

Lodging - US RevPAR +0.9% Y/Y Last Week; Clean comp; Easter comp in rear view

Back to the new norm of low-single digit RevPAR growth (at best)

What's Incremental To Our View

Overall U.S. RevPAR was +0.9% Y/Y for the week ending 5/11/2019, per STR, softer than the prior week's result of +3.6%. (2-year stacked RevPAR was +5.4% vs +7.2% in the prior week.) Independent hotels (about 1/3rd of the data set) were +1.4% y/y. Luxury (+2.6%) was the strongest chain scale for branded hotels; Midscale was the weakest at -1.8%. Upper Midscale (+0.3%) also underperformed the industry average. Within Upper Upscale & Luxury class hotels, Group (+6.0% vs. +8.1% prior week) was stronger than Transient (-1.7% vs. +2.4% prior week).

Last week was a relatively clean comp. With the Easter comp weeks in the rear view window, last week's RevPAR results presented a return to a more "new normal" trend of very low-single digit growth (at best). There may have been a modest Ramadan calendar shift given that Ramadan began in the evening of Sunday, May 5th this year vs. Tuesday, May 15th last year.

• With limited supply growth, Luxury RevPAR was a clear outperformer among the chain scales last week.

Due to the hurricane comparisons from the 2017 storms, we anticipate continued choppiness of the data in some of the most impacted major markets (especially Houston). We believe comps are starting to become "less hard" as evidenced by the Houston trends in particular over the last few weeks, although Houston is still facing tough supply growth headwinds.

Last week's RevPAR details:

- Luxury was the strongest chain scale. Upscale and Upper Midscale underperformed by 260 bps and 230 bps, respectively: Luxury RevPAR (+2.6%), Upper Upscale (+0.5%), Upscale (+0.0%), Upper Midscale (+0.3%), Midscale (-1.8%), and Economy (-0.7%). Independent hotels (+1.4%) outperformed headline U.S. RevPAR.
- Within Upper Upscale & Luxury class hotels, Group was stronger than Transient: Transient segment (individual business and leisure travelers) RevPAR was -1.7% (vs. +2.4% last week) and Group segment RevPAR was +6.0% (vs. +8.1% last week).
- Boston (+5.2%) was the strongest of the top five markets: Chicago (-6.8%), LA (+1.3%), NYC (-9.6%), and DC (+2.2%).

C. Patrick Scholes 212-319-3915 patrick.scholes@suntrust.com

Gregory J. Miller 212-303-4198 gregory.j.miller@suntrust.com

Brian Hollenden, CFA 212-303-1742 brian.hollenden@suntrust.com

Kevin Robinson 617-345-6544 kevin.robinson@suntrust.com

What's Inside

Weekly STR results and analysis



- Other relevant markets:
 - San Francisco was slightly down (Moscone Convention Center expansion and renovation completed): RevPAR was -1.3% vs. +1.9% last week.
 - Texas results were mixed (y/y hurricane comps in Houston): Dallas RevPAR was -2.5% (vs. -1.6% last week). Houston RevPAR was +38.5% (vs. -22.7% last week). Houston Group RevPAR was +68.0% last week.
 - O Hurricane-impacted markets in FL were mixed: Miami (-2.8% vs. -2.1% last week); Orlando (+1.8% vs. +4.8% last week).

The stocks: We continue to favor C-Corps over hotel REITs (we favored hotel REITs for the first half of 2018). In an environment of low RevPAR growth combined with gradually increasing wages/margin pressures, returns for hotel owners is a major headwind to EBITDA growth. Hotel stocks, but especially hotel REIT stocks, typically work best when there is a spark to RevPAR growth and at this moment we are not seeing such a spark like we did earlier in 2018. We are more favorable on other sectors at the moment, namely cruise lines.



Weekly RevPAR Summary

	YoY % change in RevPAR													
_			Upper		Upper			Inde-	New					
	U.S.	Luxury	Upscale	Upscale	Midscale	Midscale	Economy	pendent	York	Boston	LA	Chicago	DC	
3/23/2019	0.4%	-3.6%	-1.0%	-1.8%	0.7%	0.3%	1.2%	2.5%	-2.5%	-6.8%	1.3%	-2.3%	-16.8%	
3/30/2019	5.1%	-8.9%	9.2%	7.5%	9.0%	6.1%	2.8%	1.6%	-22.9%	9.3%	-6.0%	-4.2%	25.2%	
4/6/2019	1.9%	-2.9%	9.8%	3.2%	1.8%	-3.0%	-1.2%	-2.5%	4.4%	-10.2%	-2.3%	22.8%	16.7%	
4/13/2019	6.9%	5.9%	7.1%	4.3%	6.0%	5.8%	6.8%	8.4%	3.2%	9.8%	9.4%	17.0%	0.6%	
4/20/2019	-8.0%	-1.9%	-13.7%	-12.0%	-11.6%	-10.4%	-4.8%	-1.1%	6.2%	-4.4%	2.1%	-26.3%	-30.1%	
4/27/2019	-2.9%	-5.1%	-10.6%	-5.5%	-1.0%	0.8%	2.8%	1.3%	-7.5%	-7.7%	-6.4%	-16.9%	-20.3%	
5/4/2019	3.6%	6.9%	3.8%	2.2%	2.8%	-0.2%	0.8%	3.9%	-3.2%	17.4%	10.8%	14.5%	11.8%	
5/11/2019	0.9%	2.6%	0.5%	0.0%	0.3%	-1.8%	-0.7%	1.4%	-9.6%	5.2%	1.3%	-6.8%	2.2%	

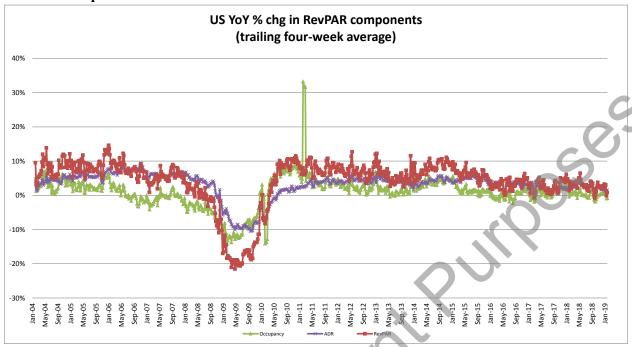
	CI	ean comp			Luxury and	d Upper Upsca	le led the ind	lustry		Boston and	DC led the To	p 5 markets	s
1Q16	2.7%	1.6%	1.9%	2.2%	2.0%	0.0%	1.8%	4.0%	-1.2%	-3.0%	16.6%	-4.8%	3.1%
2Q16	3.5%	0.8%	2.9%	3.1%	3.2%	3.2%	3.0%	4.2%	-4.5%	1.5%	11.1%	-1.0%	3.5%
3Q16	3.3%	1.5%	2.5%	2.0%	1.8%	2.5%	3.0%	5.1%	-2.5%	-0.5%	9.3%	1.2%	5.5%
4Q16	3.2%	1.9%	0.6%	1.2%	2.2%	3.9%	4.4%	5.1%	0.9%	-1.6%	6.9%	3.3%	8.0%
1Q17	3.4%	2.1%	3.0%	1.0%	2.4%	3.5%	2.6%	5.2%	-1.3%	-1.1%	-2.5%	1.5%	16.19
2Q17	2.7%	2.3%	0.6%	0.6%	1.2%	2.4%	3.7%	5.1%	0.2%	4.4%	3.6%	0.8%	0.89
3Q17	1.9%	0.5%	-0.7%	0.7%	1.8%	3.5%	2.9%	3.1%	-0.9%	-0.2%	-1.2%	-5.0%	-0.69
4Q17	4.2%	4.5%	3.2%	3.8%	3.9%	3.7%	3.7%	4.1%	0.8%	3.7%	4.2%	-2.5%	2.29
1Q18	3.5%	6.6%	0.9%	2.2%	3.0%	3.8%	5.3%	3.8%	7.1%	2.6%	2.7%	5.8%	-11.09
2Q18	4.0%	4.9%	3.4%	2.8%	3.0%	4.1%	3.1%	4.6%	4.2%	-1.2%	0.6%	4.0%	3.19
3Q18	1.7%	3.3%	1.9%	0.8%	-0.5%	0.1%	1.8%	2.2%	0.7%	2.8%	1.3%	7.5%	-3.49
4Q18	2.4%	3.0%	1.1%	0.0%	0.5%	1.3%	2.9%	4.9%	3.5%	12.2%	3.0%	2.8%	-3.49
1Q19	1.5%	-0.7%	1.2%	-0.5%	0.4%	-0.1%	1.9%	3.1%	-7.1%	-2.1%	-1.7%	-4.5%	-2.49

						VaV 0/ a	hanaa in	ADD					
_			Upper		Upper	101 % 0	hange in	Inde-	New			-	
	U.S.	Luxury	Upscale	Upscale	Midscale	Midscale	Economy		York	Boston	LA	Chicago	DC
3/23/2019	0.2%	-0.8%	0.8%	0.1%	1.0%	-0.3%	-0.1%	0.4%	-3.9%	-3.3%	-0.7%	-2.0%	-9.1%
3/30/2019	0.9%	-6.4%	4.6%	2.0%	2.4%	0.7%	0.5%	-0.8%	-16.4%	5.5%	-3.9%	-2.1%	19.7%
4/6/2019	1.5%	-3.1%	5.5%	2.1%	1.7%	-1.9%	-0.8%	-1.5%	1.8%	-2.9%	-2.7%	10.7%	11.9%
4/13/2019	4.4%	6.1%	5.0%	3.7%	4.2%	3.0%	3.1%	4.6%	0.0%	6.2%	4.1%	7.9%	0.2%
4/20/2019	-1.9%	4.5%	-5.6%	-3.1%	-2.9%	-2.9%	-2.2%	1.5%	4.7%	-2.5%	-0.9%	-16.9%	-19.4%
4/27/2019	-1.4%	0.9%	-4.5%	-2.1%	0.5%	0.4%	0.8%	0.9%	-3.9%	-5.8%	-4.4%	-12.6%	-13.2%
5/4/2019	2.3%	4.7%	2.5%	0.8%	1.7%	0.1%	0.6%	2.3%	-0.8%	8.5%	5.9%	7.1%	8.0%
5/11/2019	1.2%	1.9%	1.3%	0.5%	0.7%	-0.4%	-0.2%	1.4%	-4.9%	-0.2%	1.8%	-7.7%	3.2%
		_											
1Q16	3.2%	1.9%	2.7%	3.2%	2.6%	1.7%	3.3%	3.7%	-3.1%	1.4%	11.3%	-1.9%	1.1%
2Q16	2.9%	1.5%	2.2%	2.9%	2.8%	2.7%	3.4%	3.0%	-3.1%	3.3%	9.4%	0.3%	2.1%
3Q16	3.4%	1.5%	2.5%	2.7%	2.4%	3.1%	3.6%	4.4%	-2.7%	2.3%	7.5%	1.9%	3.5%
4Q16	2.6%	2.1%	1.4%	2.2%	2.0%	2.2%	3.2%	3.8%	-1.2%	1.3%	5.8%	3.9%	4.1%
1Q17	2.5%	2.3%	2.4%	1.3%	1.6%	1.8%	2.4%	3.5%	-2.2%	0.0%	-0.2%	1.7%	13.6%
2Q17	2.2%	2.2%	1.2%	1.7%	1.5%	2.1%	2.3%	3.5%	-1.5%	4.1%	2.8%	1.5%	2.0%
3Q17	1.4%	1.4%	0.2%	0.8%	1.2%	1.9%	2.4%	2.2%	-2.0%	0.8%	1.8%	-2.4%	0.0%
4Q17	2.4%	2.2%	1.9%	1.8%	1.8%	2.5%	3.4%	2.1%	-0.2%	0.8%	4.6%	-2.0%	2.4%
1Q18	2.5%	4.5%	1.0%	1.7%	2.0%	3.0%	4.0%	3.1%	3.5%	-1.0%	4.0%	1.4%	-9.4%
2Q18	2.9%	3.5%	2.9%	2.4%	2.1%	2.6%	2.7%	3.1%	3.7%	-0.1%	2.1%	3.3%	2.4%
3Q18	2.1%	3.3%	2.4%	1.8%	1.2%	1.3%	1.2%	1.9%	1.2%	1.9%	1.1%	6.7%	-0.8%
4Q18	2.0%	3.7%	2.2%	1.6%	1.1%	0.9%	0.6%	2.9%	3.4%	5.6%	1.4%	2.2%	-2.1%
1Q19	1.1%	2.2%	2.5%	1.0%	0.8%	-0.2%	-0.3%	1.0%	-3.8%	0.7%	-1.0%	-2.4%	1.5%

					Yo'	Y % char	nge in Oc	cupancy					
-			Upper		Upper			Inde-	New				
	U.S.	Luxury	Upscale	Upscale	Midscale	Midscale	Economy	pendent	York	Boston	LA	Chicago	DC
3/23/2019	0.2%	-2.9%	-1.8%	-1.9%	-0.3%	0.6%	1.4%	2.1%	1.5%	-3.6%	2.0%	-0.3%	-8.5%
3/30/2019	4.2%	-2.6%	4.5%	5.4%	6.5%	5.4%	2.3%	2.4%	-7.8%	3.7%	-2.2%	-2.1%	4.6%
4/6/2019	0.4%	0.2%	4.0%	1.1%	0.1%	-1.1%	-0.3%	-1.1%	2.5%	-7.5%	0.4%	11.0%	4.3%
4/13/2019	2.4%	-0.2%	2.0%	0.6%	1.7%	2.7%	3.6%	3.6%	3.2%	3.5%	5.1%	8.5%	0.4%
4/20/2019	-6.2%	-6.1%	-8.5%	-9.3%	-9.0%	-7.8%	-2.6%	-2.6%	1.4%	-2.0%	3.0%	-11.3%	-13.3%
4/27/2019	-1.4%	-6.0%	-6.3%	-3.5%	-1.6%	0.4%	2.0%	0.4%	-3.7%	-2.1%	-2.1%	-4.9%	-8.1%
5/4/2019	1.2%	2.1%	1.3%	1.4%	1.1%	-0.3%	0.2%	1.6%	-2.4%	8.2%	4.7%	6.9%	3.5%
5/11/2019	-0.3%	0.7%	-0.9%	-0.5%	-0.4%	-1.4%	-0.5%	0.0%	-5.0%	5.4%	-0.5%	1.0%	-1.0%
		<u> </u>						,					
1Q16	-0.5%	-0.3%	-0.8%	-0.9%	-0.6%	-1.7%	-1.5%	0.3%	2.0%	-4.3%	4.7%	-3.0%	2.0%
2Q16	0.6%	-0.7%	0.7%	0.2%	0.4%	0.5%	-0.4%	1.2%	-1.4%	-1.7%	1.5%	-1.4%	1.3%
3Q16	0.0%	0.0%	-0.1%	-0.6%	-0.6%	-0.6%	-0.6%	0.7%	0.3%	-2.8%	1.7%	-0.7%	1.9%
4Q16	0.6%	-0.2%	-0.8%	-1.0%	0.2%	1.7%	1.2%	1.2%	2.2%	-2.8%	1.0%	-0.5%	3.7%
1Q17	0.9%	-0.2%	0.6%	-0.3%	0.7%	1.6%	0.2%	1.6%	1.0%	-1.1%	-2.4%	-0.2%	2.2%
2Q17	0.5%	0.1%	-0.6%	-1.1%	-0.3%	0.4%	1.4%	1.6%	1.7%	0.3%	0.8%	-0.7%	-1.2%
3Q17	0.5%	-0.9%	-0.9%	-0.1%	0.6%	1.6%	0.5%	0.9%	1.1%	-1.0%	-2.9%	-2.7%	-0.5%
4Q17	1.8%	2.2%	1.3%	2.0%	2.1%	1.2%	0.3%	2.0%	1.0%	2.8%	-0.3%	-0.5%	-0.2%
1Q18	0.9%	2.1%	0.0%	0.5%	1.1%	0.9%	1.3%	0.7%	3.5%	3.7%	-1.3%	4.4%	-1.8%
2Q18	1.1%	1.3%	0.5%	0.4%	0.9%	1.5%	0.4%	1.5%	0.5%	-1.1%	-1.4%	0.7%	0.7%
3Q18	-0.4%	0.0%	-0.5%	-1.0%	-1.7%	-1.1%	0.5%	0.3%	-0.5%	0.9%	0.2%	0.7%	-2.6%
4Q18	0.4%	-0.7%	-1.1%	-1.6%	-0.6%	0.4%	2.3%	1.9%	0.1%	6.3%	1.6%	0.6%	-1.3%
1Q19	0.4%	-2.8%	-1.3%	-1.4%	-0.5%	0.0%	2.3%	2.1%	-3.5%	-2.8%	-0.7%	-2.2%	-3.8%

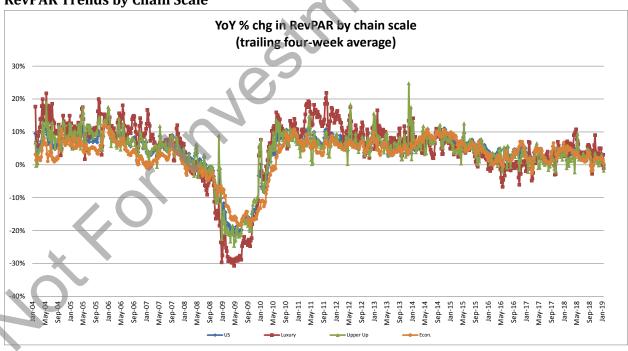
Source: STR data, STRH research

RevPAR Component Trends



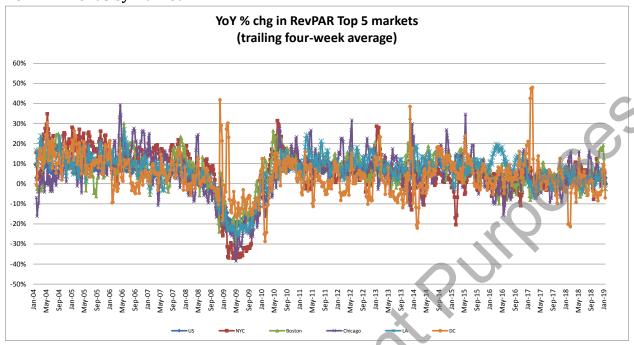
Source: STR data, STRH research

RevPAR Trends by Chain Scale



Source: STR data, STRH research

RevPAR Trends by Market



Source: STR data, STRH research



Price Target/Risks Summary

Lodging	TKR	Price 5/14/19	Rating	PT*	% upside down- side	2020E Valuation EBITDA (\$M)* **	2020E As Reported EBITDA (\$M)*	Target EV/EBITDA Multiple	Risks
Chesapeake Lodging Trust	CHSP	\$30.23	Hold	\$26	-14%	\$182	\$182	12.0X	Upside risk: improvement in NY and Chicago markets Downside risk: softening of RevPAR trends in Boston or SF. Slowdown real estate lending.
Obi Het-I-	01111	600.00	11212	\$86	407	\$380	\$380	14.0X	Upside risk: conservative guidance.
Choice Hotels	CHH	\$82.88	Hold	280	4%	\$380	\$38U	14.0X	Downside risk: slowdown in development opportunities.
DiamondRock Hospitality	DRH	\$10.78	Hold	\$11	2%	\$267	\$268	12.0X	Upside risk: specific markets (esp. NYC) perform better than expected Downside risk: company unable to locate properties to buy. Upside risk: the company increases dividends by more than expected NYC outperforms or is sold down at attractive multiplies.
									Downside risk: Group underperforms. NYC hotels underperform and
Host Hotels & Resorts	HST	\$18.99	Hold	\$22	16%	\$1,540	\$1,540	12.5X	asset sales do not happen. Upside risk: Transient and group trends outperform expectations
Hyatt Hotels	н	\$76.37	Hold	\$82	7%	\$802	\$839	13.2X	Downside risk: ongoing misexecution and volatility.
Bluegreen Vacations Corporation	BXG	\$15.03	Hold	\$16	6%	\$146	\$146	7.8X	Upside risk: Accelerating tour flow, FCF generation and decliining consumer defaults. Downside risk: 3rd party induced defaults worsen. Middle market customers underperform.
									Downside risk: Disruption in a major market (HGV more concentrated
Hilton Grand Vacations	HGV	\$27.56	Buy	\$51	85%	\$433	\$488	11.4X	than peers), issues with Japanese customer (HGV more exposed that peers), difficulty sourcing additional fee-for-service inventory deals
Hilton	HLT	\$91.74	Buy	\$101	10%	\$2,382	\$32	14.8X	Downside risk: slowing pipeline
									Upside Risk: Significani U.S macroeco; nomic improvement results in large recovery in transient corporate demand (and consequential >400 bps RevPAR improvement). Owned assets sell for premium prices relative to MAR expectations. Downside Risk: 2020 is a recession year in the U.S. Geopolitical and
Marriott International	MAR	\$129.87	Hold	\$135	4%	\$3,548	\$0	14.8X	policy risks negatively impact lodging demand.
Marriott Vacations	VAC	\$97.18	Buy	\$147	51%	\$748	\$880	11.2X	Downside risk: M&A story fades and multiples revert to historical level
Park Hotels & Resorts	PK	\$30.34	Buy	\$34	12%	\$763	\$778	12.6X	Downside risk: Significant supply growth, macroeconomic challenges/shocks, higher than expected labor costs.
			,					X	Upside Risks: Material near-term incremental EBITDA from Legacy LH assets. Downside Risks: Planned asset sales do not materialize as expected and/or at lower-than-expected pricing. Incremental EBITDA from major CapEx investments take longer than anticipated, resulting
Pebblebrook Hotel Trust***	PEB	\$31.26	Hold	\$34	9%	\$489	\$489	14.5X	multiple contraction.
Playa Hotels & Resorts	PLYA	\$8.67	Buy	\$13	50%	\$213	\$224	11.5X	Downside risk: demand shock, hurricanes, inability to complete 2021 growth initiatives, country-specific risks (emerging market portfolio) Upside risk: RevPAR reaccelerates due to macroeconomic
RLJ Lodging Trust	RLJ	\$18.45	Hold	\$ 19	3%	\$488	\$501	11.5X	improvements, leading to estimate revisions and multiple expansion. Downside risk: Significant supply growth, struggle to source deals/low leverage, macroeconomic challenges/demand shocks.
									Upside risk:recovering group demand better than expected, better marg
Ryman Hospitality Properties	RHP	\$85.00	Hold	\$81	-5%	\$536	\$521	12.6X	recovery. Downside risk: booking issues stickier than expected. Upside risk: Recovery of corporate demand in SHO's markets. Above average group bookings in Orlando and Boston Park Plaza post-meetir
Sunstone Hotel Investors	SHO	\$14.31	Hold	\$15	5%	\$316	\$316	12.0X	space expansions. Downside risk: Weaker than expected demand trends following capitations investment projects.
/ail Resorts, Inc.	MTN	\$219.79	Buy	\$242	10%	\$767	\$767	15.0X	Downside risk: Economic conditions, competition for vacation and sk dollars, stagnant skier visitation, an aging customer, and climate changes
Vyndham Destinations	WYND	\$43.10	Buy	\$74	72%	\$1,028	\$1,047	9.2X	Downside risk: The timeshare business is especially vulnerable to economic softness. There are potential execution risks post the spin of
Wyndham Hotels & Resorts	WH	\$54.89	Buy	\$68	24%	\$644	\$666	13.0X	Downside risk: Slowdown in development opportunities. La Quinta synergies below expectations.
vynunam notels & results	VVII	φυ4.89	Duy	200	2470	Ф 044	φυσσ	13.07	synergies below expectations.

*** Covered by Gregory J. Miller

Source: FactSet, STRH research



Companies Mentioned in This Note

Bluegreen Vacations Corporation (BXG, \$15.03, Hold, C. Patrick Scholes)

Choice Hotels International, Inc. (CHH, \$82.88, Hold, C. Patrick Scholes)

Chesapeake Lodging Trust (CHSP, \$30.23, Hold, C. Patrick Scholes)

DiamondRock Hospitality Company (DRH, \$10.78, Hold, C. Patrick Scholes)

Hyatt Hotels Corporation (H, \$76.37, Hold, C. Patrick Scholes)

Hilton Grand Vacations Inc. (HGV, \$27.56, Buy, C. Patrick Scholes)

Hilton Worldwide Holdings Inc. (HLT, \$91.74, Buy, C. Patrick Scholes)

Host Hotels & Resorts, Inc. (HST, \$18.99, Hold, C. Patrick Scholes)

Marriott International, Inc. (MAR, \$129.87, Hold, C. Patrick Scholes)

Vail Resorts, Inc. (MTN, \$219.79, Buy, C. Patrick Scholes)

Pebblebrook Hotel Trust (PEB, \$31.26, Hold, Gregory Miller)

Park Hotels & Resorts Inc. (PK, \$30.34, Buy, C. Patrick Scholes)

Playa Hotels & Resorts N.V. (PLYA, \$8.67, Buy, C. Patrick Scholes)

Ryman Hospitality Properties, Inc. (RHP, \$85.00, Hold, C. Patrick Scholes)

RLJ Lodging Trust (RLJ, \$18.45, Hold, C. Patrick Scholes)

Sunstone Hotel Investors, Inc. (SHO, \$14.31, Hold, C. Patrick Scholes)

Marriott Vacations Worldwide Corporation (VAC, \$97.18, Buy, C. Patrick Scholes)

Wyndham Hotels & Resorts, Inc. (WH, \$54.89, Buy, C. Patrick Scholes)

Wyndham Destinations, Inc. (WYND, \$43.10, Buy, C. Patrick Scholes)

Analyst Certification

I, C. Patrick Scholes, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject company(ies) and its (their) securities. I also certify that I have not been, am not, and will not be receiving direct or indirect compensation in exchange for expressing the specific recommendation(s) in this report.

Required Disclosures

Analyst compensation is based upon stock price performance, quality of analysis, communication skills, and the overall revenue and profitability of the firm, including investment banking revenue.

As a matter of policy and practice, the firm prohibits the offering of favorable research, a specific research rating or a specific target price as consideration or inducement for the receipt of business or compensation. In addition, associated persons preparing research reports are prohibited from owning securities in the subject companies.

Charts indicating changes in ratings can be found in recent notes and/or reports at our website or by contacting SunTrust Robinson Humphrey. Please see our disclosures page for more complete information at https://suntrust.bluematrix.com/sellside/Disclosures.action.

STRH Ratings System for Equity Securities

Dissemination of Research

SunTrust Robinson Humphrey (STRH) seeks to make all reasonable efforts to provide research reports simultaneously to all eligible clients. Reports are available as published in the restricted access area of our website to all eligible clients who have requested a password. Institutional



investors, corporates, and members of the Press may also receive our research via third party vendors including: Thomson Reuters, Bloomberg, FactSet, and S&P Capital IQ. Additional distribution may be done by sales personnel via email, fax, or other electronic means, or regular mail.

For access to third party vendors or our Research website: https://suntrustlibrary.bluematrix.com/client/library.jsp

Please email the Research Department at mailto:STRHEquityResearchDepartment@suntrust.com or contact your STRH sales representative.

The rating system effective as of Oct. 7, 2016:

STRH Rating System for Equity Securities

SunTrust Robinson Humphrey (STRH) rates individual equities using a three-tiered system. Each stock is rated relative to the broader market (generally the S&P 500) over the next 12-18 months (unless otherwise indicated).

Buy (B) – the stock's total return is expected to outperform the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Hold (H) – the stock's total return is expected to perform in line with the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Sell (S) – the stock's total return is expected to underperform the S&P 500 or relevant benchmark over the next 12-18 months (unless otherwise indicated)

Not Rated (NR) – STRH does not have an investment rating or opinion on the stock

Coverage Suspended (CS) – indicates that STRH's rating and/or target price have been temporarily suspended due to applicable regulations and/or STRH Management discretion. The previously published rating and target price should not be relied upon

STRH analysts have a price target on the stocks that they cover, unless otherwise indicated. The price target represents that analyst's expectation of where the stock will trade in the next 12-18 months (unless otherwise indicated). If an analyst believes that there are insufficient valuation drivers and/or investment catalysts to derive a positive or negative investment view, they may elect with the approval of STRH Research Management not to assign a target price; likewise certain stocks that trade under \$5 may exhibit volatility whereby assigning a price target would be unhelpful to making an investment decision. As such, with Research Management's approval, an analyst may refrain from assigning a target to a sub-\$5 stock.

Legend for Rating and Price Target History Charts:

B = Buy

H = Hold

S = Sell

D = Drop Coverage

CS = Coverage Suspended

NR = Not Rated

I = Initiate Coverage

T = Transfer Coverage

The prior rating system until Oct. 7, 2016:

3 designations based on total returns* within a 12-month period**

- · Buy total return ≥ 15% (10% for low-Beta securities)***
- · Reduce total return ≤ negative 10% (5% for low Beta securities)
- · Neutral total return is within the bounds above



- · NR NOT RATED, STRH does not provide equity research coverage
- · CS Coverage Suspended
- *Total return (price appreciation + dividends); **Price targets are within a 12-month period, unless otherwise noted; ***Low Beta defined as securities with an average Beta of 0.8 or less, using Bloomberg's 5-year average

SunTrust Robinson Humphrey ratings distribution (as of 05/15/2019):

Coverage Univ	verse		Investment Banking Clients Past 12 Months						
Rating	Count	Percent	Rating	Count	Percent				
Buy	435	64.44%	Buy	112	25.75%				
Hold	237	35.11%	Hold	31	13.08%				
Sell	3	0.44%	Sell	1	33.33%				

Other Disclosures

Information contained herein has been derived from sources believed to be reliable but is not guaranteed as to accuracy and does not purport to be a complete analysis of the security, company or industry involved. This report is not to be construed as an offer to sell or a solicitation of an offer to buy any security. SunTrust Robinson Humphrey, Inc. and/or its officers or employees may have positions in any securities, options, rights or warrants. The firm and/or associated persons may sell to or buy from customers on a principal basis. Investors may be prohibited in certain states from purchasing some over-the-counter securities mentioned herein. Opinions expressed are subject to change without notice. The information herein is for persons residing in the United States only and is not intended for any person in any other jurisdiction.

SunTrust Robinson Humphrey, Inc.'s research is provided to and intended for use by Institutional Accounts as defined in FINRA Rule 4512(c). The term "Institutional Account" shall mean the account of: (1) a bank, savings and loan association, insurance company or registered investment company; (2) an investment adviser registered either with the SEC under Section 203 of the Investment Advisers Act or with a state securities commission (or any agency or office performing like functions); or (3) any other person (whether a natural person, corporation, partnership, trust or otherwise) with total assets of at least \$50 million.

SunTrust Robinson Humphrey, Inc. is a registered broker-dealer and a member of FINRA and SIPC. It is a service mark of SunTrust Banks, Inc. SunTrust Robinson Humphrey, Inc. is owned by SunTrust Banks, Inc. ("SunTrust") and affiliated with SunTrust Investment Services, Inc. Despite this affiliation, securities recommended, offered, sold by, or held at SunTrust Robinson Humphrey, Inc. and at SunTrust Investment Services, Inc. (i) are not insured by the Federal Deposit Insurance Corporation; (ii) are not deposits or other obligations of any insured depository institution (including SunTrust Bank); and (iii) are subject to investment risks, including the possible loss of the principal amount invested. SunTrust Bank may have a lending relationship with companies mentioned herein.

Please see our Disclosure Database to search by ticker or company name for the current required disclosures, including valuation and risks, Link: https://suntrust.bluematrix.com/sellside/Disclosures.action

Please visit the STRH equity research library for current reports and the analyst roster with contact information, Link (password protected): STRH RESEARCH LIBRARY

SunTrust Robinson Humphrey, Inc., member FINRA and SIPC. SunTrust and SunTrust Robinson Humphrey are service marks of SunTrust Banks, Inc.

If you no longer wish to receive this type of communication, please request removal by sending an email to STRHEquityResearchDepartment@SunTrust.com



© SunTrust Robinson Humphrey, Inc. 2019. All rights reserved. Reproduction or quotation in whole or part without permission is forbidden.

ADDITIONAL INFORMATION IS AVAILABLE at our website, www.suntrustrh.com, or by writing to:SunTrust Robinson Humphrey, Research Department, 3333 Peachtree Road N.E., Atlanta, GA 30326-1070