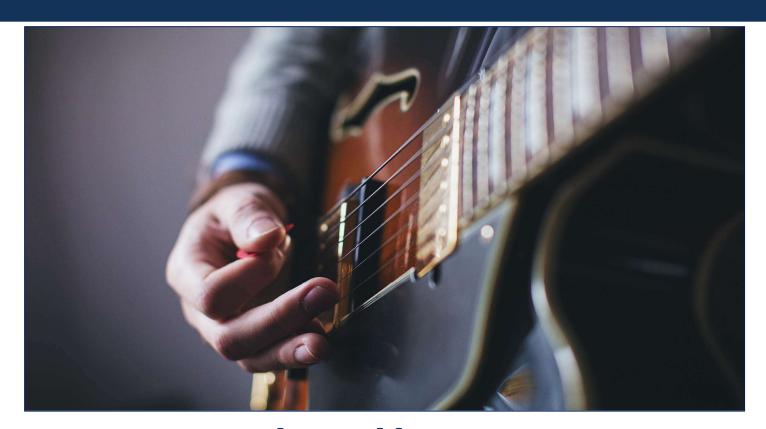


### MARKET INTELLIGENCE REPORT



Nashville, TN

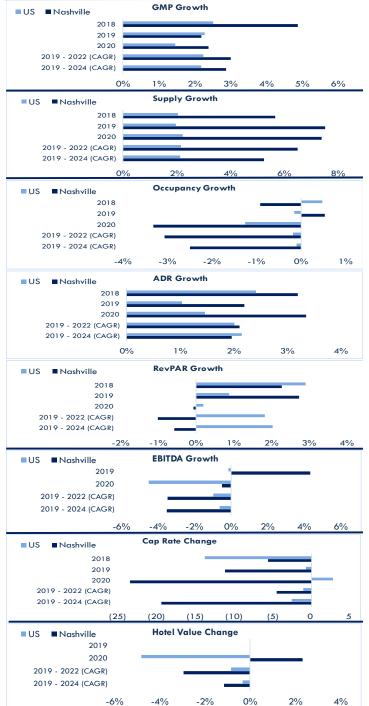


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## **Nashville Summary**

Despite one of the strongest economies in the country, Nashville's elevated supply growth (rank #X of the top 25 markets) will pressure RevPAR growth. However, given the economic strength, we expect the elevated supply to be absorbed over the medium term, limiting value decreases to a -1.2% compound annual growth rate (CAGR) over the next five years (ranking #X out of 25).

#### **Nashville Summary Forecast Charts & Commentary**



Source: Lodging Analytics Research & Consulting, STR Global, Moody's Analytics & Real Capital Analytics

Nashville's gross metropolitan product (GMP) is forecast to exceed the national average in 2020 and over the next three-year and five-year periods. In fact, over the next five years, Nashville's economic growth ranks #X of the top 25 markets.

Supply growth is following the strong economic growth in the market, forecasted to be materially above the national average in 2020 and over the next 3-year and 5-year periods. Nashville's supply growth ranks #X among the top 25 markets.

Primarily fueled by elevated supply growth we expect occupancy to decline meaningfully through 2024 as the market struggles to absorb an extremely elevated level of supply. As a result, Nashville's Revenue per Available Room (RevPAR) growth is expected to turn negative in 2021 and not turn positive again until 2024. Declining occupancy is the main driver of the RevPAR decline, as occupancy is expected to decline meaningfully through 2024. Average Daily Rate (ADR) growth will hold up a little better, closer to national averages. Nashville's occupancy outlook ranks Xth out of the 25 major markets over the next five years. Nashville's ADR outlook ranks Xth out of the 25 major markets over the next five years. Nashville's RevPAR outlook ranks Xth out of the 25 major markets over the next five years.

Given the top line challenges for Nashville and our expense growth forecast, we expect EBITDA to decline at a 3.5% CAGR over the next five years, ranking  $X^{th}$  out of the 25 major markets over the next five years.

Nashville hotel cap rates are forecast to decline consistently over the next five years, helping offset the impact of some of the market's lost EBITDA on hotel values. Nashville's cap rate compression ranks in the top X among the top 25 markets over the next five years.

Hotel values over the next 3-year and 5-year periods, are forecast to decline by a CAGR of 3.0% and 1.2%, respectively, underperforming the national average and ranking  $X^{th}$  among the major markets for value growth over the next five years.

<sup>\*</sup>Use of "X" depicts information available on all final reports



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### **Nashville Forecast Summary**

							EBITDA	Chg	EBITDA	Cap	Cap Rate	Value Change (from
	Occupancy	% Chg	ADR	% Chg	RevPAR	% Chg	Margin	(bps, YoY)	% Chg	Rate	Chg (bps)	2019 Base)
2018	73.3%	-0.9%	\$147.19	3.2%	\$107.87	2.3%	35.0%	NA	NA	8.6%	(6)	-
2019	73.5%	0.5%	\$150.40	2.2%	\$110.54	2.7%	35.6%	55	4.3%	8.5%	(11)	-
2020	71.1%	-3.3%	\$155.45	3.4%	\$110.46	-0.1%	35.4%	(15)	-0.5%	8.3%	(23)	2.3%
2021	68.5%	-3.6%	\$157.55	1.3%	\$107.90	-2.3%	34.1%	(132)	-6.0%	8.6%	32	<b>-7.4</b> %
2022	67.0%	-2.3%	\$160.12	1.6%	\$107.20	-0.7%	33.0%	(110)	-3.9%	8.4%	(23)	-8.6%
2023	65.5%	-2.2%	\$163.09	1.9%	\$106.83	-0.3%	31.9%	(112)	-3.7%	8.0%	(43)	<b>-7.3</b> %
2024	64.8%	-1.1%	\$165.75	1.6%	\$107.39	0.5%	30.6%	(125)	-3.4%	7.6%	(41)	-5.6%

### **Nashville Quarterly Operating Forecast Summary**

					-		EBITDA	Chg	EBITDA
	Occupancy	% Chg	ADR	% Chg	RevPAR	% Chg	Margin*	(bps, YoY)	% Chg
2018-1Q	66.9%	-2.1%	\$138.21	4.2%	\$92.50	2.1%	30.5%	NA	NA
2018-2Q	79.3%	-0.1%	\$155.06	4.4%	\$122.92	4.3%	38.5%	NA	NA
2018-3Q	76.1%	-1.6%	\$145.06	1.3%	\$110.46	-0.4%	34.2%	NA	NA
2018-4Q	70.1%	-0.3%	\$148.87	2.5%	\$104.42	2.2%	35.6%	NA	NA
2018	73.3%	-0.9%	\$147.19	3.2%	\$107.87	2.3%	35.0%	NA	NA
2019-1Q	68.3%	2.0%	\$143.57	3.9%	\$98.03	6.0%	32.7%	220	13.6%
2019-2Q	79.4%	0.1%	\$1 <i>5</i> 8. <i>57</i>	2.3%	\$125.84	2.4%	39.2%	70	4.2%
2019-3Q	76.8%	0.8%	\$147.74	1.8%	\$113.41	2.7%	34.3%	16	3.1%
2019-4Q	69.8%	-0.5%	\$150.83	1.3%	\$105.24	0.8%	34.7%	(89)	-1.7%
2019	73.5%	0.5%	\$150.40	2.2%	\$110.54	2.7%	35.6%	55	4.3%
2020-1Q	66.0%	-3.3%	\$152.34	6.1%	\$100.78	2.8%	34.7%	200	9.1%
2020-2Q	78.4%	-1.2%	\$159.11	0.3%	\$124.77	-0.9%	37.3%	(191)	-5.7%
2020-3Q	73.8%	-3.9%	\$152.29	3.1%	\$112.49	-0.8%	33.8%	(55)	-2.4%
2020-4Q	66.0%	-5.4%	\$157.72	4.6%	\$104.40	-0.8%	35.3%	54	0.8%
2020	71.1%	-3.3%	\$155.45	3.4%	\$110.46	-0.1%	35.4%	(15)	-0.5%
2021-1Q	65.0%	-1.6%	\$155.30	1.9%	\$101.10	0.3%	33.7%	(101)	-2.6%
2021-2Q	74.8%	-4.6%	\$161.33	1.4%	\$120.76	-3.2%	36.1%	(127)	-6.5%
2021-3Q	70.6%	-4.4%	\$153.98	1.1%	\$108.83	-3.3%	32.4%	(142)	-7.3%
2021-4Q	63.7%	-3.6%	\$159.33	1.0%	\$101.72	-2.6%	33.9%	(144)	-6.5%
2021	68.5%	-3.6%	\$1 <i>57</i> .55	1.3%	\$107.90	-2.3%	34.1%	(132)	-6.0%
2022-1Q	63.2%	-2.8%	\$1 <i>57</i> .16	1.2%	\$99.53	-1.6%	32.4%	(130)	-5.4%
2022-2Q	73.1%	-2.3%	\$163.80	1.5%	\$119.84	-0.8%	35.0%	(108)	-3.7%
2022-3Q	69.1%	-2.0%	\$156.78	1.8%	\$108.60	-0.2%	31.4%	(101)	-3.3%
2022-4Q	62.4%	-1.9%	\$162.50	2.0%	\$101.78	0.1%	32.9%	(94)	-2.7%
2022	67.0%	-2.3%	\$160.12	1.6%	\$107.20	-0.7%	33.0%	(110)	-3.9%
2023-1Q	61.9%	-2.0%	\$160.31	2.0%	\$99.58	0.0%	31.4%	(101)	-3.1%
2023-2Q	71.5%	-2.1%	\$166.94	1.9%	\$119.62	-0.2%	34.0%	(102)	-3.1%
2023-3Q	67.6%	-2.3%	\$159.61	1.8%	\$108.10	-0.5%	30.2%	(11 <i>5</i> )	-4.1%
2023-4Q	61.0%	-2.4%	\$165.27	1.7%	\$101.12	-0.6%	31.7%	(119)	-4.2%
2023	65.5%	-2.2%	\$163.09	1.9%	\$106.83	-0.3%	31.9%	(112)	-3.7%
2024-1Q	61.0%	-1.5%	\$162.96	1.7%	\$99.74	0.2%	30.2%	(122)	-3.7%
2024-2Q	70.8%	-1.1%	\$169.67	1.6%	\$120.26	0.5%	32.8%	(118)	-3.0%
2024-3Q	66.9%	-0.9%	\$162.19	1.6%	\$108.86	0.7%	28.9%	(127)	-3.5%
2024-4Q	60.5%	-0.8%	\$167.93	1.6%	\$101.91	0.8%	30.4%	(127)	-3.3%
2024	64.8%	-1.1%	\$165.75	1.6%	\$107.39	0.5%	30.6%	(125)	-3.4%

Source Lodging Analytics Research & Consulting, STR Global, Real Capital Analytics

Source: Lodging Analytics Research & Consulting, STR Global, Real Capital Analytics
\*Forecasts begin 2020; Quarterly EBITDA Margins estimated based on quarterly revenue allocation and annual EBITDA margins

<sup>\*</sup>Forceasts begin 2020-1Q; Quarterly EBITDA Margins estimated based on quarterly revenue allocation and annual EBITDA margins

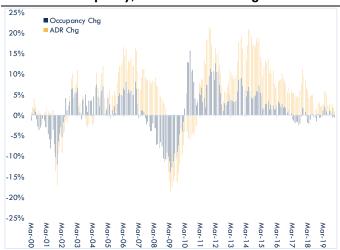


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### **Operating Results Review**

Over the past three years, Nashville RevPAR has increased by an annual rate of 3.5%, driven by a 0.3% decrease in occupancy and a 3.8% increase in ADR. Like the rest of the country, RevPAR growth gradually slowed over the past few years as occupancy has plateaued. The good news is that the recent heightened level of supply has been absorbed rather quickly. With a 2019 occupancy level of 73.5%, Nashville ranks 12th among the major markets. We believe the market will continue to have success absorbing new supply.

### Historical Occupancy, ADR and RevPAR growth



Source: Lodging Analytics Research & Consulting & STR Global

### **MSA Economic Summary**

Although Nashville's rate of economic growth has exceeded the U.S. average in recent years, aspects of the current expansion are moderate relative to the 1990s, when the metro benefitted from several large corporate relocations and stronger population growth. Regardless, outperformance is still forecasted, with local gross metropolitan product growth of 2.9% annually through 2024 vs. the U.S. average of 2.2% GDP growth.

The combination of softer population growth and a more restrictive mortgage climate has weighed on homebuilding, a key ingredient of local growth. Specifically, housing starts per 100,000 households during 2014-18 were almost 60% below the 1990-2001 average, compared to 32% nationally. This has contributed to eroding affordability, a new problem for historically low-cost Nashville. Conditions have become

quite strained in communities near major employment centers and especially within Fulton County.

Metro Nashville should see relief in the upcoming years as housing starts are forecast to accelerate over the next few years with average growth over the next five years of just over 10% annually. The challenge in the market is the availability of construction labor, which could limit upside. Aside from residential investment, the city is well positioned to benefit from the digital economy and media. In addition to several corporate relocations to the area in 2019, BlackRock announced it will develop a 1,000-person base in Nashville that will include a large cohort of tech positions. The metro has also become a center for motion picture production, driven by tax incentives.

#### **Largest Employers**

Company	# of Employees Locally
Vanderbilt University Medical Center	20,428
Nissan North America	10 <i>,75</i> 0
HCA Healthcare Inc.	10,613
Vanderbilt University	6,912
Saint Thomas Health	6,243
Community Health Systems	<b>4,7</b> 00
Randstad	4,557
Asurion	3,600
The Kroger Co.	3,523
National HealthCare Corp.	3,250
Shoney's	3,000
Electrolux Home Products	2,900
Bridgestone Americas	2,897
Lowe's Cos.	2,890

Source: Nashville Chamber of Commerce

#### **Key Economic Highlights Include:**

- Local GMP forecast to increase at a 2.9% CAGR through 2024
- Diversified economy with no one sector accounting for over 21% of the GMP structure
- The fastest growing sector in Nashville is Information Technology, which accounts for 4.5% of the broader local economy
- Employment growth will narrowly exceed the U.S. average during the next five years
- Population growth will exceed the regional and national average by a wide margin

#### **Major Local Developments:**

 Nashville Yards is scheduled to be completed in 2020 and includes over 3.5 million square feet of office space, over 1,000 residential units, more than 400,000 square feet of retail and over 1,100 hotel rooms. Amazon has signed on as an



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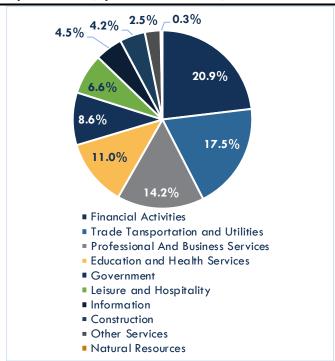
- anchor office tenant snatching up 500,000 square feet of space in the new development.
- Eakin Partners has embarked on a 30-acre, \$1
  billion development referred to as Century Farms
  just south of Antioch. The development is expected
  to be a build-to-suit office campus.

### GMP Growth (annualized, T4Q average)



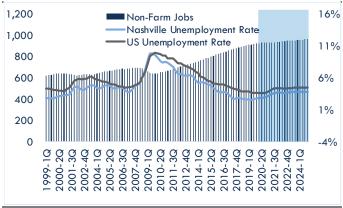
Source: Moody's Analytics

### Top Industries (by GMP contribution)



Source: Moody's Analytics

#### **Employment Picture, SA**



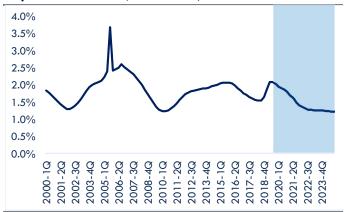
Source: Moody's Analytics

#### Consumer Price Index, Annualized



Source: Moody's Analytics

#### Population Growth (annualized)



Source: Moody's Analytics



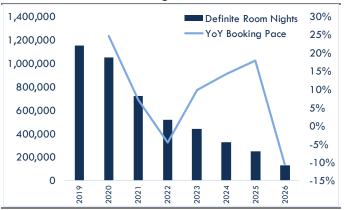
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### **Lodging Demand Drivers**

#### **Convention Center**

The Music City Center is a 2.1 million square-foot convention center, which opened in the heart of downtown Nashville in 2013. In 2019, the convention center generated 1.2 million room nights to the market and is currently pacing up almost 25% in 2020 and another 7% in 2021.

#### **Convention Center Bookings**

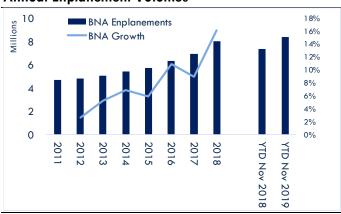


Source: Lodging Analytics Research & Consulting

#### **Air Traffic**

Nashville International Airport embarked on a \$1.2 billion expansion plan in 2016, which is slated to be completed in 2023. The plan is meant to enable the airport to keep pace with the growing demand seen in the market.

#### **Annual Enplanement Volumes**



Source: FlvNashville.com

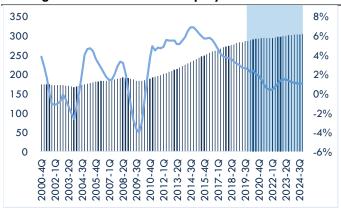
The Nashville International Airport is the 33rd largest airport in the country, by passenger volumes, but the consistent passenger volume growth is impressive and will lead it higher on that list in the coming years. Through November 2019, passenger volumes increased 14% year-to-date and over the prior three years they have

increased at an 11.9% CAGR and at an 8.0% CAGR since 2011. The current master plan calls for capacity enhancements to grow the airport from the current 9 million enplanement level over 30% to 12 million in a few years. Currently underway is the \$203 million expansion of Concourse D. This expansion will add six new gates to the airport and is expected to be completed in Summer 2020. We expect air traffic volumes to continue their upward trajectory for the next few years.

#### **Office Market**

Over the past ten years, Nashville's office using employment has grown by a 4.8% CAGR vs. the national CAGR of 1.8%.

### **Trailing Four Quarter Office Employment**



Source: Moody's Analytic

The outperformance is expected to continue over the next few years as well. In 2020, office employment is forecast to grow by 1.8% with a forward three-year growth CAGR of 1.1% and a forward five-year growth CAGR of 1.1%. Continued strength in office employment should translate into lodging demand across the market.

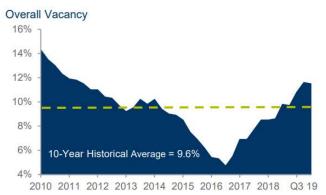
Given that outlook, it is not surprising that the office market is absorbing and expected to continue to absorb elevated supply growth. Leasing activity in the Nashville office market finished the year with a total of over 2.6 million square feet (msf). This was double the amount recorded in 2018, as companies continued to relocate and expand. During 4Q2019, the Midtown and Cool Springs/Franklin submarkets ranked among the highest for leasing activity, both totaling just over 300,000 square feet (sf). As developers raced to increase supply for Nashville's central business district (CBD), office space remained limited with the submarket posting 57,000 sf of leasing activity for the fourth quarter. However, new supply is coming to the CBD with over 1.6 msf currently under construction and 52.0% of it preleased going into 2020.



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### **Nashville Office Market Statistics**





Source: Cushman & Wakefield

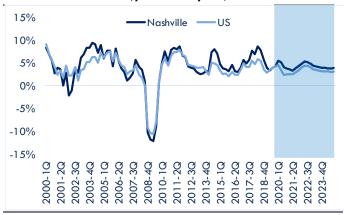
Consistent with that backdrop, overall gross asking rents increased meaningfully to \$28.45 per square foot (psf) in 4Q2019, up 6.5% from \$26.71 psf from 4Q2018. Class A rents reached another historic high, posting \$32.04 psf, a 7.7% increase year-over-year.

Due to limited available space and new construction in the urban core, Cushman & Wakefield expects direct asking rents to increase into 2020. Cushman and Wakefield also expects Office investment sales to increase as Nashville gains global recognition with PwC and Urban Land Institute ranking it as #3 best city for real estate investment.

### Other Economic Factors with a High Correlation to Lodging in the Nashville Market

**Retail sales growth** has historically had a strong correlation with lodging trends in Nashville. This is likely driven by the high leisure orientation of the market. Since 2000, retail sales growth has a 96% correlation with lodging ADR growth.

#### Retail Sales Growth (year-over year)



Source: Moody's Analytics

Since 2000, Nashville retail sales has experienced an average annual growth rate of 4.2%, exceeding the national average of 3.6%. That outperformance is expected to continue which should translate into continued leisure demand growth for the local lodging industry.

### **Lodging Supply**

### **Traditional Supply**

Nashville has been one of the hottest markets in the U.S. in terms of supply growth. With strong demand trends, supply has followed suit, growing at an average pace of 7.5% in 2019 and 6.1% since the middle of 2017. The good news is that those strong demand trends have made it possible for Nashville to absorb this elevated supply, as in 2019, occupancy actually increased slightly despite the 7.5% supply growth. However, we expect supply growth to remain elevated through 2023.

### **Traditional Lodging Supply Growth**

	1Q	2Q	3 <b>Q</b>	4Q	Year
2018	4.9%	4.9%	5.7%	6.1%	5.7%
2019	8.0%	7.7%	7.3%	7.1%	7.5%
2020	5.7%	6.9%	7.7%	9.4%	7.4%
2021	9.3%	8.0%	<b>7.</b> 1%	5.0%	7.3%
2022	4.4%	5.0%	5.0%	4.9%	4.8%
'19 - '22 '19 - '24		6.4% 5.2%			

Source: BuildCentral and Lodging Analytics Research & Consulting \*Forecasts begin 2020-1 Q

Following these high levels of supply growth that we expect to lead to occupancy and RevPAR declines, the market will get a supply reprieve and revert to its long-run average growth of 2.1% in 2024. Overall, 14.9% of Nashville's current room count is under construction and another 21.0% is in various Planning stages.



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Supply growth in Nashville is ranked X among the country's top 25 markets, highlighting heightened supply growth risk relative to other markets.

On a submarket level, the Nashville CBD is expected to see the most supply growth over the next few years. In fact, over one third of the CBD's current room supply is already under construction and a similar level is also in planning. In fact, the CBD accounts for 74% of all the rooms under construction in the market and 48% of all rooms in Planning. As the CBD submarket is the primary demand creator, we expect this level of supply growth to have a ripple effect throughout the whole market. While supply growth will peak in late 2020, we expect it to remain elevated through 2023, meaningfully limiting the market's upside over the next few years.

#### **Submarket Supply Growth**

	ln	ln				
	Constr.	Planning	2020	2021	2022	After
Nashville CBD, TN	37.2%	34.6%	24.8%	8.8%	9.3%	9.3%
Brentwood/Franklin, TN	13.0%	40.5%	9.8%	5.4%	10.9%	10.9%
Nashville I-65 North, TN	6.2%	11.1%	6.2%	1.5%	3.0%	3.0%
Nashville Other Areas, TN	5.6%	15.3%	3.2%	2.1%	4.1%	4.1%
I-24/Murfreesboro, TN	5.4%	16.3%	5.4%	2.2%	4.4%	4.4%
Nashville Airport, TN	4.9%	12.6%	4.2%	2.3%	3.4%	3.4%
Nashville	14.9%	21.0%	7.3%	7.3%	4.8%	4.7%

Source: BuildCentral and Lodging Analytics Research & Consulting

### **Major Hotel Developments**

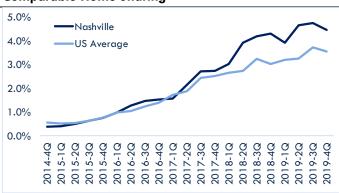
Hotel	Rooms	Development Phase	Projected Opening
Grand Hyatt @ Nashville Yards	591	Construction	4Q2020
SoBro Embassy Suites	506	Construction	1Q2021
Hotel Broadway	423	Construction	1Q2020
Drury Hotel SoBro	390	Construction	1Q2020
W Hotel	346	Construction	4Q2020
MGM Resort @ Nashville Yards	315	Planning	4Q2022
The Joseph Hotel	297	Construction	4Q2020
Hyatt Centric Downtown	252	Construction	2Q2021
Four Seasons Hotel	236	Construction	2Q2021

Source: BuildCentral and Lodging Analytics Research & Consulting

### **Home Sharing Supply**

Given Nashville's slight skew toward a leisure centric market, home sharing in the market currently has a more meaningful impact than the national average. Home sharing accounted for 4.5% of all accommodation revenues (defined as hotel comparable home sharing revenue + hotel rooms revenue) in Nashville in 4Q19 (latest available data) and has averaged 4.4% over the past twelve months. This compares to the national average of 3.5% in 4Q19 and 3.4% over the last twelve months. Of note, we have seen share continue steady upward trajectory, both in Nashville and nationally. However, the rate of growth has been faster in Nashville over the past two years, despite the increase in hotel rooms.

### Accommodations Revenue Allocated to Hotel Comparable Home Sharing



Source: Lodging Analytics Research & Consulting and AirDNA

These market share gains by the home sharing industry are driven by robust revenue growth. Not surprisingly, we have seen meaningful growth across the Nashville home sharing market, which has experienced revenue growth of 28% over the last twelve months on a 33% increase in hotel-comparable available room nights (supply). Meanwhile ADRs for hotel-comparable homes sharing units is down 1% over the same time period, illustrating that the revenue growth has been primarily fueled by an increase in supply. While those growth levels have experienced a gradual deceleration since the data began being tracked in late 2014, it remains robust.

The Nashville home sharing market share over the past twelve months ranks X among the top 25 markets and the growth rate over the top 25 markets ranks X.



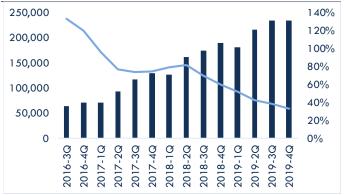
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### Hotel Comparable Home Sharing <u>Revenue</u> and YoY Growth on a Rolling 4-Quarter Basis



Source: Lodging Analytics Research & Consulting and AirDNA

### Hotel Comparable Home Sharing <u>Available Room</u> <u>Nights</u> and YoY Growth on a Rolling 4-Quarter Basis



Source: Lodging Analytics Research & Consulting and AirDNA

### Hotel Comparable Home Sharing <u>ADR</u> and YoY Growth on a Rolling 4-Quarter Basis



Source: Lodging Analytics Research & Consulting and AirDNA

#### **Home Sharing Regulation Update**

In August 2019, the Nashville City Council outlawed nonowner-occupied short-term rentals in residentially zoned developments. The new law grandfathers in those with existing city permits and takes effect January 1, 2020. While the law is encouraging for the hotel community, it lacks substantial penalty. The current penalty for operating a short-term rental in Nashville without a permit is \$50 per day of listing and a one-year suspension from obtaining a permit (if possible). Airbnb and other platforms have agreed to comply with the new law, which requires a permit identification be included in the listing. Additionally, permits do not transfer upon sale, meaning that grandfathered permits would expire upon transaction.

These factors should meaningfully limit Nashville's home sharing inventory, which we expect stabilize over the next couple of years as short-term rental investors avoid the market.

Of note, the City Council attributed the new law to housing affordability in Nashville, citing that investor-owned short-term rental properties have values up to 30% above residential properties.

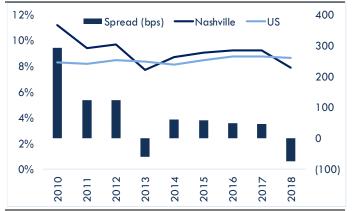
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### **Recent Transactions**

Nashville hotel cap rates have been on a steady decline during this entire lodging cycle. We believe that is driven by several factors:

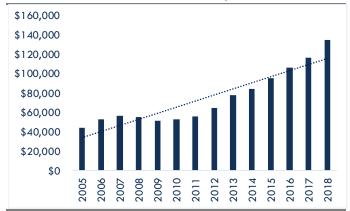
- National lodging cap rates have gradually declined over this time frame
- The emergence of the market as a year-round destination for corporate, group and leisure travelers, making it a true 7-day per week, 365day per year market
- Stronger economic growth than the national average
- Ample new hotel construction volumes are driving property values to replacement cost levels and above.

### **Historical Lodging Cap Rates**



Source: Lodging Analytics Research & Consulting & Real Capital Analytics

### Historical Hotel Transaction Values per Room



Source: Lodging Analytics Research & Consulting & Real Capital Analytics

As cap rates have declined and profits have improved, hotel values have climbed in the market. Recent transactions in the CBD have seen values at \$500K per room, while older limited service assets in more suburban locations, have traded at values under \$50K per room.

#### Recent Hotel Transactions (\$5 million and above)

Property Name	Date	Submarket	Units	Price (000)	Price/ Unit (000)	Buyer	Seller
DoubleTree Hotel Nashville Downtown	Dec-19	Nashville - CBD	341	\$139,000	\$408	AWH Partners	Walton Street Capital
Holiday Inn Express Nashville Airport	Dec-19	Nashville- Proper	207	\$24,100	\$116	Riller Capital	Starwood Capital
Embassy Suites Nashville Airport	Aug-19	Nashville - Proper	296	\$80,200	\$271	Square Mile Capital	Starwood Capital
Country Inn & Suites By Radisson	Aug-19	Nashville - Proper	65	\$6,100	\$94		Kalpesh R Patel,
Holiday Inn Nashville-Vanderbilt	Aug-19	Nashville - Proper	297	\$75,600	\$255	Vanderbilt University	Natchez West
The Hampton Inn & Suites Downtown	Jul-19	Nashville - CBD	207	\$101,500	\$490	Douglas Development, Triangle Capital Group, Nakash Holdings	SEDCO Holding, The LCP Group
DoubleTree Suites by Hilton Hotel	Apr-19	Nashville - Proper	138	\$13,433	\$97	Wexford Lodging Advisors, Trinity Private Equity	Hospitality Ventures Mgmt Grp
Country Inn & Suites	Mar-19	Nashville - Proper	53	\$6,700	\$126	Laxmi 37 LLC	Laxmi Investments
Hilton Garden Inn	Jan-19	Nashville - CBD	214	\$125,000	\$584	AVR Realty	Rockbridge Capital
Holiday Inn Express - Downtown	Jan-19	Nashville - CBD	287	\$117,500	\$409	Highland Capital Mgmt	Birchmont Cap Advisors

Source: Real Capital Analytics and LW Hospitality Advisors



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### **Revenue Forecast Models**

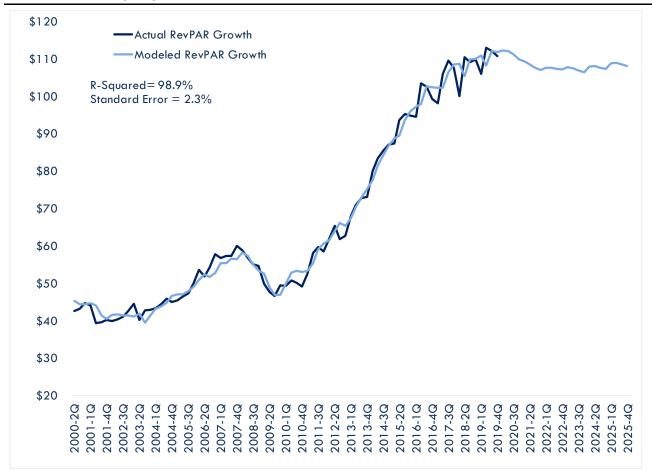
#### **RevPAR Growth Outlook**

Our seasonally adjusted RevPAR model is driven by the following key variables:

- MSA Office Employment (99.2% correlation)
- MSA Lodging Supply (92.9% correlation)
- MSA GMP Growth (96.7% correlation)
- MSA RevPAR on a 1Q lead (99.2% correlation)

Based on these variables, along with several others, we have created a regression forecast model that has a 98.9% R-Squared, indicating an extremely high prediction confidence level, within a standard error of 2.3%. Moody's Analytics forecasts a 3.0% 3-year CAGR for Real GMP and 2.9% for a 5-year CAGR. Moody's Analytics forecasts a 1.1% 3-year CAGR for Office Employment and 1.1% for a 5-year CAGR.

### RevPAR, Seasonally Adjusted



Source: Lodging Analytics Research & Consulting

### RevPAR Growth Sensitivity to Key Variables- 3-Year Outlook

		3-Year Supply CAGR								
		3.2%	4.2%	5.2%	6.2%	7.2%	8.2%	9.2%		
89	-0.4%	-2.0%	-2.5%	-3.0%	-3.4%	-4.0%	-4.5%	-5.0%		
Office Emp CAGR	0.1%	-1.2%	-1.7%	-2.2%	-2.6%	-3.1%	-3.7%	-4.2%		
Е	0.6%	-0.5%	-0.9%	-1.4%	-1.8%	-2.3%	-2.8%	-3.4%		
) Hi	1.1%	0.3%	-0.1%	-0.6%	-1.0%	-1.5%	-2.0%	-2.5%		
3-Year	1.6%	1.1%	0.7%	0.2%	-0.2%	-0.7%	-1.2%	-1.7%		
3-)	2.1%	1.9%	1.4%	1.0%	0.5%	0.1%	-0.4%	-0.9%		
	2.6%	2.6%	2.2%	1.8%	1.3%	0.9%	0.4%	-0.1%		

Source: Lodging Analytics Research & Consulting

## RevPAR Growth Sensitivity to Key Variables- 5-Year Outlook

				5-	Year Supply CA	GR		
		2.1%	3.1%	4.1%	5.1%	6.1%	7.1%	8.1%
Ę,	-1.9%	-4.5%	-5.1%	-5.8%	-6.5%	-7.3%	-8.2%	-9.1%
± =	-0.9%	-2.6%	-3.2%	-3.8%	-4.5%	-5.2%	-6.0%	-6.8%
e E	0.1%	-0.7%	-1.3%	-1.9%	-2.5%	-3.1%	-3.9%	-4.6%
Ĕ	1.1%	1.1%	0.6%	0.0%	-0.6%	-1.2%	-1.8%	-2.5%
2-Year Uffice Emp CAGK	2.1%	2.8%	2.3%	1.8%	1.3%	0.7%	0.1%	-0.5%
<u>,</u>	3.1%	4.5%	4.1%	3.6%	3.1%	2.6%	2.0%	1.4%
	4.1%	6.2%	5.8%	5.3%	4.9%	4.4%	3.8%	3.3%

Source: Lodging Analytics Research & Consulting



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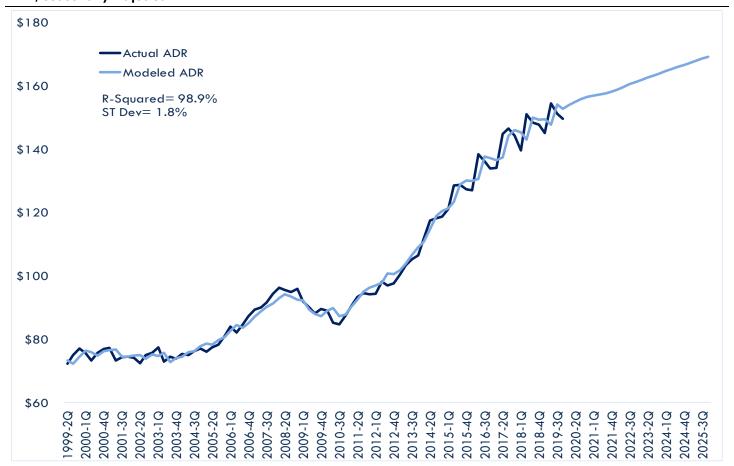
#### **ADR Growth Outlook**

Our seasonally adjusted ADR model is driven by the following key variables, among others:

- MSA Office Employment (98.9% correlation)
- MSA CPI Growth (89.7% correlation)
- MSA seasonally adjusted ADR on a 1Q lead (99.2% correlation)

Based on these variables and a few others, we have created a regression forecast model that has a 98.9% R-Squared, indicating an extremely high prediction confidence level, within a standard error of 1.8%. Moody's Analytics forecasts a 2.3% 3-year CAGR for Nashville CPI and 2.3% for a 5-year CAGR. Moody's Analytics forecasts a 1.1% 3-year CAGR for Office Employment and 1.1% for a 5-year CAGR.

### ADR, Seasonally Adjusted



Source: Lodging Analytics Research & Consulting

ADR Growth Sensitivity to Key Variables- 3-Year Outlook

				3-Year	CPI Nashvill	e CAGR		
		-0.7%	0.3%	1.3%	2.3%	3.3%	4.3%	5.3%
AGR	-0.4%	0.4%	0.5%	0.7%	0.8%	0.9%	1.1%	1.2%
Office Emp CAGR	0.1%	0.8%	1.0%	1.1%	1.2%	1.4%	1.5%	1.7%
e Em	0.6%	1.3%	1.4%	1.5%	1.7%	1.8%	1.9%	2.1%
Offic Offic	1.1%	1.7%	1.8%	2.0%	2.1%	2.2%	2.4%	2.5%
3-Year	1.6%	2.1%	2.3%	2.4%	2.5%	2.7%	2.8%	2.9%
ج. ح	2.1%	2.6%	2.7%	2.8%	3.0%	3.1%	3.2%	3.4%
	2.6%	3.0%	3.1%	3.3%	3.4%	3.5%	3.7%	3.8%

Source: Lodging Analytics Research & Consulting

ADR Growth Sensitivity to Key Variables- 5-Year Outlook

				5-Year	CPI Nashvill	e CAGR		
		-0.7%	0.3%	1.3%	2.3%	3.3%	4.3%	5.3%
\GR	-1.9%	-1.3%	-1.2%	-1.0%	-0.8%	-0.7%	-0.5%	-0.3%
Emp CAGR	-0.9%	-0.4%	-0.2%	-0.1%	0.1%	0.3%	0.4%	0.6%
e Em	0.1%	0.6%	0.7%	0.9%	1.1%	1.2%	1.4%	1.6%
Office	1.1%	1.6%	1.7%	1.9%	2.0%	2.2%	2.3%	2.5%
5-Year	2.1%	2.6%	2.7%	2.8%	3.0%	3.1%	3.3%	3.4%
5-1	3.1%	3.5%	3.7%	3.8%	3.9%	4.1%	4.2%	4.4%
	4.1%	4.5%	4.6%	4.8%	4.9%	5.0%	5.2%	5.3%

Source: Lodging Analytics Research & Consulting



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Detailed RevPAR and ADR forecasts by quarter and by year through 2024 are available on page 2.

#### **Occupancy Growth Outlook**

Using our RevPAR and ADR growth outlooks we derive our occupancy outlook. Using our Supply growth forecast as well, we back into our demand growth outlook.

### Supply, Demand and Occupancy Forecast

	Cl.	D d	-	0
	Supply Growth	Demand Growth	<b>0</b>	Occupancy Growth
0010.10			Occupancy	
2018-1Q	4.9%	2.8%	66.9%	-2.1%
2018-2Q	4.9%	4.8%	79.3%	-0.1%
2018-3Q	5.7%	4.1%	76.1%	-1.6%
2018-4Q	6.1%	5.9%	70.1%	-0.3%
2018	5.7%	4.7%	73.3%	-0.9%
2019-1Q	8.0%	10.0%	68.3%	2.0%
2019-2Q	7.7%	7.8%	79.4%	0.1%
2019-3Q	7.3%	8.1%	76.8%	0.8%
2019-4Q	7.1%	6.6%	69.8%	-0.5%
2019	7.5%	8.1%	73.5%	0.5%
2020-1Q	5.7%	2.3%	66.0%	-3.3%
2020-2Q	6.9%	5.7%	78.4%	-1.2%
2020-3Q	7.7%	3.8%	73.8%	-3.9%
2020-4Q	9.4%	4.0%	66.0%	-5.4%
2020	7.4%	4.1%	71.1%	-3.3%
2021-1Q	9.3%	7.7%	65.0%	-1.6%
2021-2Q	8.0%	3.4%	74.8%	-4.6%
2021-3Q	7.1%	2.7%	70.6%	-4.4%
2021-4Q	5.0%	1.4%	63.7%	-3.6%
2021	7.3%	3.7%	68.5%	-3.6%
2022-1Q	4.4%	1.6%	63.2%	-2.8%
2022-2Q	5.0%	2.7%	73.1%	-2.3%
2022-3Q	5.0%	2.9%	69.1%	-2.0%
2022-4Q	4.9%	3.0%	62.4%	-1.9%
2022	4.8%	2.5%	67.0%	-2.3%
2023-1Q	4.8%	2.9%	61.9%	-2.0%
2023-2Q	4.8%	2.7%	71.5%	-2.1%
2023-3Q	4.7%	2.5%	67.6%	-2.3%
2023-4Q	4.7%	2.3%	61.0%	-2.4%
2023	4.8%	2.6%	65.5%	-2.2%
2024-1Q	2.1%	0.6%	61.0%	-1.5%
2024-2Q	2.1%	1.0%	70.8%	-1.1%
2024-3Q	2.1%	1.2%	66.9%	-0.9%
2024-4Q	2.1%	1.2%	60.5%	-0.8%
2024	2.1%	1.0%	64.8%	-1.1%

Source: Lodging Analytics Research & Consulting, STR Global and BuildCentral

\*Forecasts begin 4Q-2020

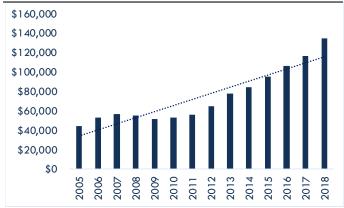
### **EBITDA Forecast**

According to Smith Travel Research, in 2018, Nashville generated an average Hotel EBITDA margin of 35.0% which ranked as #X among the top 25 markets and is 700 bps above the national average. The primary drivers of EBITDA growth, in addition to the top line, are labor and property taxes. Labor accounts for 40% of total costs in the market and property taxes account for 4.5% of the overall cost structure.

### **Property Taxes**

The 2019 property tax rate for commercial property in Nashville was 3.155% and based on 40% of the appraised property value. Despite a shortfall in the city operating budget (property taxes fund 46% of the budget), the Metro Council voted against a tax rate increase in summer 2019. Given the budgetary shortfall, there is risk to tax rate increases in the near term. We build that risk along with the expectation for appraised values across the market to continue to rise. Given risk to an increase to the tax rate, we forecast a 5.1% property tax CAGR over the next five years.

### Historical Hotel Transaction Values per Room



Source: Lodging Analytics Research & Consulting & Real Capital Analytics

### **Labor Costs**

Labor is the primary factor driving expense growth in Nashville. Accounting for 40% of total hotel costs, increases in labor costs across the lodging industry in this market will continue to limit profit growth.

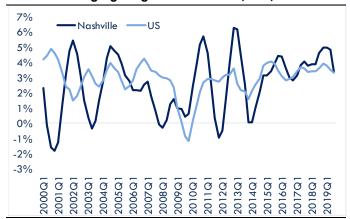
Nashville's labor wages across the lodging industry on a per employee basis have recently been growing at a faster rate than the national average. In fact, over recent quarters, we have seen Nashville's wage growth rate increase in the mid-single digits. We believe this relatively larger wage rate increase is fueled by lower-than-



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national unemployment rates coupled with continued elevated supply growth, which increases the demand for Lodging employees.

### Historical Lodging Wage Rate Growth (TTM)



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

Given that those factors are unlikely to change, we continue to expect Nashville Lodging wage rates to continue to rise at a clip faster than the national average. We forecast a 4.5% wage rate CAGR over the next five years, which translates into a 1.5% labor cost CAGR over the same time frame, when accounting for changing occupancies and cost flexing in negative environments.

### Nashville Lodging Wage Rate Growth Forecast

	1 Q	2Q	3 <b>Q</b>	4Q	Annual
2018	4.3%	4.2%	7.0%	4.5%	5.0%
2019	4.3%	3.7%	1.0%	4.0%	3.2%
2020	4.4%	5.6%	5.9%	5.4%	5.3%
2021	4.6%	4.1%	3.7%	3.7%	4.0%
2022	3.6%	3.9%	4.2%	4.4%	4.0%
2023	4.7%	4.7%	4.6%	4.5%	4.6%
2024	4.5%	4.5%	4.6%	4.6%	4.5%

Source: Lodging Analytics Research & Consulting & Moody's Analytics \*Forecasts begin 2020-1 Q

### **Expense Growth Forecast**

Our expense growth forecast is primarily driven by the Nashville market hotel cost structure and our expected increases in property taxes and labor costs in the markets. We also assume a standard level of cost flexing related to changing occupancies and negative environments. As a result, despite higher wage growth rates than the national average, we forecast an expense CAGR over the next five years of just 0.9%, well below the 3.0% national average.

#### Nashville Expense Growth Forecast

	1 Q	2Q	3 <b>Q</b>	4Q	Annual
2020	-0.3%	2.3%	0.0%	-1.6%	0.2%
2021	1.9%	-1.3%	-1.2%	-0.4%	-0.3%
2022	0.4%	0.9%	1.3%	1.5%	1.0%
2023	1.6%	1.4%	1.2%	1.1%	1.3%
2024	1.9%	2.3%	2.5%	2.7%	2.4%

Source: Lodging Analytics Research & Consulting

#### **Hotel EBITDA Growth Forecast**

Using our RevPAR and Expense forecasts, we derive our Hotel EBITDA growth and margin forecast.

#### Nashville Hotel EBITDA Margin Change Forecast (bps)

	1Q	2Q	3Q	4Q	Annual
2020	200	(191)	(55)	54	(15)
2021	(101)	(127)	(142)	(144)	(132)
2022	(130)	(108)	(101)	(94)	(110)
2023	(101)	(102)	(115)	(119)	(112)
2024	(122)	(118)	(127)	(127)	(125)

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

#### **Nashville EBITDA Growth Forecast**

	1 Q	2Q	3Q	4Q	Annual
2020	9.1%	-5.7%	-2.4%	0.8%	-0.5%
2021	-2.6%	-6.5%	-7.3%	-6.5%	-6.0%
2022	-5.4%	-3.7%	-3.3%	-2.7%	-3.9%
2023	-3.1%	-3.1%	-4.1%	-4.2%	-3.7%
2024	-3.7%	-3.0%	-3.5%	-3.3%	-3.4%

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



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### **Investment Forecast Model**

### Nashville Cap Rates

As mentioned earlier, Nashville hotel cap rates have been on a steady decline during this entire lodging cycle. The primary macro factors driving cap rate changes in Nashville include both factors that are national in nature and local in nature. The national macro factors include:

- Broader national commercial real estate values;
   Moody's Commercial Property Price Index (-53.4% correlation)
- Baa Bond yields (15.0% correlation)

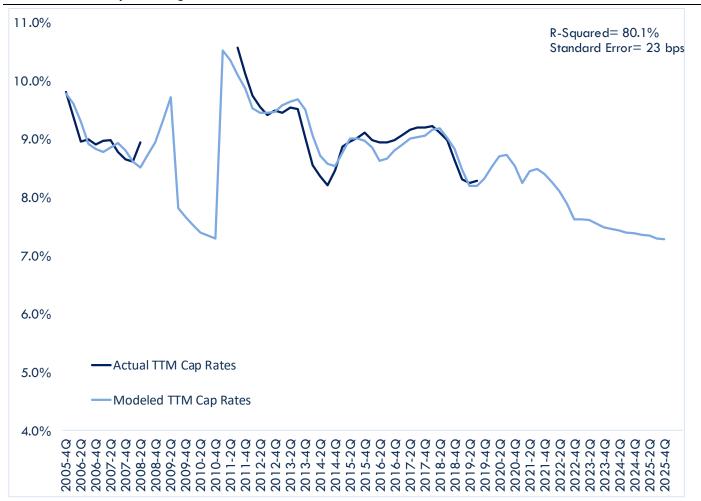
Local factors impacting Nashville cap rates most include:

- MSA Unemployment Rate (58.8% correlation)
- Prior 4 quarter Nashville Cap Rates Spreads over Baa Bond yields (46.1% correlation)
- MSA Real GMP (-37.0% correlation)

Based on these variables, and others we have created a regression forecast model for Nashville cap rates that has an 80.1% R-Squared, indicating a high prediction confidence level, within a standard error of 23 bps.

We believe this model offers a highly accurate forecast for Nashville cap rates, given the limited data points, including the absence of transactions during the Great Recession. Moody's Analytics forecasts a 3.0% 3-year CAGR for Real GMP and 2.9% for a 5-year CAGR. Moody's Analytics forecasts an 85-bp 3-year expansion CAGR for the Nashville unemployment rate and a 58-bp 5-year expansion CAGR.

### Nashville Hotel Cap Rate Regression Forecast



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### Cap Rate Change Sensitivity to Key Variables- 3-Year Outlook (in bps)

				3-Year	r Real GMP	CAGR		
		0.0%	1.0%	2.0%	3.0%	4.0%	5.0%	6.0%
Chg	(95)	(56)	(71)	(87)	(103)	(120)	(136)	(154)
3-Year Unempmt Rt Chg	(35)	(45)	(60)	(76)	(92)	(108)	(125)	(143)
mdu	25	(34)	(49)	(65)	(81)	(97)	(114)	(132)
Unei	85	(23)	(38)	(54)	(70)	(86)	(103)	(121)
ear	145	(12)	(27)	(43)	(59)	(75)	(92)	(110)
3-7	205	(1)	(16)	(32)	(48)	(64)	(81)	(98)
	265	10	(5)	(21)	(37)	(53)	(70)	(87)

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

### Cap Rate Change Sensitivity to Key Variables- 5-Year Outlook (in bps)

				5-Yea	r Real GMP	CAGR		
		-0.1%	0.9%	1.9%	2.9%	3.9%	4.9%	5.9%
Chg	(122)	(71)	(96)	(123)	(151)	(180)	(211)	(243)
5-Year Unempmt Rt Chg	(62)	(53)	(78)	(105)	(132)	(162)	(192)	(224)
mdu	(2)	(34)	(59)	(86)	(114)	(143)	(174)	(206)
Uner	58	(16)	(41)	(68)	(95)	(125)	(155)	(187)
ear	118	3	(23)	(49)	(77)	(106)	(137)	(169)
5-Y	178	21	(4)	(31)	(59)	(88)	(118)	(151)
	181	22	(3)	(30)	(58)	(87)	(117)	(150)

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

#### **Investment Value Change**

Based on our EBITDA forecasts and cap rate forecasts, we derive our property value forecasts for the Nashville market. Overall, we forecast property values to decrease by a 3.0% CAGR over the next three years and by a 1.2% CAGR over the next five years. That translates to a 5.6% decrease in hotel values over the next five years. This ranks as the X highest appreciation value across the 25 major U.S. hotel markets over the next three years, and X highest over the next five years.

### **Property Value Change Forecast**

				Asset Value			
					Change		
	EBITDA %		Cap Rate		from 2019		
	Chg	Cap Rate	Chg (bps)	YoY Change	Base		
2019	4.3%	8.5%	(11)	-	-		
2020	-0.5%	8.3%	(23)	2.3%	2.3%		
2021	-6.0%	8.6%	32	-9.5%	-7.4%		
2022	-3.9%	8.4%	(23)	-1.3%	-8.6%		
2023	-3.7%	8.0%	(43)	1.4%	-7.3%		
2024	-3.4%	7.6%	(41)	1.8%	-5.6%		

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



## MARKET INTELLIGENCE REPORT



**APPENDIX** 



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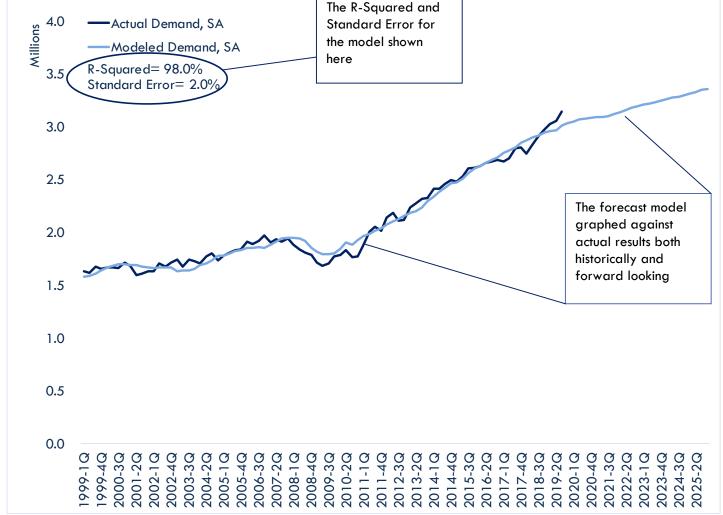
### **Interpreting Our Forecasts**

We use regression-based forecasting to drive our industry and market outlooks. Using this methodology, we look beyond correlation relationships between variables to causal relationships. We analyze dozens of macro and industry-specific data sets to determine relationships with the lodging indictors we are forecasting. Not only do we analyze these variables on a contemporaneous basis, but also on various lead times.

#### **Reading Our Models**

Each of our regression forecast models is graphed and shown just as below. 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 variations of the forecast variable. However, there are other factors that come into play, including the standard error, the T Test and the P Values. The standard error is a metric used to understand how inaccurate a model can be. The forecast will be within the standard error of the actual result 95.0% of the time. In other words, if a model has a 5.0% standard error, the forecast output is within 5.0% of the actual results 95.0% of the time. The smaller the standard error, the better. The standard error will also help the reader understand the prediction intervals of the forecast.





Source: Lodging Analytics Research & Consulting



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In addition to showing a chart plotting the model's forecast with actuals, historically and forward looking, we always share both our R-Squared and the standard error for the model so that the reader knows how accurate our models are. We believe transparency in the accuracy of our models is important and should give the reader confidence that our forecasts are extremely accurate. See below as an example. Additionally, our models comply with statistical modelling proficiency standards as it relates to other tests that can be conducted, including T Tests and P Values.

In the same effort to be transparent, we share the key drivers of each forecast model, their correlations with the output variable (the metric we are forecasting) and provide sensitivity tables. In some cases, those drivers are leading indicators to our lodging forecasts, and in other cases they are contemporaneous indicators. Some examples of these drivers are:

- Gross Metropolitan Product- a measure of economic growth in the market
- Office Employment- represents industries most likely to drive lodging demand, both to the market and from it
- CPI an inflationary metric that impacts pricing
- Retail Sales a measure of discretionary spend in the market
- Private Non-Farm Employment overall jobs growth in the market is a key economic metric
- Credit Risk Spreads- A measure of risk aversion or engagement across the country
- Household Income a measure of economic growth in the market
- Bond Yields- Another measure of risk aversion across the country
- Population positive net migration can cause a need for more accommodations
- Exchange Rates can impact the affordability of US destinations vs. other global destinations
- Foreign Direct Investment into the US A component representing the flow of investment funds into the US

Industry related forecasts that are drivers in some of our models are as follows and are sometimes applied contemporaneously and sometimes as a leading indicator:

- Occupancy can often impact pricing power
- ADR more than anything, pricing strength begets pricing strength across the industry, as the human

element of the industry comes into play. A hotel able to grow rate aggressively in one quarter is unlikely to grow conservative the next. Pricing strength also impacts profitability which can impact cap rates in a market.

- RevPAR- similar to ADR, a hotel able to grow RevPAR aggressively in one quarter is unlikely to grow conservative the next. RevPAR strength also impacts profitability which can impact cap rates in a market.
- Group demand tied to citywide pacing data- for group-centric markets, Citywide demand can be the primary driver for swings in operating fundamentals.
- Home sharing supply and revenue- recently the impact of home sharing is showing in certain leisure sensitive markets, particularly in the ability to drive pricing.

While the models are tested for accuracy backward looking, the forecasts are driven by forecasts for the model drivers going forward. As a result, all industry forecasts will only be as accurate as the forecasts for the model drivers. Our economic and demographic forecasts come from Moody's Analytics, while industry related forecasts come from LARC. The sensitivity tables provided help the reader understand what the forecast would look like under different forecast assumptions for key economic variables.

### Demand Growth Sensitivity to Key Variables- 3-Year Outlook

				3-Year	Retail Sale	es CAGR		
		1.2%	2.2%	3.2%	4.2%	5.2%	6.2%	7.2%
/GR	-1.9%	-2.1%	-1.8%	-1.4%	-1.1%	-0.7%	-0.3%	0.0%
D d	-0.9%	-1.2%	-0.9%	-0.5%	-0.2%	0.2%	0.6%	0.9%
Office Emp CAGR	0.1%	-0.2%	0.1%	0.4%	0.8%	1.1%	1.5%	1.9%
Offic	1.1%	0.7%	1.1%	1.4%	1.7%	2.1%	2.4%	2.8%
3-Year (	2.1%	1.7%	2.0%	2.3%	2.7%	3.0%	3.4%	3.7%
3-₹	3.1%	2.7%	3.0%	3.3%	3.6%	4.0%	4.3%	4.7%
	4.1%	3.7%	4.0%	4.3%	4.6%	4.9%	5.3%	5.6%

Source: Lodging Analytics Research & Consulting

Using the above table as an example, you can see based on the center box in the table, we assume a 4.2% 3-year retail sales CAGR going forward in our model and a 1.1% 3-year office employment CAGR. If you disagree with our assumptions, the below sensitivity table shows the demand growth forecast assuming a wider range of assumptions. For example, at a 1.2% 3-year retail sales CAGR and a (1.9)% office employment CAGR, our demand forecast CAGR changes from 1.7% to (2.1)%. We provide these



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sensitivity tables on three-year and five-year CAGRs for the key model drivers of all our regression forecasts, in case you have a more bullish or bearish view than Moody's Analytics.

### **Understanding our Expense Forecasts**

Our baseline expense growth model assumes 50% of labor costs are set at the current labor expense ratio to revenues. The other 50% of labor costs flex with occupancy, so as occupancy declines, labor costs will

decline for both calculations, but costs for the calculations tied to occupancy rather than revenues will decline faster. The same is the case for periods when occupancy increases. These changes are also adjusted by our wage growth forecast. Property taxes are forecasted based on understanding of current municipal budgets, property tax calculations and forecasts for property values. Similar to labor, we also flex other costs based on occupancy and increase them based on current forecasts for MSA CPI-U.

### Glossary

Term	Definition
ADR	Average Daily Rate- room revenue divided by paid rooms occupied
CAGR	Compound annual growth rate- annual growth rate over a period of time longer than one year, compounded annually
Cap Rate	A common valuation metric in the commercial real estate industry calculated as net property income divided by property value
Correlation	A statistical that measures the degree to which two variables move in relation to each other
EBITDA Margin	A profitability metric calculated as Hotel EBITDA divided by Hotel Revenues
FF&E Reserve	Reserve account for furniture fixtures and equipment replacement and repair
GMP	Gross Metropolitan Product is a monetary measure of the value of all final goods and services produced within a metropolitan statistical area during a specified period
Hotel EBITDA	Hotel Earnings Before Interest Taxes, Depreciation and Amortization- A key profit metric for the lodging industry that is calculated as hotel revenues less hotel expenses, excluding the FF&E reserve
Hotel-Comparable Home sharing	Entire units listed on-line for short-term rental that are no larger than a 1 bedroom apartment
In Construction	A property that is under construction but yet to open
In Planning	A property that has yet to begin the construction process but has begin the process of getting local municipal approvals needed to begin construction
MSA	Metropolitan Statsistical Area- An urban market, inclusive of regional locations that are tied to the urban cenbter ecoiniically, but necessarily administratively
Occupancy	Paid rooms occupied in a given period divided by available rooms in the same period
RevPAR	Revenue per Available Room- rooms revenue divided by available rooms
R-squared	A statistical measure that represents the proportion of the variance for a dependent variable that's explained by independent variables in a regression model
Standard Error	a measure of the statistical accuracy of an estimate, equal to the standard deviation of the theoretical distribution of a large population of such estimates
Supply	Average daily room nights available per quarter, represented as a change over the previous year, same quarter, except annually

Source: Lodging Analytics Research & Consulting

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