

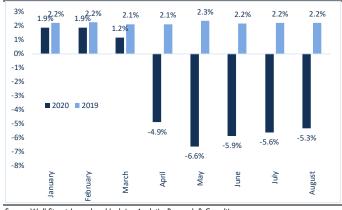
U.S. Lodging Industry and Market Outlook – September 2020

Pandemic Pandemonium

The Covid-19 pandemic has impacted the U.S. hotel industry like no other phenomenon, for as long as data has been tracked. The distress exerted on the industry is cataclysmic and six months into the pandemic, it still remains unclear if/ when the virus will abate. This level of uncertainty makes near-term forecasting even more challenging than normal. At this juncture, it appears that the only way for the nation to return to some sense of normalcy will be through a widely available and effective vaccine or herd immunity. Until then, the country seems destined to fight pockets of outbreak and life to be far from "normal".

This uncertainty related to the duration and full impact of the pandemic has created a uniquely cloudy economic outlook. With this said, to provide some perspective, the August Wall Street Journal (WSJ) economic forecasting survey results include a range for 2020 GDP growth from 0.6% to (12.1)% with an average of (5.3)%. Additionally, the average monthly change to the 2020 average Real U.S. GDP outlook has been a staggering 1.0%. Last year the average monthly change was 0.002%, indicating an average monthly change in the average outlook that is over 600 times as great as last year. In, short, eight months into the year, there is still a tremendous lack of clarity on economic growth in 2020.

Comparison of Monthly WSJ Economic Survey Results for Current Year Real GDP Growth



Source: Wall Street Journal and Lodging Analytics Research & Consulting

As we grapple with the implications of the "new normal" we expect travel to remain muted until there is a vaccine but believe that some modest level of business travel will gradually pick up as we move through the coming months.

While near-term economic and public health uncertainty limits our near-term forecast conviction, we do know that

over time, corporate and group travel will return and when it does, there will be a considerable amount of pent up demand. There are skeptics that believe that corporate travel will be forever altered by the pandemic, resulting in a permanent reduction in business and convention travel. We heard those arguments after 9/11 and again after the Great Recession. We found in both prior instances that business is best conducted face to face and relationships are best forged in person rather than on-line. We do not expect the pandemic to generate a permanent reduction in travel demand. The impact will be temporary.

With that backdrop, we believe our baseline economic forecast from Moody's Analytics is the most likely scenario to unfold and makes the following key assumptions:

- New Covid-19 infections peak in July 2020, nationally
- 13.7 million confirmed infections
- 3.3% confirmed fatality rate
- 5.0% hospitalization rate
- 1.0% ICU use rate
- Vaccine widely available by April 2021
- Infections abate by June 2021
- \$1.5 trillion in additional stimulus, almost evenly split between aid for state and local governments and for unemployment insurance benefits.

Long-Term Conviction

In April, we issued a scenario outlook for the industry that assumed that the Covid-19 pandemic and related impact on the lodging industry would not persist into 2021, even in our bearish scenario. We did however expect that the economic downturn caused by the pandemic would have longer lasting implications. Today, we expect the pandemic-induced travel disruption to persist through the first quarter of 2021. As such, the majority of our current 2020 outlook is closer to our bearish scenario from April, while our new 2020 value erosion estimate is slightly worse than even our bearish scenario from April, given the expectation for a slower recovery following 2020 than previously anticipated. However, looking out five years our RevPAR and EBITDA outlooks are similar to our base case from April. Our hotel value outlook is decidedly more positive over that time frame, despite the more bearish 2020 forecast for values. The driver for this change is a much lower forecast for interest rates, which will drive cap rates to modestly compress relative to previous expectations.



In fact, even going back to our January U.S. industry outlook, we see minimal long-term changes to our forecast, despite the impact from the unanticipated pandemic.

The below table illustrates the changes from our January 2020 forecast to our current forecast for each of the key metrics driving our national lodging forecasts as well as the output of RevPAR and Hotel Values. This data shows that the changes for 2020 are substantial on every metric. However, as we move further from 2020, the changes are diminished and in fact, looking out five years, Moody's Analytics economic forecast has improved on two key drivers of our lodging industry outlook: Business Investment and Investment Grade Bond Yields.

Moody's Analytics 5-year CAGR forecast for GDP drops from 2.2% to 1.8% and Non-Farm Jobs drops from 0.6% to 0.3%. However, the Business Investment outlook has improved from a 2.6% CAGR to a 3.6% CAGR and our supply outlook has moderated from a 2.1% CAGR to a 1.8% CAGR. As a result, <u>our 5-year RevPAR CAGR</u> forecast is only 0.5% lower than where it was in January.

Moody's Analytics 5-year forecast for Baa Bond Yield change drops 33 bps as well. This is driven by expanded quantitative easing from the Fed and delayed interest rate expansion. This decline has a direct impact on our cap rate models, causing our cap rate forecast to decline modestly and as such <u>our hotel value forecast is increased</u> from our January forecast by a 5-year CAGR of 1.4%, despite the modestly reduced RevPAR outlook.

Thus, despite the substantial negative impact form the pandemic in the near-term, we expect the growth coming out of the pandemic to result in greater value appreciation over the next five years than our outlook pre-pandemic.

Forecast Changes from January 2020 Version to September 2020 Version

	2020 Growth Forecast		3-Year CAGR Forecast			5-year CAGR Forecast			
	Jan-20	Sep-20	Variance	Jan-20	Sep-20	Variance	Jan-20	Sep-20	Variance
GDP	1.8%	-4.9%	-6.7%	2.2%	0.8%	-1.4%	2.2%	1.8%	-0.4%
Business Investment	2.7%	-6.1%	-8.8%	2.7%	1.6%	-1.0%	2.6%	3.6%	1.0%
Non-Farm Jobs	1.0%	-6.4%	-7.4%	0.6%	-1.1%	-1.7%	0.6%	0.3%	-0.3%
Baa Bond Yield Change (bps)	111	(38)	(150)	246	99	(147)	257	224	(33)
Supply	2.4%	-3.7%	-6.0%	2.2%	1.8%	-0.4%	2.1%	1.8%	-0.4%
RevPAR	0.2%	-52.2%	-52.4%	1.8%	-3.2%	-5.1%	2.0%	1.6%	-0.5%
Hotel Value	-4.8%	-33.1%	-28.3%	-0.8 %	-5.1%	-4.2%	-0.3%	1.0%	1.4%

Source: Lodging Analytics Research & Consulting, Moody's Analytics



LARC's Industry Outlook

Currently, LARC expects U.S. RevPAR to decline by 52.2% in 2020 and increase at a 1.6% CAGR over the next five years. LARC also anticipates U.S. hotel property values to decline 33.1% in 2020 and increase at a 1.0% CAGR over the next five years. We forecast ADR, RevPAR, Hotel EBITDA and hotel values will recover to 2019 levels in 2023. However, occupancy will not reach 2019 levels within the next five years. The table below illustrates a summary of LARC's current U.S. Hotel Industry Outlook in contrast to last quarter's outlook.

September 2020 U.S. Hotel Industry Forecast Summary vs. June 2020 U.S. Hotel Industry Forecast Summary

	Sept	September Update			June Update			
	2020	3-Year Forwrad CAGR	5-Year Forward CAGR	2020	3-Year Forwrad CAGR	5-Year Forward CAGR		
Supply	-3.7%	1.8%	1.8%	1.7%	2.4%	2.0%		
Demand	-43.7%	0.0%	1.3%	-18.1%	1.4%	1.8%		
Occupancy	-40.0%	-1.8%	-0.4%	-19.8%	-1.0%	-0.2%		
ADR	-20.4%	-1.5%	2.0%	-13.1%	-0.8%	2.1%		
RevPAR	-52.2%	-3.2%	1.6%	-30.3%	-1.8%	1.9%		
Hotel EBITDA	-88.3%	-12.4%	0.5%	-69.3%	-10.6%	0.8%		
Hotel Values	-33.1%	-5.1%	1.0%	-23.0%	-1.5%	1.3%		

Source: Lodging Analytics Research & Consulting

The changes to our 2020 outlook are driven by the following key factors:

- Our Covid-19 assumptions are meaningfully more difficult for the U.S. Hotel Industry as our prior outlook assumed the worst from the pandemic took place in the Spring and there would be some sense of a return to normalcy in the Fall. As discussed earlier, we no longer believe that is the case.
- 2) Overall GDP growth is slightly improved for 2020, but minimally changed on our five-year outlook.
- Non-Farm Job growth is now forecast to be meaningfully more negative in 2020 than last quarter and not as positive over the five-year outlook.

Our U.S. RevPAR model has an R-squared of 98.3% with a standard error of 2.6%, back-tested to 2000.

While it is possible that past relationships between the economy and the industry can experience disruption in the face of an event like the Covid-19 pandemic, we do not believe that disruption is permanent. As such, we feel confident in our outlook beyond 2020, while acknowledging that 2020 is fraught with a tremendous amount of uncertainty.

<u>Market Outlooks</u>

We continue to expect the various demand segments of the hotel business to recover in the following order: driveto leisure, domestic business travel, fly-to leisure, international business travel, small group, and citywide conventions. Therefore, markets with a greater concentration of hotel demand from the drive-to-leisure segment and less from group and conventions are likely to recover most quickly.

Below is a list of the best and worst performing markets based on our forecasts. Similar to our U.S. forecast, our market level forecasts are built entirely on multi-variable regression models with high historical accuracy (Rsquareds for each model seen on the next page).

More detail on our market outlooks can be found in LARC's Market Intelligence Reports. Please <u>contact us</u> if you are interested in purchasing any of LARC's Market Intelligence Reports.

2020

<u>Top Markets for RevPAR Growth:</u> Norfolk, Phoenix, Tampa, Detroit and Miami.

Bottom Markets for RevPAR Growth:

Boston, Seattle, Minneapolis, Anaheim and Washington, D.C.

5-Year Outlook

<u>Top Markets for RevPAR Growth:</u> Denver, Los Angeles, San Francisco, Honolulu and Phoenix.

<u>Bottom Markets for RevPAR Growth:</u> St. Louis, Orlando, New Orleans, Chicago and Atlanta

<u>Top Markets for Value Change:</u> Boston, Phoenix, Denver, Houston, and Los Angeles

<u>Bottom Markets for Value Change:</u> Chicago, Miami, New Orleans, Orlando, and Seattle



We use multi-variable regression forecasting to drive our industry and market outlooks. Using this methodology, we look beyond correlation relationships between variables to causal relationships. R-Squared is a statistical measure to define the causal relationship between a regression forecast model and the actual results historically. The highest R-Squared possible is 100%, indicating that the model has forecasted the actual results historically perfectly. We generally view any R-Squared above 80% as highly accurate, indicating that the model forecasts 80% of the volatility of the forecast variable.

	R-Squareds for our Mult-Variable Regression Forecasting Models					
	RevPAR Forecast	ADR Forecast	Cap Rate Forecast			
Anaheim, CA	92.5%	97.6%	99.6%			
Atlanta, GA	99.2%	99.8%	99.9%			
Boston, MA	89.3%	92.2%	99.7%			
Chicago, IL	99.0%	99.4%	98.2%			
Dallas, TX	99.0%	92.6%	99.8%			
Denver, CO	99.5%	99.7%	99.8%			
Detroit, MI	99.5%	89.9%	99.8%			
Houston, TX	85.5%	92.6%	98.1%			
Los Angeles, CA	91.6%	94.6%	100.0%			
Miami, FL	94.2%	92.1%	99.8%			
Minneapolis, MN	85.5%	99.8%	99.6%			
Nashville, TN	99.3%	99.8%	99.8%			
New Orleans, LA	99.0%	99.6%	81.1%			
New York, NY	99.5%	99.7%	99.8%			
Norfolk, VA	98.8%	99.7%	98.2%			
Honolulu, HI	96.4%	97.9%	98.3%			
Orlando, FL	91.4%	98.6%	98.2%			
Philadelphia, PA	84.1%	89.4%	99.8%			
Phoenix, AZ	99.6%	99.8%	99.5%			
San Diego, CA	99.6%	99.8%	98.2%			
San Francisco, CA	94.7%	96.4%	87.4%			
Seattle, WA	99.2%	90.4%	99.7%			
St Louis, MO	88.5%	93.6%	99.7%			
Tampa, FL	98.9%	94.9%	99.8%			
Washington, DC	99.4%	99.8%	99.7%			
United States Total	99.6%	92.8%	90.7%			

Model Accuracy Based on R-squareds and Back-Testing to 2000 (2005 for cap rates)

Source: Lodging Analytics Research & Consulting



Our thoughts and hearts are with all those that have lost loved ones during the pandemic as well as those who have lost their jobs. While we can often get bogged down in the economic implications of such tragedies, it is important to remember that those that lost loved ones, lost their jobs or lost their financial independence are the ones most impacted by this crisis.

We are optimistic that the worst of the Covid-19 pandemic is behind us, but we hope that everyone continues to act prudently and safely in the face of a deadly and highly contagious virus. As we navigate this trying period, we extend best wishes for the health and safety of all, particularly emergency workers that have helped so many global citizens, Americans, travelers and hotel industry professionals.

While the hotel industry is obviously in uncharted territory, the sector has proven its resilience time and time again. We firmly believe that lodging companies, properties and professionals that navigate this storm will be positioned to experience one of the strongest period's in the industry's history and benefit from outsized profit growth, value appreciation and employment opportunities.

However, to navigate this turbulent period, accurate, transparent, and detailed information will support better decision making. As such, we believe LARC's industry-leading Market Intelligence Reports referred to throughout this document will help all industry players navigate the current environment. Please <u>contact us</u> directly to learn more about our products and/or if there is any other way we may be able to serve you.

Sincerely,

Ryan Meliker President & Co-founder Lodging Analytics Research & Consulting

This report is compiled and produced by Lodging Analytics Research and Consulting ("LARC"). LARC does not represent the data herein to be definitive or accurate, nor should the contents be construed as recommendations on policies or actions. The material herein is based on current public information that we consider reliable, but we do not represent it as accurate or complete, and it should not be relied on as such. Without prejudice to the generality of the foregoing, we do not represent, warrant undertake or guarantee that the use of this report or any information contained herein will lead to any particular outcome or result. Quotation, reproduction or transmittal of the information contained herein in any form or by any means, whether electronic, photocopying, recording or otherwise, is not permitted without consent from LARC.