	3.6872	4.6709	5.4788	6.2038	6.7725	6.9066	7.2714	7.2504	7.5500	7.6870
Wilmington	1.5073	1.9116	1.9283	2.0508	2.5854	2.5133	1.7890	0.7914	0.9161	1.7408	1.8440	1.9822	2.1036	2.2112	2.1114	2.1752	2.1449	2.1644	2.2294
Winston-Salem	1.0356	1.1062	0.9729	1.2684	1.6474	1.7746	1.3309	0.7734	0.7632	0.9162	1.1665	1.3745	1.6154	1.7623	1.6556	1.6413	1.5401	1.5066	1.4708
WPB - Boca Raton	2.4491	2.8268	4.3637	5.2978	5.3844	4.0683	2.9528	1.2600	1.5400	2.2077	3.0714	4.0227	4.8383	5.1360	4.8590	4.8538	4.6371	4.7761	4.9205

### PER-ROOM VALUE BY MARKET (\$) – 2002 THROUGH 2020

					Histo	orical Estima	ites								Fore	cast			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Albuquerque	\$37,460	\$35,441	\$37,178	\$45,201	\$57,274	\$55,860	\$54,763	\$41,649	\$46,532	\$42,048	\$34,500	\$31,553	\$33,799	\$36,943	\$40,171	\$45,767	\$49,510	\$54,428	\$56,033
Anaheim	\$72,736	\$83,142	\$105,960	\$144,089	\$169,600	\$162,898	\$136,259	\$108,560	\$125,111	\$149,286	\$182,959	\$215,254	\$235,920	\$245,365	\$236,594	\$241,024	\$235,081	\$229,229	\$233,474
Atlanta	\$58,715	\$49,109	\$63,721	\$88,401	\$108,854	\$94,934	\$73,990	\$54,823	\$71,361	\$71,788	\$82,857	\$92,124	\$102,858	\$114,872	\$111,941	\$115,299	\$113,663	\$114,005	\$114,352
Austin	\$56,271	\$48,701	\$53,364	\$90,057	\$133,471	\$143,066	\$141,060	\$126,112	\$128,596	\$151,858	\$186,405	\$216,863	\$242,341	\$258,601	\$254,338	\$257,424	\$251,612	\$259,147	\$266,918
Baltimore	\$122,458	\$123,571	\$136,035	\$144,287	\$155,160	\$134,491	\$100,833	\$91,872	\$97,549	\$104,221	\$107,750	\$123,394	\$143,344	\$155,663	\$151,748	\$156,332	\$156,137	\$162,899	\$167,785
Boston	\$164,813	\$114,143	\$160,600	\$191,125	\$214,908	\$261,874	\$228,924	\$194,590	\$254,571	\$296,273	\$353,487	\$392,571	\$398,888	\$419,330	\$402,055	\$405,247	\$393,058	\$422,648	\$430,757
Buffalo	\$43,736	\$39,882	\$37,227	\$47,426	\$61,114	\$67,359	\$76,578	\$89,237	\$86,690	\$93,175	\$104,214	\$121,380	\$139,063	\$146,196	\$137,534	\$134,454	\$127,853	\$128,788	\$129,714
Charlotte	\$39,169	\$37,806	\$45,444	\$65,833	\$97,900	\$105,969	\$91,093	\$67,767	\$83,314	\$99,648	\$130,037	\$153,823	\$173,994	\$179,316	\$168,543	\$167,338	\$161,908	\$165,137	\$168,430
Chicago	\$89,600	\$91,542	\$99,508	\$138,785	\$197,568	\$211,126	\$167,827	\$89,701	\$124,713	\$151,546	\$203,573	\$218,534	\$230,074	\$246,409	\$258,630	\$273,129	\$268,214	\$266,106	\$270,624
Cincinnati	\$40,989	\$44,210	\$52,979	\$59,785	\$71,462	\$65,019	\$62,446	\$53,804	\$55,141	\$62,452	\$68,856	\$80,603	\$97,739	\$103,101	\$98,999	\$97,301	\$94,310	\$93,740	\$94,187
Cleveland	\$34,200	\$28,614	\$36,250	\$37,797	\$58,310	\$54,683	\$40,087	\$28,240	\$35,660	\$39,394	\$62,887	\$72,679	\$86,051	\$97,947	\$91,438	\$91,583	\$88,305	\$88,273	\$88,238
Columbia	\$44,263	\$43,914	\$59,560	\$75,277	\$83,111	\$77,865	\$72,367	\$59,388	\$51,368	\$61,832	\$70,367	\$79,090	\$90,517	\$95,753	\$95,772	\$98,652	\$94,773	\$98,912	\$101,891
Dallas	\$53,936	\$44,474	\$55,864	\$83,414	\$106,834	\$98,323	\$88,818	\$60,727	\$73,082	\$93,258	\$102,052	\$118,269	\$127,918	\$133,712	\$130,627	\$134,835	\$136,240	\$143,738	\$146,600
Dayton	\$34,123	\$39,210	\$35,516	\$37,764	\$42,820	\$32,356	\$25,200	\$24,999	\$28,664	\$37,278	\$43,224	\$46,406	\$50,208	\$52,713	\$50,469	\$50,002	\$47,327	\$46,685	\$48,030
Denver	\$59,051	\$51,378	\$61,740	\$86,617	\$123,018	\$132,355	\$129,637	\$108,338	\$132,564	\$144,861	\$162,605	\$169,032	\$184,862	\$201,679	\$192,769	\$198,552	\$195,767	\$203,663	\$209,894
Detroit	\$41,844	\$34,013	\$39,914	\$46,097	\$59,407	\$50,695	\$39,484	\$20,000	\$25,000	\$37,429	\$47,194	\$57,797	\$68,244	\$70,303	\$65,252	\$67,229	\$66,746	\$68,745	\$68,352
Fort Lauderdale	\$63,369	\$77,509	\$116,831	\$138,993	\$159,903	\$141,586	\$114,673	\$83,688	\$107,808	\$122,374	\$146,794	\$166,426	\$189,409	\$209,858	\$209,268	\$210,205	\$207,266	\$208,052	\$203,273
Hartford	\$66,949	\$51,920	\$68,619	\$64,073	\$64,011	\$59,315	\$45,736	\$25,241	\$34,054	\$58,648	\$56,295	\$66,367	\$74,931	\$81,872	\$76,793	\$76,049	\$78,017	\$80,335	\$81,115
Houston	\$61,360	\$44,788	\$52,910	\$87,511	\$104,116	\$106,952	\$127,859	\$85,522	\$69,921	\$90,656	\$127,711	\$152,173	\$164,938	\$171,508	\$163,644	\$163,214	\$154,016	\$155,170	\$156,269
Huntsville	\$35,336	\$37,180	\$42,260	\$53,402	\$57,292	\$65,409	\$57,777	\$49,636	\$62,397	\$61,066	\$53,988	\$61,207	\$72,059	\$79,288	\$77,309	\$74,630	\$73,587	\$77,090	\$80,751
Indianapolis	\$58,543	\$57,586	\$69,927	\$73,682	\$90,243	\$80,108	\$66,946	\$50,130	\$49,299	\$61,088	\$91,359	\$110,497	\$125,362	\$126,060	\$117,028	\$114,668	\$113,019	\$119,449	\$123,040
Jacksonville	\$71,345	\$85,016	\$97,680	\$119,409	\$120,928	\$105,904	\$76,159	\$45,508	\$50,388	\$52,196	\$67,194	\$77,896	\$89,632	\$101,136	\$110,324	\$123,372	\$124,730	\$128,457	\$134,152
Kansas City	\$46,903	\$36,704	\$46,339	\$53,730	\$67,211	\$63,548	\$53,591	\$38,998	\$43,087	\$47,891	\$56,943	\$62,371	\$70,013	\$80,235	\$80,805	\$77,715	\$68,637	\$68,041	\$64,594
Las Vegas	\$126,439	\$165,058	\$211,428	\$213,797	\$195,927	\$218,516	\$163,660	\$41,218	\$30,673	\$64,585	\$62,983	\$69,062	\$71,769	\$76,042	\$87,678	\$101,880	\$102,937	\$110,768	\$116,537
Long Island	\$145,650	\$138,782	\$134,608	\$155,702	\$147,434	\$144,494	\$121,867	\$94,770	\$97,495	\$114,852	\$146,824	\$169,711	\$191,450	\$197,192	\$192,237	\$192,737	\$184,931	\$193,118	\$198,908
Los Angeles	\$85,904	\$90,050	\$134,310	\$174,924	\$193,608	\$216,371	\$191,452	\$128,935	\$163,980	\$205,942	\$267,119	\$292,093	\$301,280	\$313,668	\$313,064	\$318,651	\$309,081	\$318,340	\$320,146
Memphis	\$36,543	\$34,652	\$43,483	\$59,688	\$77,061	\$73,285	\$52,537	\$42,103	\$41,213	\$41,150	\$56,055	\$66,962	\$74,708	\$77,098	\$72,740	\$74,899	\$73,879	\$73,555	\$71,869
Miami	\$55,216	\$71,944	\$126,355	\$209,327	\$219,820	\$282,417	\$250,362	\$160,377	\$226,272	\$308,505	\$366,814	\$472,935	\$539,944	\$582,594	\$605,204	\$628,732	\$615,039	\$621,275	\$651,529
Milwaukee	\$40,376	\$42,100	\$45,514	\$56,002	\$78,499	\$70,380	\$70,107	\$37,801	\$46,770	\$52,904	\$57,524	\$58,045	\$66,175	\$75,414	\$78,366	\$85,698	\$88,770	\$91,430	\$94,174
Minneapolis	\$63,698	\$55,489	\$72,522	\$92,708	\$109,759	\$101,859	\$87,931	\$59,222	\$74,122	\$89,349	\$95,146	\$105,215	\$115,976	\$124,670	\$126,636	\$130,415	\$128,596	\$125,379	\$127,299
Nashville	\$50,925	\$57,135	\$66,406	\$74,707	\$106,462	\$100,045	\$83,317	\$69,238	\$72,716	\$101,391	\$127,788	\$148,296	\$165,087	\$177,606	\$176,752	\$178,087	\$173,630	\$176,819	\$176,115
New Haven	\$75,046	\$64,370	\$66,616	\$66,690	\$68,901	\$68,240	\$62,339	\$58,706	\$56,997	\$67,417	\$74,917	\$79,717	\$85,306	\$89,223	\$84,351	\$86,880	\$87,001	\$90,993	\$95,210
New Orleans	\$118,381	\$107,063	\$116,465	\$136,805	\$116,036	\$70,567	\$84,627	\$74,170	\$110,170	\$118,452	\$169,071	\$214,607	\$225,573	\$237,464	\$234,009	\$230,895	\$213,068	\$209,622	\$218,462

### PER-ROOM VALUE BY MARKET (\$) – 2002 THROUGH 2020 (CONTINUED)

					Histo	rical Estima	ites								Fore	cast			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
New York	\$98,485	\$100,000	\$185,682	\$311,552	\$381,070	\$497,360	\$456,241	\$300,000	\$320,000	\$383,159	\$457,395	\$485,228	\$515,929	\$565,237	\$602,552	\$670,487	\$675,861	\$696,135	\$725,650
Norfolk	\$62,455	\$73,675	\$68,619	\$64,066	\$64,311	\$63,997	\$36,952	\$32,476	\$21,087	\$18,753	\$26,725	\$26,272	\$28,444	\$31,698	\$33,180	\$39,008	\$40,900	\$43,398	\$47,310
Oahu	\$132,141	\$156,147	\$227,244	\$334,923	\$340,785	\$322,652	\$271,743	\$238,787	\$305,542	\$337,611	\$474,224	\$575,678	\$612,889	\$654,679	\$684,946	\$718,761	\$709,912	\$731,204	\$739,213
Oakland	\$79,936	\$55,830	\$63,170	\$78,136	\$100,821	\$103,596	\$81,703	\$46,456	\$56,320	\$86,585	\$128,831	\$152,465	\$174,927	\$184,182	\$175,955	\$177,905	\$171,818	\$173,303	\$174,762
Omaha	\$41,711	\$43,640	\$51,951	\$62,314	\$84,750	\$76,516	\$71,315	\$54,403	\$55,565	\$51,296	\$70,148	\$76,990	\$85,142	\$92,994	\$90,637	\$90,683	\$84,229	\$84,108	\$87,992
Orlando	\$83,518	\$78,302	\$116,463	\$118,229	\$126,163	\$114,130	\$91,523	\$55,633	\$65,439	\$83,170	\$96,056	\$111,019	\$124,606	\$135,867	\$139,853	\$143,881	\$137,914	\$137,968	\$140,091
Philadelphia	\$77,749	\$70,880	\$86,138	\$102,660	\$119,628	\$117,399	\$98,489	\$72,340	\$72,446	\$93,094	\$108,011	\$117,115	\$132,141	\$142,603	\$141,106	\$147,543	\$149,776	\$158,781	\$168,230
Phoenix	\$63,205	\$72,751	\$103,534	\$134,512	\$171,324	\$154,085	\$110,467	\$48,478	\$53,092	\$66,269	\$67,737	\$83,303	\$94,677	\$112,833	\$109,322	\$108,304	\$106,789	\$114,321	\$116,241
Pittsburgh	\$45,227	\$43,656	\$53,359	\$58,277	\$88,064	\$85,058	\$102,532	\$92,007	\$116,247	\$134,655	\$139,521	\$156,116	\$172,785	\$181,481	\$177,654	\$182,989	\$178,101	\$178,002	\$181,515
Portland	\$50,669	\$48,066	\$59,044	\$83,129	\$110,896	\$117,020	\$116,935	\$97,721	\$110,138	\$125,808	\$154,583	\$178,134	\$197,277	\$209,881	\$202,573	\$204,648	\$197,913	\$192,152	\$190,116
Raleigh-Durham	\$46,269	\$44,854	\$53,914	\$59,038	\$81,582	\$82,585	\$67,505	\$45,090	\$44,819	\$53,824	\$58,116	\$69,812	\$75,339	\$80,494	\$81,284	\$83,705	\$82,520	\$85,018	\$86,022
Richmond	\$41,683	\$56,519	\$62,337	\$70,261	\$81,463	\$83,877	\$65,233	\$37,591	\$36,709	\$44,820	\$54,536	\$68,033	\$82,617	\$94,159	\$94,397	\$99,938	\$97,276	\$101,500	\$103,178
Rochester	\$43,198	\$51,063	\$46,675	\$52,367	\$73,266	\$75,858	\$65,528	\$53,985	\$61,195	\$60,685	\$68,815	\$73,471	\$79,102	\$78,735	\$76,734	\$77,618	\$77,872	\$80,173	\$82,595
Sacramento	\$65,854	\$69,297	\$77,276	\$84,120	\$99,727	\$77,595	\$56,998	\$30,000	\$32,000	\$31,518	\$39,570	\$46,085	\$53,555	\$58,021	\$56,593	\$55,361	\$53,126	\$56,236	\$59,451
Salt Lake City	\$102,907	\$65,830	\$72,139	\$95,770	\$127,176	\$125,238	\$112,968	\$92,575	\$94,117	\$106,549	\$120,753	\$136,394	\$145,089	\$156,063	\$152,141	\$156,701	\$151,132	\$155,650	\$156,782
San Antonio	\$97,849	\$88,807	\$94,704	\$115,151	\$140,806	\$121,330	\$118,340	\$82,207	\$88,527	\$92,680	\$107,105	\$122,940	\$131,083	\$141,970	\$141,807	\$138,968	\$130,171	\$127,211	\$124,004
San Diego	\$145,425	\$159,333	\$172,698	\$190,858	\$228,921	\$216,468	\$192,912	\$144,220	\$147,780	\$163,732	\$196,901	\$210,216	\$226,391	\$251,732	\$255,572	\$273,948	\$275,106	\$285,701	\$306,118
San Francisco	\$117,842	\$104,244	\$147,956	\$203,900	\$239,475	\$286,233	\$299,554	\$230,874	\$305,774	\$386,955	\$484,034	\$567,292	\$589,109	\$606,280	\$623,413	\$653,744	\$645,516	\$671,002	\$697,453
San Jose	\$86,619	\$46,378	\$57,308	\$87,888	\$131,654	\$140,096	\$125,795	\$74,939	\$100,899	\$138,778	\$189,051	\$217,001	\$230,420	\$247,319	\$241,095	\$248,319	\$254,762	\$259,795	\$264,939
Santa Fe	\$136,975	\$127,036	\$137,454	\$150,754	\$156,726	\$142,347	\$117,788	\$112,067	\$118,027	\$108,652	\$106,277	\$112,744	\$123,978	\$136,445	\$141,691	\$151,336	\$151,116	\$153,847	\$154,700
Seattle	\$77,886	\$81,138	\$100,509	\$127,720	\$174,629	\$171,537	\$156,094	\$118,263	\$131,232	\$156,372	\$186,516	\$207,370	\$217,611	\$219,058	\$225,015	\$228,179	\$234,715	\$239,301	\$243,890
St. Louis	\$50,818	\$42,811	\$47,398	\$55,594	\$62,820	\$63,308	\$53,348	\$41,143	\$45,719	\$49,883	\$61,541	\$72,351	\$77,962	\$80,284	\$78,250	\$80,609	\$80,855	\$83,245	\$85,703
Stamford	\$88,314	\$73,889	\$82,904	\$94,563	\$108,525	\$103,521	\$73,642	\$35,108	\$51,092	\$68,742	\$81,687	\$97,765	\$112,680	\$119,891	\$116,908	\$120,427	\$122,581	\$128,286	\$132,153
Syracuse	\$56,408	\$56,276	\$55,104	\$64,066	\$65,016	\$66,695	\$61,095	\$68,522	\$80,471	\$79,188	\$86,965	\$94,635	\$103,480	\$106,259	\$105,003	\$108,161	\$109,301	\$112,603	\$116,708
Tallahassee	\$43,052	\$51,246	\$66,964	\$72,583	\$73,520	\$47,208	\$24,507	\$13,396	\$13,512	\$17,506	\$21,262	\$21,889	\$25,035	\$28,109	\$26,287	\$28,256	\$29,013	\$31,113	\$34,543
Tampa	\$57,471	\$57,145	\$77,961	\$94,631	\$102,607	\$84,400	\$58,988	\$31,204	\$28,893	\$51,093	\$80,748	\$105,971	\$120,872	\$135,905	\$137,977	\$144,019	\$141,966	\$144,235	\$146,449
Tucson	\$54,961	\$54,008	\$65,577	\$93,477	\$118,826	\$109,162	\$80,357	\$32,965	\$35,120	\$28,589	\$29,921	\$23,314	\$24,234	\$31,241	\$33,559	\$39,438	\$42,402	\$49,041	\$49,025
United States	\$51,165	\$50,606	\$64,767	\$81,628	\$98,976	\$94,944	\$80,811	\$55,736	\$65,228	\$78,231	\$93,919	\$105,645	\$121,920	\$132,861	\$131,885	\$135,847	\$130,445	\$134,360	\$136,470
Washington DC	\$142,638	\$152,680	\$203,498	\$258,856	\$240,480	\$264,320	\$245,507	\$264,419	\$255,343	\$268,485	\$240,642	\$234,341	\$230,846	\$244,507	\$253,937	\$268,785	\$267,768	\$283,129	\$295,474
West Palm Beach	\$96,929	\$118,843	\$179,862	\$228,963	\$233,233	\$189,934	\$154,159	\$86,842	\$94,880	\$131,687	\$166,820	\$195,674	\$221,566	\$241,877	\$246,666	\$259,694	\$258,944	\$269,644	\$274,538
Wilmington	\$53,833	\$68,273	\$68,870	\$73,244	\$92,338	\$89,761	\$63,893	\$28,263	\$32,719	\$62,173	\$65,858	\$70,795	\$75,129	\$78,972	\$75,407	\$77,688	\$76,603	\$77,300	\$79,622
Winston-Salem	\$36,986	\$39,507	\$34,748	\$45,299	\$58,838	\$63,378	\$47,533	\$27,621	\$27,259	\$32,721	\$41,661	\$49,088	\$57,694	\$62,941	\$59,129	\$58,619	\$55,002	\$53,807	\$52,527
WPB - Boca Raton	\$87,469	\$100,957	\$155,846	\$189,210	\$192,300	\$145,299	\$105,458	\$45,000	\$55,000	\$78,848	\$109,694	\$143,670	\$172,796	\$183,429	\$173,538	\$173,351	\$165,613	\$170,577	\$175,735

### **ANNUAL PERCENTAGE CHANGES IN PER-ROOM VALUE- 2002 THROUGH 2020**

					Histor	ical Estimat	es								Foreca	st			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Albuquerque	7.7%	-5.4%	4.9%	21.6%	26.7%	-2.5%	-2.0%	-23.9%	11.7%	-9.6%	-18.0%	-8.5%	7.1%	9.3%	8.7%	13.9%	8.2%	9.9%	2.9%
Anaheim	-12.2%	14.3%	27.4%	36.0%	17.7%	-4.0%	-16.4%	-20.3%	15.2%	19.3%	22.6%	17.7%	9.6%	4.0%	-3.6%	1.9%	-2.5%	-2.5%	1.9%
Atlanta	-6.7%	-16.4%	29.8%	38.7%	23.1%	-12.8%	-22.1%	-25.9%	30.2%	0.6%	15.4%	11.2%	11.7%	11.7%	-2.6%	3.0%	-1.4%	0.3%	0.3%
Austin	-21.6%	-13.5%	9.6%	68.8%	48.2%	7.2%	-1.4%	-10.6%	2.0%	18.1%	22.7%	16.3%	11.7%	6.7%	-1.6%	1.2%	-2.3%	3.0%	3.0%
Baltimore	15.0%	0.9%	10.1%	6.1%	7.5%	-13.3%	-25.0%	-8.9%	6.2%	6.8%	3.4%	14.5%	16.2%	8.6%	-2.5%	3.0%	-0.1%	4.3%	3.0%
Boston	-14.5%	-30.7%	40.7%	19.0%	12.4%	21.9%	-12.6%	-15.0%	30.8%	16.4%	19.3%	11.1%	1.6%	5.1%	-4.1%	0.8%	-3.0%	7.5%	1.9%
Buffalo	4.6%	-8.8%	-6.7%	27.4%	28.9%	10.2%	13.7%	16.5%	-2.9%	7.5%	11.8%	16.5%	14.6%	5.1%	-5.9%	-2.2%	-4.9%	0.7%	0.7%
Charlotte	6.9%	-3.5%	20.2%	44.9%	48.7%	8.2%	-14.0%	-25.6%	22.9%	19.6%	30.5%	18.3%	13.1%	3.1%	-6.0%	-0.7%	-3.2%	2.0%	2.0%
Chicago	-7.8%	2.2%	8.7%	39.5%	42.4%	6.9%	-20.5%	-46.6%	39.0%	21.5%	34.3%	7.3%	5.3%	7.1%	5.0%	5.6%	-1.8%	-0.8%	1.7%
Cincinnati	14.6%	7.9%	19.8%	12.8%	19.5%	-9.0%	-4.0%	-13.8%	2.5%	13.3%	10.3%	17.1%	21.3%	5.5%	-4.0%	-1.7%	-3.1%	-0.6%	0.5%
Cleveland	-10.9%	-16.3%	26.7%	4.3%	54.3%	-6.2%	-26.7%	-29.6%	26.3%	10.5%	59.6%	15.6%	18.4%	13.8%	-6.6%	0.2%	-3.6%	0.0%	0.0%
Columbia	22.9%	-0.8%	35.6%	26.4%	10.4%	-6.3%	-7.1%	-17.9%	-13.5%	20.4%	13.8%	12.4%	14.4%	5.8%	0.0%	3.0%	-3.9%	4.4%	3.0%
Dallas	-7.1%	-17.5%	25.6%	49.3%	28.1%	-8.0%	-9.7%	-31.6%	20.3%	27.6%	9.4%	15.9%	8.2%	4.5%	-2.3%	3.2%	1.0%	5.5%	2.0%
Dayton	12.4%	14.9%	-9.4%	6.3%	13.4%	-24.4%	-22.1%	-0.8%	14.7%	30.1%	16.0%	7.4%	8.2%	5.0%	-4.3%	-0.9%	-5.3%	-1.4%	2.9%
Denver	-10.4%	-13.0%	20.2%	40.3%	42.0%	7.6%	-2.1%	-16.4%	22.4%	9.3%	12.2%	4.0%	9.4%	9.1%	-4.4%	3.0%	-1.4%	4.0%	3.1%
Detroit	-21.2%	-18.7%	17.3%	15.5%	28.9%	-14.7%	-22.1%	-49.3%	25.0%	49.7%	26.1%	22.5%	18.1%	3.0%	-7.2%	3.0%	-0.7%	3.0%	-0.6%
Fort Lauderdale	-11.8%	22.3%	50.7%	19.0%	15.0%	-11.5%	-19.0%	-27.0%	28.8%	13.5%	20.0%	13.4%	13.8%	10.8%	-0.3%	0.4%	-1.4%	0.4%	-2.3%
Hartford	-9.7%	-22.4%	32.2%	-6.6%	-0.1%	-7.3%	-22.9%	-44.8%	34.9%	72.2%	-4.0%	17.9%	12.9%	9.3%	-6.2%	-1.0%	2.6%	3.0%	1.0%
Houston	-8.5%	-27.0%	18.1%	65.4%	19.0%	2.7%	19.5%	-33.1%	-18.2%	29.7%	40.9%	19.2%	8.4%	4.0%	-4.6%	-0.3%	-5.6%	0.7%	0.7%
Huntsville	49.1%	5.2%	13.7%	26.4%	7.3%	14.2%	-11.7%	-14.1%	25.7%	-2.1%	-11.6%	13.4%	17.7%	10.0%	-2.5%	-3.5%	-1.4%	4.8%	4.7%
Indianapolis	2.8%	-1.6%	21.4%	5.4%	22.5%	-11.2%	-16.4%	-25.1%	-1.7%	23.9%	49.6%	20.9%	13.5%	0.6%	-7.2%	-2.0%	-1.4%	5.7%	3.0%
Jacksonville	16.3%	19.2%	14.9%	22.2%	1.3%	-12.4%	-28.1%	-40.2%	10.7%	3.6%	28.7%	15.9%	15.1%	12.8%	9.1%	11.8%	1.1%	3.0%	4.4%
Kansas City	-1.0%	-21.7%	26.3%	15.9%	25.1%	-5.4%	-15.7%	-27.2%	10.5%	11.2%	18.9%	9.5%	12.3%	14.6%	0.7%	-3.8%	-11.7%	-0.9%	-5.1%
Las Vegas	6.4%	30.5%	28.1%	1.1%	-8.4%	11.5%	-25.1%	-74.8%	-25.6%	110.6%	-2.5%	9.7%	3.9%	6.0%	15.3%	16.2%	1.0%	7.6%	5.2%
Long Island	-11.9%	-4.7%	-3.0%	15.7%	-5.3%	-2.0%	-15.7%	-22.2%	2.9%	17.8%	27.8%	15.6%	12.8%	3.0%	-2.5%	0.3%	-4.1%	4.4%	3.0%
Los Angeles	-4.0%	4.8%	49.2%	30.2%	10.7%	11.8%	-11.5%	-32.7%	27.2%	25.6%	29.7%	9.3%	3.1%	4.1%	-0.2%	1.8%	-3.0%	3.0%	0.6%
Memphis	11.7%	-5.2%	25.5%	37.3%	29.1%	-4.9%	-28.3%	-19.9%	-2.1%	-0.2%	36.2%	19.5%	11.6%	3.2%	-5.7%	3.0%	-1.4%	-0.4%	-2.3%
Miami	-27.9%	30.3%	75.6%	65.7%	5.0%	28.5%	-11.4%	-35.9%	41.1%	36.3%	18.9%	28.9%	14.2%	7.9%	3.9%	3.9%	-2.2%	1.0%	4.9%
Milwaukee	14.7%	4.3%	8.1%	23.0%	40.2%	-10.3%	-0.4%	-46.1%	23.7%	13.1%	8.7%	0.9%	14.0%	14.0%	3.9%	9.4%	3.6%	3.0%	3.0%
Minneapolis	-4.4%	-12.9%	30.7%	27.8%	18.4%	-7.2%	-13.7%	-32.6%	25.2%	20.5%	6.5%	10.6%	10.2%	7.5%	1.6%	3.0%	-1.4%	-2.5%	1.5%
Nashville	13.4%	12.2%	16.2%	12.5%	42.5%	-6.0%	-16.7%	-16.9%	5.0%	39.4%	26.0%	16.0%	11.3%	7.6%	-0.5%	0.8%	-2.5%	1.8%	-0.4%
New Haven	1.8%	-14.2%	3.5%	0.1%	3.3%	-1.0%	-8.6%	-5.8%	-2.9%	18.3%	11.1%	6.4%	7.0%	4.6%	-5.5%	3.0%	0.1%	4.6%	4.6%
New Orleans	-3.7%	-9.6%	8.8%	17.5%	-15.2%	-39.2%	19.9%	-12.4%	48.5%	7.5%	42.7%	26.9%	5.1%	5.3%	-1.5%	-1.3%	-7.7%	-1.6%	4.2%

### ANNUAL PERCENTAGE CHANGES IN PER-ROOM VALUE- 2002 THROUGH 2020 (CONTINUED)

					Histor	ical Estimat	es								Foreca	ist			
Market	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
New York	-25.7%	1.5%	85.7%	67.8%	22.3%	30.5%	-8.3%	-34.2%	6.7%	19.7%	19.4%	6.1%	6.3%	9.6%	6.6%	11.3%	0.8%	3.0%	4.2%
Norfolk	48.4%	18.0%	-6.9%	-6.6%	0.4%	-0.5%	-42.3%	-12.1%	-35.1%	-11.1%	42.5%	-1.7%	8.3%	11.4%	4.7%	17.6%	4.8%	6.1%	9.0%
Oahu	5.9%	18.2%	45.5%	47.4%	1.8%	-5.3%	-15.8%	-12.1%	28.0%	10.5%	40.5%	21.4%	6.5%	6.8%	4.6%	4.9%	-1.2%	3.0%	1.1%
Oakland	-31.1%	-30.2%	13.1%	23.7%	29.0%	2.8%	-21.1%	-43.1%	21.2%	53.7%	48.8%	18.3%	14.7%	5.3%	-4.5%	1.1%	-3.4%	0.9%	0.8%
Omaha	6.9%	4.6%	19.0%	19.9%	36.0%	-9.7%	-6.8%	-23.7%	2.1%	-7.7%	36.8%	9.8%	10.6%	9.2%	-2.5%	0.1%	-7.1%	-0.1%	4.6%
Orlando	4.3%	-6.2%	48.7%	1.5%	6.7%	-9.5%	-19.8%	-39.2%	17.6%	27.1%	15.5%	15.6%	12.2%	9.0%	2.9%	2.9%	-4.1%	0.0%	1.5%
Philadelphia	24.6%	-8.8%	21.5%	19.2%	16.5%	-1.9%	-16.1%	-26.5%	0.1%	28.5%	16.0%	8.4%	12.8%	7.9%	-1.0%	4.6%	1.5%	6.0%	6.0%
Phoenix	-10.7%	15.1%	42.3%	29.9%	27.4%	-10.1%	-28.3%	-56.1%	9.5%	24.8%	2.2%	23.0%	13.7%	19.2%	-3.1%	-0.9%	-1.4%	7.1%	1.7%
Pittsburgh	5.1%	-3.5%	22.2%	9.2%	51.1%	-3.4%	20.5%	-10.3%	26.3%	15.8%	3.6%	11.9%	10.7%	5.0%	-2.1%	3.0%	-2.7%	-0.1%	2.0%
Portland	0.3%	-5.1%	22.8%	40.8%	33.4%	5.5%	-0.1%	-16.4%	12.7%	14.2%	22.9%	15.2%	10.7%	6.4%	-3.5%	1.0%	-3.3%	-2.9%	-1.1%
Raleigh-Durham	-3.3%	-3.1%	20.2%	9.5%	38.2%	1.2%	-18.3%	-33.2%	-0.6%	20.1%	8.0%	20.1%	7.9%	6.8%	1.0%	3.0%	-1.4%	3.0%	1.2%
Richmond	2.5%	35.6%	10.3%	12.7%	15.9%	3.0%	-22.2%	-42.4%	-2.3%	22.1%	21.7%	24.7%	21.4%	14.0%	0.3%	5.9%	-2.7%	4.3%	1.7%
Rochester	10.6%	18.2%	-8.6%	12.2%	39.9%	3.5%	-13.6%	-17.6%	13.4%	-0.8%	13.4%	6.8%	7.7%	-0.5%	-2.5%	1.2%	0.3%	3.0%	3.0%
Sacramento	3.6%	5.2%	11.5%	8.9%	18.6%	-22.2%	-26.5%	-47.4%	6.7%	-1.5%	25.5%	16.5%	16.2%	8.3%	-2.5%	-2.2%	-4.0%	5.9%	5.7%
Salt Lake City	64.2%	-36.0%	9.6%	32.8%	32.8%	-1.5%	-9.8%	-18.1%	1.7%	13.2%	13.3%	13.0%	6.4%	7.6%	-2.5%	3.0%	-3.6%	3.0%	0.7%
San Antonio	21.0%	-9.2%	6.6%	21.6%	22.3%	-13.8%	-2.5%	-30.5%	7.7%	4.7%	15.6%	14.8%	6.6%	8.3%	-0.1%	-2.0%	-6.3%	-2.3%	-2.5%
San Diego	4.3%	9.6%	8.4%	10.5%	19.9%	-5.4%	-10.9%	-25.2%	2.5%	10.8%	20.3%	6.8%	7.7%	11.2%	1.5%	7.2%	0.4%	3.9%	7.1%
San Francisco	-37.6%	-11.5%	41.9%	37.8%	17.4%	19.5%	4.7%	-22.9%	32.4%	26.5%	25.1%	17.2%	3.8%	2.9%	2.8%	4.9%	-1.3%	3.9%	3.9%
San Jose	-40.5%	-46.5%	23.6%	53.4%	49.8%	6.4%	-10.2%	-40.4%	34.6%	37.5%	36.2%	14.8%	6.2%	7.3%	-2.5%	3.0%	2.6%	2.0%	2.0%
Santa Fe	19.6%	-7.3%	8.2%	9.7%	4.0%	-9.2%	-17.3%	-4.9%	5.3%	-7.9%	-2.2%	6.1%	10.0%	10.1%	3.8%	6.8%	-0.1%	1.8%	0.6%
Seattle	-9.9%	4.2%	23.9%	27.1%	36.7%	-1.8%	-9.0%	-24.2%	11.0%	19.2%	19.3%	11.2%	4.9%	0.7%	2.7%	1.4%	2.9%	2.0%	1.9%
St. Louis	14.8%	-15.8%	10.7%	17.3%	13.0%	0.8%	-15.7%	-22.9%	11.1%	9.1%	23.4%	17.6%	7.8%	3.0%	-2.5%	3.0%	0.3%	3.0%	3.0%
Stamford	-16.1%	-16.3%	12.2%	14.1%	14.8%	-4.6%	-28.9%	-52.3%	45.5%	34.5%	18.8%	19.7%	15.3%	6.4%	-2.5%	3.0%	1.8%	4.7%	3.0%
Syracuse	33.9%	-0.2%	-2.1%	16.3%	1.5%	2.6%	-8.4%	12.2%	17.4%	-1.6%	9.8%	8.8%	9.3%	2.7%	-1.2%	3.0%	1.1%	3.0%	3.6%
Tallahassee	20.7%	19.0%	30.7%	8.4%	1.3%	-35.8%	-48.1%	-45.3%	0.9%	29.6%	21.5%	2.9%	14.4%	12.3%	-6.5%	7.5%	2.7%	7.2%	11.0%
Tampa	-14.7%	-0.6%	36.4%	21.4%	8.4%	-17.7%	-30.1%	-47.1%	-7.4%	76.8%	58.0%	31.2%	14.1%	12.4%	1.5%	4.4%	-1.4%	1.6%	1.5%
Tucson	-9.4%	-1.7%	21.4%	42.5%	27.1%	-8.1%	-26.4%	-59.0%	6.5%	-18.6%	4.7%	-22.1%	3.9%	28.9%	7.4%	17.5%	7.5%	15.7%	0.0%
United States	0.0%	-1.1%	28.0%	26.0%	21.3%	-4.1%	-14.9%	-31.0%	17.0%	19.9%	20.1%	12.5%	15.4%	9.0%	-0.7%	3.0%	-4.0%	3.0%	1.6%
Washington DC	7.9%	7.0%	33.3%	27.2%	-7.1%	9.9%	-7.1%	7.7%	-3.4%	5.1%	-10.4%	-2.6%	-1.5%	5.9%	3.9%	5.8%	-0.4%	5.7%	4.4%
West Palm Beach	-1.8%	22.6%	51.3%	27.3%	1.9%	-18.6%	-18.8%	-43.7%	9.3%	38.8%	26.7%	17.3%	13.2%	9.2%	2.0%	5.3%	-0.3%	4.1%	1.8%
Wilmington	-0.6%	26.8%	0.9%	6.4%	26.1%	-2.8%	-28.8%	-55.8%	15.8%	90.0%	5.9%	7.5%	6.1%	5.1%	-4.5%	3.0%	-1.4%	0.9%	3.0%
Winston-Salem	4.4%	6.8%	-12.0%	30.4%	29.9%	7.7%	-25.0%	-41.9%	-1.3%	20.0%	27.3%	17.8%	17.5%	9.1%	-6.1%	-0.9%	-6.2%	-2.2%	-2.4%
WPB - Boca Raton	0.9%	15.4%	54.4%	21.4%	1.6%	-24.4%	-27.4%	-57.3%	22.2%	43.4%	39.1%	31.0%	20.3%	6.2%	-5.4%	-0.1%	-4.5%	3.0%	3.0%

# **Volatility Index**

Investing in hotels is an exercise in balancing risks with rewards. An attractive hotel acquisition would offer low risk coupled with high returns. Hotels are subject to varied risks that impact the certainty of achieving specific levels of return. Examples of hotel investment risks include the potential for overbuilding (e.g., excessive hotel supply), a decline in demand (e.g., employer closure, recession), incompetent management, functional and external obsolescence, poor brand recognition, over-leverage, and natural or man-made disasters (e.g., volcanic ash in the atmosphere, oil spills). Each one of these risks translates into either lower than anticipated revenues and/or higher operating expenses, which affect bottom-line profit (return). With so many different types of risks, quantifying the overall risk of a hotel investment is difficult.

The Volatility Index is an analysis of the historical and projected rates of per-room value changes for an individual market. For the purposes of this analysis, we have utilized the data period of 1988 through 2012. Hotel value volatility is measured by calculating the standard deviation of the annual change in value, year-overyear. This result is then indexed to the volatility of a typical hotel in the United States. The Volatility Index shows the percentage relationship of the value volatility of a specific market to the value volatility of the United States. For example, Detroit has a Volatility Index of 88%, which means that hotel values are 88% more volatile than the value of a typical hotel in the United States.

The following two tables exhibit the index of volatility, including the top ten most volatile and ten least volatile markets based on historical changes in value between 1988 and 2012.

### **GATEWAY CITIES ARE THE MOST VOLATILE**

Rank		
1	WPB - Boca Raton	194%
2	New York	188%
3	Miami	127%
4	Las Vegas	125%
5	Wilmington	116%
6	Los Angeles	103%
7	San Jose	98%
8	Hartford	97%
9	Detroit	88%
10	Oakland	76%

Source: HVS

### SECONDARY CITIES ARE THE LEAST VOLATILE

<u>Rank</u>			
66	Cincinnati	-26%	
65	Syracuse	-23%	
64	Buffalo	-20%	
63	Santa Fe	-16%	
62	Albuquerque	-15%	
61	St. Louis	-13%	
60	Washington DC	-3%	
59	Pittsburgh	-3%	
58	Seattle	-1%	
57	United States	0%	
	Source: HVS		

As illustrated above, West Palm Beach/Boca Raton represents the most volatile market at 194%, while Seattle and Pittsburgh are the least volatile, at -1% and - 3%. We note that Seattle and Pittsburgh are forecast to exhibit a recovery through

2016 at a rate significantly lower than U.S. national average, while West Palm Beach/Boca Raton is forecast to exceed the U.S. average.

The following table illustrates the relationship between the top five most volatile markets, the historical change in value from 1987 through 2012, and the projected change in value through 2016, as well as the comparison to the U.S. average.

	Valatility	Historical Value Change	Drainstad Value Change		
	volatility	Historical value change	Projected value Change		
Market	(1988-2012)	(1987-2012)	(2012-2016)		
WPB - Boca Raton	194%	4.1%	58.2%		
New York	188%	9.5%	31.7%		
Miami	127%	11.4%	65.0%		
Las Vegas	125%	2.4%	39.2%		
Wilmington	116%	-0.1%	14.5%		
	00/	2.00/	40.40/		
United States	0%	3.9%	40.4%		
Source: HVS					

#### "HIGHER RISK HIGHER RETURNS?"

During the historical period reviewed, the per-room value of Las Vegas and Wilmington remained fairly stable: Las Vegas per-room value only increased slightly and Wilmington's per-room value decreased minimally. As previously mentioned, extremely volatile markets usually experience strong declines in RevPAR during recession years, which are followed by even stronger increases during recovery years; the most recent recession is anticipated to be no exception. The per-room value of Las Vegas is anticipated to increase on par with the U.S. average (40.0%), whereas Wilmington is expected to increase at a lower rate (15%). The data indicate that there is no distinct relationship between risk and return, and would as such suggest that investors require a deep understanding of market dynamics in order to sell or buy assets at the right time to yield high returns.

As previously discussed, Miami and WPB-Boca Raton were fairly quick to recover from the latest economic recession and therefore have increased most in value during the historical period reviewed. However, increases in both domestic and international visitation, well surpassing New York City and Las Vegas levels, and increased corporate travelers, are expected to boost occupancy and average rate further. Therefore, Miami and WPB-Boca Raton per-room values are expected to increase through 2016 by 65% and 58%, respectively, which is well above the U.S. average. The data again indicate that there is a potential for high returns, but



would also suggest that investors must comprehend the dynamics and timing of the market in order to yield these higher returns.

Historically, New York has always been a strong market and is therefore an exception. New York's per-room values increased during the historical period reviewed; however, due to the strong increase in the last couple of years, values are forecast to increase below the U.S. average by 2016.

Although hotel value volatility is not the only measure of investment risk and the projected change in value is not the only measure of investment return, they are both important factors to consider when making a hotel investment, particularly in today's uncertain market.



### **Final Recommendations**

Based upon our discussions with hotel investors, lenders, and brokers, as well as recent trends of occupancy, average rate and RevPAR, we anticipate a continued recovery of NOI. Many hotels have or are expected to reach prior peak occupancy levels in the near term. Room rates for hotels increased by over 4.0% in 2012, resulting in industry-wide RevPAR growth of roundly 7.0%. Limited new supply is expected to boost RevPAR growth further. As highlighted in this report, U.S. hotel values peaked in 2006 at \$100,000 per room. The low point during the recent downturn occurred in 2009, with values dropping to \$56,000 per room. We project that U.S. hotel value growth will persist through 2016, surpassing 2006 values by the end of 2013. Supply is expected to increase in the later years and value growth is anticipated to slow down by 2016. Based upon our findings, we recommend that investors who are looking to sell their properties within the next six years, sell properties in Boston, and Washington, D.C. this year, whereas we suggest investors to sell properties in New Orleans, Atlanta, Chicago, Philadelphia, and Cleveland in 2014.

# HVS

### Interpreting the Hotel Valuation Index

HVS routinely receives numerous inquiries as to how the Hotel Valuation Index data can be interpreted by hotel owners, investors, and lenders considering their own assets and investment strategies. The HVI tracks hotel values in the U.S. as a whole, as well as for 66 major lodging markets. It is calculated using occupancy and average rate data provided by Smith Travel Research (STR) for each of the markets reviewed. These market data represent the aggregate performance of virtually all the hotels within the defined geographic market.

The HVI is an index, a statistical concept reflecting a measure of the difference in the magnitude of a group of related variables compared with a base period. As such, it is a measure of broad market trends, rather than a conclusion as to the specific value of any asset, and cannot be applied to an individual asset. A good comparison is the Consumer Price Index. While this index provides a reliable measure of the overall rate of inflation in a region, it does not indicate how the price of milk has changed at one grocery store.

In any market, the aggregate nature of the STR occupancy and average rate data limits its comparability to an individual asset. In the case of the STR data used in developing the HVI, the breadth of the sample included in the report is a material factor. The sample for each market area includes virtually all the hotels in the defined market, ranging from economy to luxury properties; limited-service to full-service operations; assets in poor to excellent condition; and a wide array of locations, from Tier 1 urban settings to peripheral locations in tertiary submarkets. The resulting data, while an excellent measure of the overall trends in the market as a whole, cannot be applied to any individual submarket or asset group, much less any one hotel. For example, the addition of new supply, or a change in the performance of an individual submarket within the broader market, can cause that submarket to have significantly different results than the market as a whole.

Numerous factors influence the value of an individual asset, including the property's age, condition, location, amenities and services, brand, management expertise, and reputation. These factors must all be considered in the context of the hotel's specific competitive market, including the nature, strength, and trends in demand generators, the character and competitive posture of the existing hotels, and the potential addition of any new properties. The value of any individual asset can only be concluded after a thorough investigation of all these factors. That conclusion will invariably differ, often materially, from the index indicated by the HVI.

Change to "How, then, can the HVI be of use to an individual investor?" Although the HVI cannot tell you what a particular hotel is worth, it does provide excellent "big picture" data, indicating



which market areas are experiencing positive trends, and thus may present good investment opportunities. The HVI for the U.S. is a measure of the strength of the lodging industry as a whole and, specifically, the hospitality investment market. The HVI for the various identified markets can provide a basis to evaluate and compare different geographic regions.

# HVS

### **ABOUT THE AUTHORS**



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In 2000, Stephen founded Roadfood.com, a web site dedicated to finding the most memorable local eateries along the highways and back roads of America. The awardwinning site has been recognized by Forbes Magazine as the best restaurant guide on the Internet, and Yahoo! awarded it the very prestigious "Web Site of the Year." Over a half million visitors access the site on a monthly basis.

Stephen is member of the Young Presidents Organization (YPO) and is on the Advisory Board for the Appalachian Mountain Club (AMC), the nation's oldest outdoor recreation and conservation organization.

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