LODGING ANALYTICS RESEARCH & CONSULTING

MARKET INTELLIGENCE REPORT

Minneapolis, MN

DECEMBER 2020

LODGING ANALYTICS RESEARCH & CONSULTING

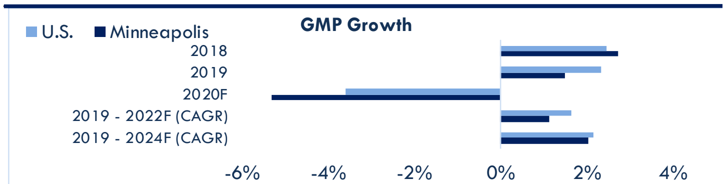
Market Intelligence Report

www.larcanalytics.com | information@larcanalytics.com

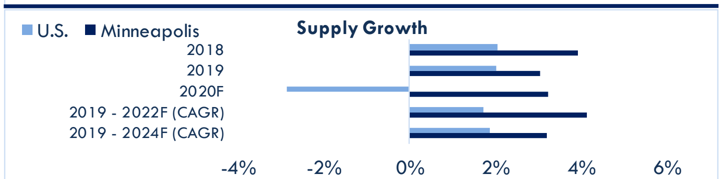
Minneapolis Summary

Pandemic-induced underperformance in 2020 will be followed by elevated supply growth limiting top-line fundamentals during the recovery. Despite that, we still expect Minneapolis fundamentals, Hotel EBITDA and values to recover (or just about) to 2019 levels by 2023 on the strength of solid economic expansion. However, 2024 send the market in reverse on all metrics as demand growth meaningfully slows. Asa result, Minneapolis hotel values will decrease at a 1.2% compound annual growth rate (CAGR) over the next five years (ranking 17th of 26 markets).

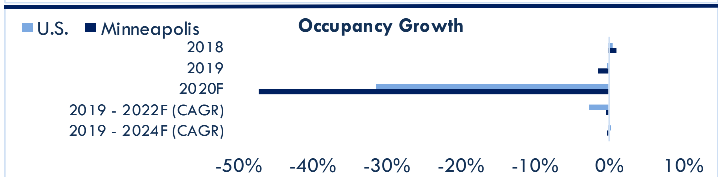
Minneapolis Summary Forecast Charts & Commentary

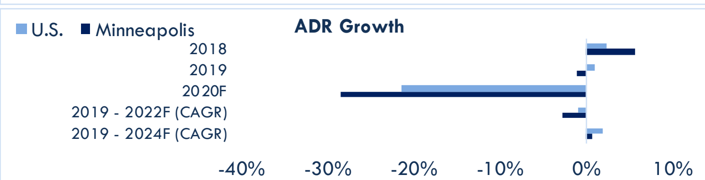


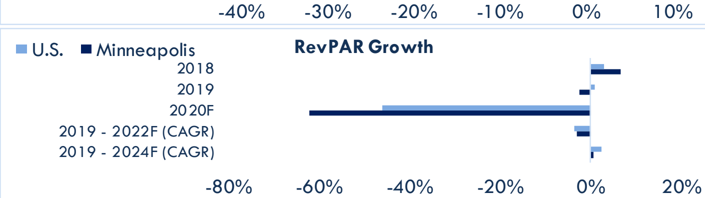
Minneapolis' gross metropolitan product (GMP) is forecast to recover at a faster pace than the national average following a sharper 2020 decline. Over the next five years, *Minneapolis' economic growth ranks 15th of the top 26 markets.*



Economic supply growth is expected to accelerate meaningfully in 2020 and remain elevated in 2021 before beginning to moderate. *Minneapolis' net supply growth ranks 5th among the top 26 markets, through 2024.*





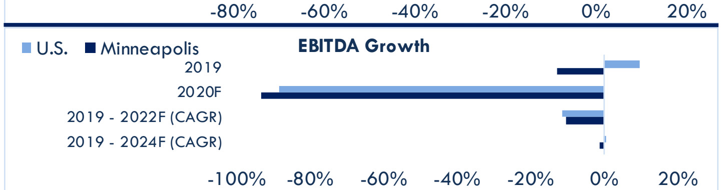


Following a sharp 2020 decline driven by the pandemic, elevated supply growth will limit the market's operating fundamentals, which we expect to trail national averages. However, stronger economic growth during the recovery will ultimately drive ADR and RevPAR to recover to 2019 levels by 2023, while occupancy does not recover to 2019 levels within the next five years. In 2024, we expect growth to meaningfully slow in Minneapolis.

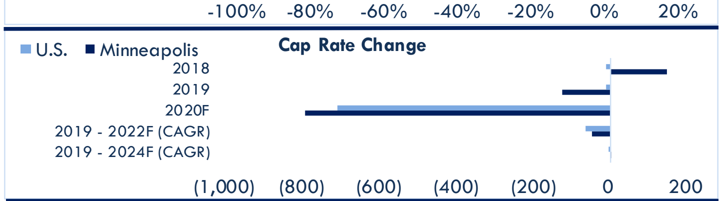
Minneapolis' occupancy outlook ranks 13th of the 26 major markets over the next five years.

Minneapolis' ADR outlook ranks 19th of the 26 major markets over the next five years.

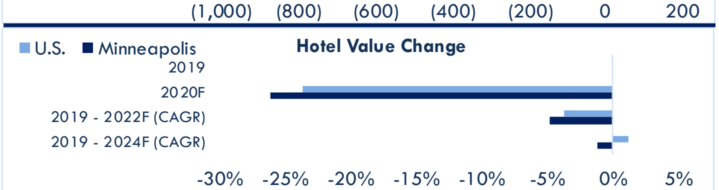
Minneapolis' RevPAR outlook ranks 19th of the 26 major markets over the next five years.



Despite a more favorable expense growth forecast, the impact from softer top-line fundamentals will limit EBITDA growth, which we expect to lag many major markets and the national average. *Minneapolis' Hotel EBITDA CAGR through 2024, ranks 16th of the 26 major markets.*



Minneapolis hotel cap rates are forecast to drop with declining EBITDA in 2020, then gradually recovering to their pre-virus levels by 2024. *Minneapolis' cap rate compression/expansion ranks 15th among the top 26 markets over the next five years.*



Hotel values over the next 3-year and 5-year periods, are forecast to decrease by a CAGR of 4.8% and by a CAGR of 1.2%, respectively, *ranking 17th among the major markets for value growth over the next five years.*

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

Minneapolis Forecast Summary *(forecasts begin 2020)*

	Occupancy	% Chg	ADR	% Chg	RevPAR	% Chg	EBITDA Margin	Chg (bps, YoY)	EBITDA % Chg	Cap Rate	Cap Rate Chg (bps)	Value Change (from 2019 Base)
2018	67.6%	1.0%	$122.66	5.8%	$82.96	6.8%	22.4%	NA	NA	9.9%	147	-
2019	66.6%	-1.3%	$121.46	-1.0%	$80.93	-2.4%	20.0%	(238)	-12.7%	8.7%	(124)	-
2020 F	*35.2%*	*-47.2%*	*$86.89*	*-28.5%*	*$30.60*	*-62.2%*	*3.6%*	*(1,639)*	*-93.2%*	*0.8%*	*(789)*	*-26.1%*
2021 F	*54.4%*	*54.4%*	*$102.63*	*18.1%*	*$55.81*	*82.4%*	*12.4%*	*880*	*526.5%*	*4.4%*	*364*	*-16.2%*
2022 F	*66.1%*	*21.5%*	*$111.92*	*9.1%*	*$73.96*	*32.5%*	*15.9%*	*345*	*69.4%*	*7.3%*	*286*	*-13.7%*
2023 F	*66.4%*	*0.6%*	*$123.49*	*10.3%*	*$82.06*	*11.0%*	*19.7%*	*384*	*37.8%*	*8.3%*	*100*	*4.6%*
2024 F	*66.0%*	*-0.6%*	*$126.40*	*2.4%*	*$83.46*	*1.7%*	*18.5%*	*(123)*	*-4.6%*	*8.8%*	*48*	*-5.7%*

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

Minneapolis Quarterly Operating Forecast Summary *(forecasts begin 2020-4Q)*

	Occupancy	% Chg	ADR	% Chg	RevPAR	% Chg	EBITDA Margin*	Chg (bps, YoY)	EBITDA % Chg
2018-1Q	60.8%	4.5%	$128.32	18.9%	$77.97	24.2%	25.1%	NA	NA
2018-2Q	72.1%	2.1%	$120.79	3.1%	$87.11	5.2%	21.6%	NA	NA
2018-3Q	76.4%	-1.3%	$125.61	3.0%	$95.92	1.7%	24.9%	NA	NA
2018-4Q	61.0%	-0.6%	$115.78	1.6%	$70.60	1.0%	17.0%	NA	NA
2018	**67.6%**	**1.0%**	**$122.66**	**5.8%**	**$82.96**	**6.8%**	**22.4%**	**NA**	**NA**
2019-1Q	57.9%	-4.7%	$109.13	-15.0%	$63.17	-19.0%	11.2%	(1,384)	-63.7%
2019-2Q	71.7%	-0.6%	$128.28	6.2%	$91.94	5.5%	24.7%	306	20.5%
2019-3Q	78.0%	2.1%	$128.19	2.1%	$99.99	4.2%	24.6%	(34)	2.8%
2019-4Q	59.2%	-3.0%	$116.17	0.3%	$68.74	-2.6%	15.0%	(198)	-14.0%
2019	**66.6%**	**-1.3%**	**$121.46**	**-1.0%**	**$80.93**	**-2.4%**	**20.0%**	**(238)**	**-12.7%**
2020-1Q	45.4%	-21.6%	$104.73	-4.0%	$47.54	-24.7%	2.2%	(903)	-85.3%
2020-2Q	23.8%	-66.8%	$71.60	-44.2%	$17.04	-81.5%	-15.5%	(4,013)	-111.6%
2020-3Q	35.4%	-54.7%	$81.88	-36.1%	$28.95	-71.0%	12.1%	(1,253)	-85.8%
2020-4Q F	*36.3%*	*-38.6%*	*$79.47*	*-31.6%*	*$28.86*	*-58.0%*	*8.4%*	*(659)*	*-76.4%*
2020 F	***35.2%***	***-47.2%***	***$86.89***	***-28.5%***	***$30.60***	***-62.2%***	***3.6%***	***(1,639)***	***-93.2%***
2021-1Q F	*36.5%*	*-19.5%*	*$89.56*	*-14.5%*	*$32.72*	*-31.2%*	*-2.8%*	*(501)*	*-187.9%*
2021-2Q F	*56.7%*	*138.2%*	*$100.58*	*40.5%*	*$57.00*	*234.6%*	*11.0%*	*2,641*	*-337.0%*
2021-3Q F	*68.4%*	*93.5%*	*$108.60*	*32.6%*	*$74.30*	*156.7%*	*18.7%*	*665*	*297.9%*
2021-4Q F	*55.9%*	*53.9%*	*$105.94*	*33.3%*	*$59.20*	*105.2%*	*14.1%*	*563*	*242.4%*
2021 F	***54.4%***	***54.4%***	***$102.63***	***18.1%***	***$55.81***	***82.4%***	***12.4%***	***880***	***526.5%***
2022-1Q F	*56.9%*	*55.8%*	*$105.58*	*17.9%*	*$60.08*	*83.6%*	*10.4%*	*1,322*	*-780.9%*
2022-2Q F	*68.6%*	*21.0%*	*$111.72*	*11.1%*	*$76.62*	*34.4%*	*16.4%*	*545*	*101.3%*
2022-3Q F	*77.0%*	*12.6%*	*$116.71*	*7.5%*	*$89.90*	*21.0%*	*20.2%*	*143*	*30.2%*
2022-4Q F	*61.8%*	*10.6%*	*$112.01*	*5.7%*	*$69.23*	*16.9%*	*14.1%*	*8*	*17.6%*
2022 F	***66.1%***	***21.5%***	***$111.92***	***9.1%***	***$73.96***	***32.5%***	***15.9%***	***345***	***69.4%***
2023-1Q F	*59.6%*	*4.8%*	*$115.36*	*9.3%*	*$68.78*	*14.5%*	*14.2%*	*376*	*55.8%*
2023-2Q F	*69.7%*	*1.7%*	*$123.67*	*10.7%*	*$86.21*	*12.5%*	*20.5%*	*415*	*41.0%*
2023-3Q F	*76.5%*	*-0.7%*	*$129.37*	*10.8%*	*$98.93*	*10.0%*	*24.0%*	*386*	*31.1%*
2023-4Q F	*60.0%*	*-2.9%*	*$123.87*	*10.6%*	*$74.32*	*7.3%*	*17.8%*	*366*	*35.2%*
2023 F	***66.4%***	***0.6%***	***$123.49***	***10.3%***	***$82.06***	***11.0%***	***19.7%***	***384***	***37.8%***
2024-1Q F	*59.1%*	*-0.9%*	*$121.68*	*5.5%*	*$71.90*	*4.5%*	*15.4%*	*119*	*13.3%*
2024-2Q F	*69.4%*	*-0.4%*	*$126.99*	*2.7%*	*$88.13*	*2.2%*	*19.6%*	*(97)*	*-2.6%*
2024-3Q F	*76.1%*	*-0.5%*	*$131.04*	*1.3%*	*$99.73*	*0.8%*	*22.1%*	*(195)*	*-7.4%*
2024-4Q F	*59.5%*	*-0.8%*	*$124.48*	*0.5%*	*$74.09*	*-0.3%*	*15.0%*	*(276)*	*-15.8%*
2024 F	***66.0%***	***-0.6%***	***$126.40***	***2.4%***	***$83.46***	***1.7%***	***18.5%***	***(123)***	***-4.6%***

Source Lodging Analytics Research & Consulting, STR, Real Capital Analytics
***Quarterly EBITDA Margins estimated based on quarterly revenue allocation and annual EBITDA margins**

Covid-19 Impact

Waiting for Vaccine Approval and Distribution

Due in part to the release of pent up demand following the unprecedented economic shutdowns experienced across the U.S. in 2Q-2020, 3Q-2020 experienced considerable improvement in economic activity and lodging demand. However, almost all of the increased lodging demand was driven by the summer leisure travel season. As the U.S. moves through 4Q-2020 and into 1Q-2021, economic growth has moderated considerably, corporate travel has yet to recover in a meaningful way and the virus is gaining momentum across the nation. While the risk of reinstated limitations on social activity and shelter-in-place orders remains, the use of preventative measures gains support and medical professionals gain more knowledge of the virus and enhanced ability to combat it. As such, we are optimistic that the upcoming winter season will not be as debilitating to the U.S. lodging industry as the virus' initial onslaught.

As stated during 2Q-2020, the U.S. lodging industry will not begin a sustained recovery until a vaccine is widely distributed. While substantial progress has occurred, several unknowns remain, including but not limited to the timing of vaccine approvals, distribution and public confidence in safety. Furthermore, it is unknown if additional stimulus from the government will lessen the impact of current economic woes, that seem poised to continue until a vaccine is distributed.

While we do not know the duration of this lodging industry downturn, 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. Following 9/11 and again after the financial crisis, we learned that business is best conducted face-to-face and relationships are best forged in person rather than virtually. As such, we do not expect the pandemic to generate a permanent reduction in lodging demand. The impact will be temporary, but economic challenges will prevent an immediate recovery to pre-pandemic travel patterns.

Under that backdrop, our economic forecast from Moody's Analytics makes the following key national assumptions:

- New Covid-19 infections peaked in November 2020
- 27.7 million confirmed infections
- 1.65% confirmed fatality rate
- 2% hospitalization rate
- Vaccine widely available by April 2021
- Infections abate by August 2021
- $1.5 trillion in additional stimulus enacted in 1Q-2021, primarily for unemployment and stimulus checks to individuals, small businesses and airlines.

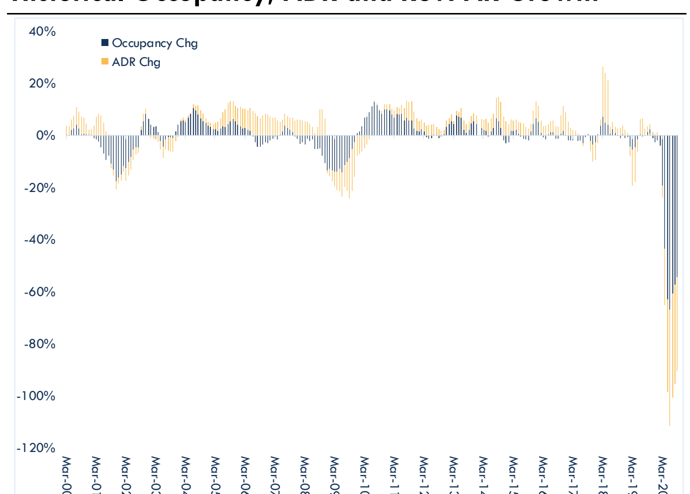
Moody's Analytics forecasts U.S. GDP to increase 3.0% in 4Q before growing at 4.1% in 2021, as growth accelerates in the back half of that year.

Operating Results Review

From 2017 - 2019, Minneapolis RevPAR increased by an average annual rate of 0.3%, driven by a 0.6% increase in occupancy and a 0.9% increase in ADR. Excluding the impact of the 2018 Super Bowl's difficult comparison in 2019, growth levels over the past few years have been relatively stable, hovering around 2%. In 2019, Minneapolis recorded an occupancy level of 66.6%, which ranked 22nd among the major markets, highlighting slightly more risk from the impact of high supply growth than other major markets.

2020 was off to a soft start though, with RevPAR down 5% through February. However, as the Covid-19 pandemic swept the nation, RevPAR dropped an average of 75.2% from March through June, with the biggest decline of 87.7% in April. However, the market has experienced a monthly sequential improvement (albeit modest) since that April trough to September's 69.7% RevPAR decline. While the sequential improvements are relatively positive, without a vaccine or effective treatment for Covid-19, we expect Minneapolis' absolute RevPAR level to remain unsustainably low.

Historical Occupancy, ADR and RevPAR Growth



Source: Lodging Analytics Research & Consulting, STR

MSA Economic Summary

The Minneapolis MSA has a highly educated workforce and a diverse economy that is home to 16 Fortune 500 companies while over 320 Fortune 500 companies have a presence in the market. The market is a global leader in biotechnology and biomedical research with deep roots in agriculture, food exports, water technology and financial services. The twin cities rank high in quality of life, have a great educational system and a low cost of living as well.

While the Covid-19 pandemic has had an unexpected and pronounced impact on the U.S. economy and all markets, Minneapolis has also been hit hard. The market's unemployment rate jumped to 9.2% in April before slowly moderating to 7.6% in the third quarter.

Following the negative effects of the pandemic, Professional & Business Services and Education and Healthcare will be the market's top job generators. Professional and Technical Services hold the most promise, with expansion by tech startups fueling big job gains in scientific research and development. However, the market will experience softness in Administrative and Support tied to a substantive drop in temporary employment. The number of medical providers is expanding to keep up with demand, helped by fast population growth and an above-average share of insured residents.

Minneapolis will endure weakness in manufacturing and trade as well-paying jobs in Professional Services and Healthcare support modest job growth. Longer term, strong population growth and a highly educated workforce will keep Minneapolis a top Midwest performer.

Moving forward, Minneapolis GMP is forecast to decline by 5.3% in 2020 before jumping to 4.1% growth in 2021. Through 2024, Minneapolis GMP is forecast to grow at a 2.1% CAGR, slightly below the national growth of 2.2%. Over the same time frame, non-farm jobs are only expected to grow at a 0.1% CAGR and office employment at a 0.8% CAGR, which translates to an unemployment rate rising from 3.0% at year-end 2019 to 3.6% at the end of 2024.

Key Economic Highlights Include:

- Local GMP forecast to increase at a 2.1% CAGR through 2024, ranked 15th among the top 26 markets
- Minneapolis benefits from a diversified economy with no one sector accounting for over 25% of the GMP structure
- The fastest growing sector in Minneapolis over the past three years was financial activities, which accounts for 23.7% of the broader local economy
- Major research institutions and corporate headquarters foster innovation
- Stable positive net migration trends should support economic growth

Major Local Real Estate Developments:

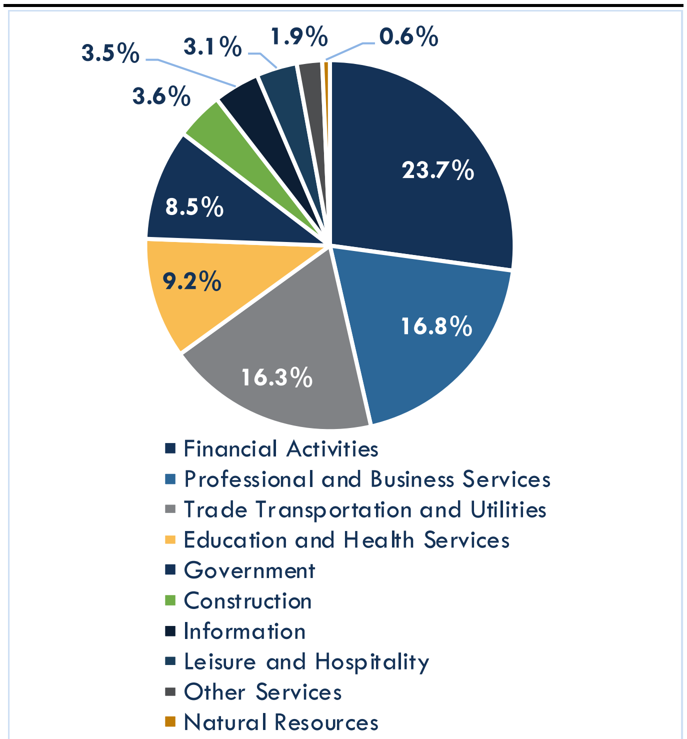
- RBC Gateway Tower - The 36-story mixed-use development located at 3rd Street and Nicollet in downtown Minneapolis is scheduled to be completed in 2022 with a total budget of $433 million. The project will include 530,000 square feet of office space, a 222-room Four Seasons Hotel, 22 branded residences and ground level retail. Approximately 60% of the office space is pre-leased to RBC Wealth Management.
- 10 West End – The 343,000 square-foot speculative office development in the West End near the intersection of I-394 and Highway 100 is currently under construction and slated to open in early 2021. If successful, developer Ryan Cos. And Excelsior Group will build a second tower of similar size at 20 West End.

Largest Employers

Company	# of Employees Locally
Target	8,300
Hennepin Healthcare	7,106
Wells Fargo	7,000
Ameriprise	5,065
U.S. Bank	4,608
Xcel Energy	2,458
RBC Wealth Management	1,508
Thrivent	1,326
Strategic Education, Inc.	1,213
Deloitte	978
Star Tribune	942
ABM	920

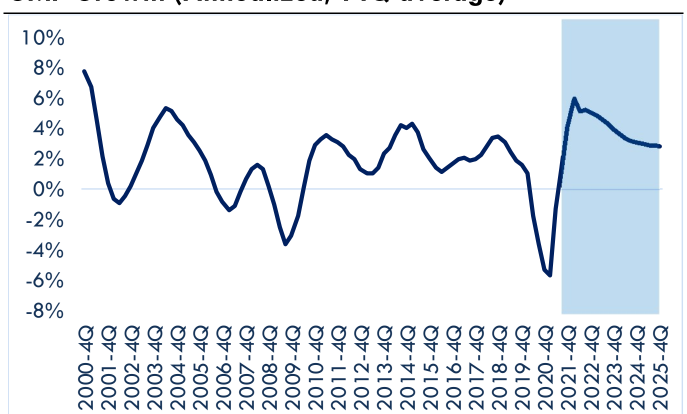
Source: Twin Cities Bureau

Top Industries (by GMP contribution)



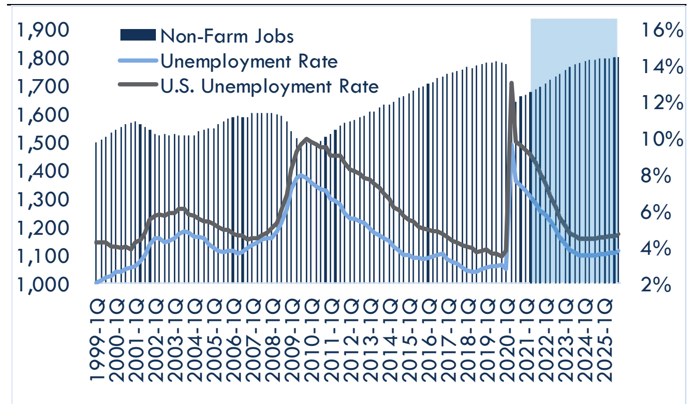
Source: Moody's Analytics

GMP Growth (Annualized, T4Q average)



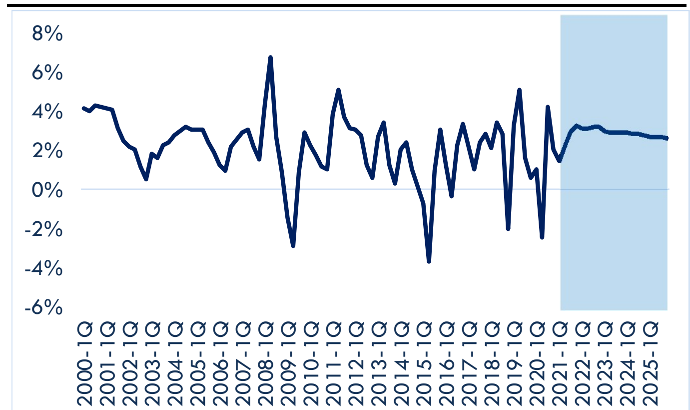
Source: Moody's Analytics

Employment Picture, Seasonally Adjusted



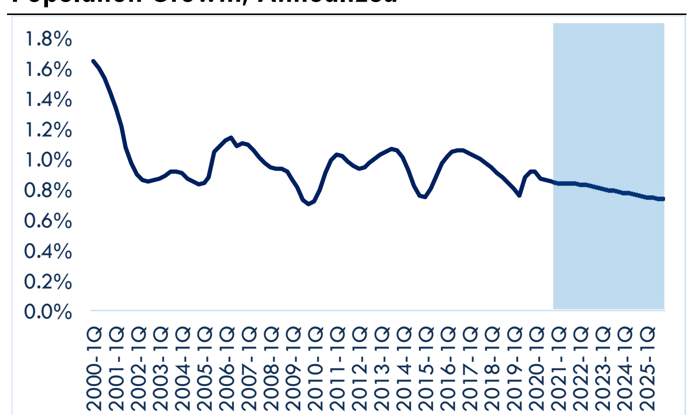
Source: Moody's Analytics

Consumer Price Index, Annualized



Source: Moody's Analytics

Population Growth, Annualized



Source: Moody's Analytics

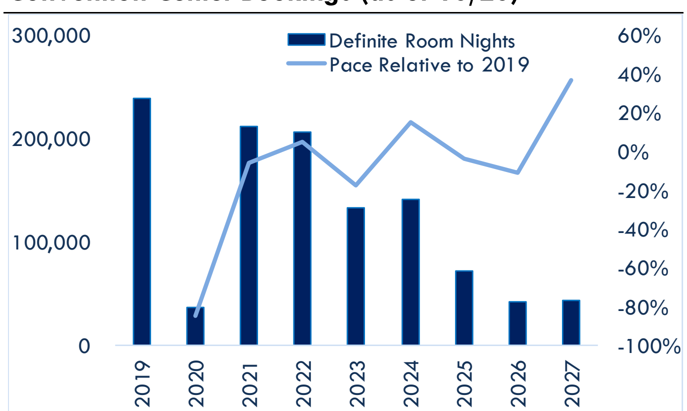
Lodging Demand Drivers

Convention Center

The Minneapolis Convention Center is one of the largest in the country, featuring 1.6 million square feet of space including a 3,400 fixed-seat auditorium, 475,000 square feet of exhibit space, 87 meeting rooms, a 28,000-square-foot ballroom and a 55,000-square-foot ballroom. Given the size of the facility, it draws multiple citywide conventions per year and the citywide booking pace can have a pronounced impact on the broader lodging market.

Unfortunately, the Covid-19 pandemic has created a complete lack of visibility into accurate convention calendars for every market as events are being cancelled daily, as far out as 2022. Currently, the 2020 pace is down 85%, while the 2021 pace is up over 500%. Definite room nights on the books for 2021 are pacing just 6% below 2019 levels, indicating that if current bookings hold, Minneapolis should experience a strong rebound in convention demand as early as 2021.

Convention Center Bookings (as of 10/20)

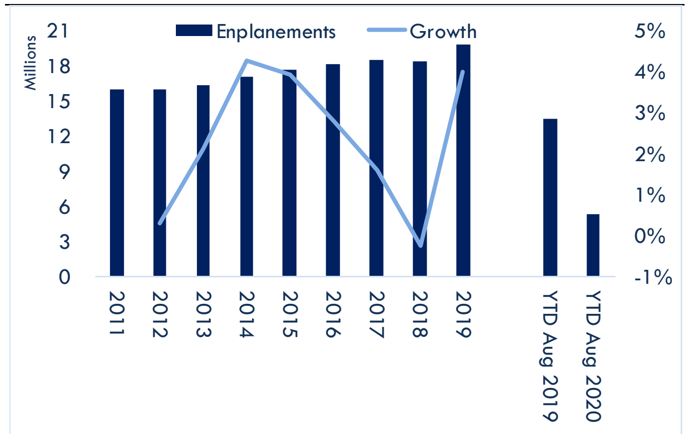


Source: Lodging Analytics Research & Consulting

Air Traffic

The Minneapolis market is serviced by the Minneapolis St. Paul International Airport. Growth since 2011 has averaged over 2% annually, however growth accelerated in 2019. Unfortunately, as the pandemic swept the nation in 2020, traffic volumes dropped 60% through August. It is important to note that only about 8% of all passengers using the airport are on international flights. As such, the airport and the Minneapolis market are less susceptible to fluctuations in international travel than many other major markets.

Annual Enplanement Volumes



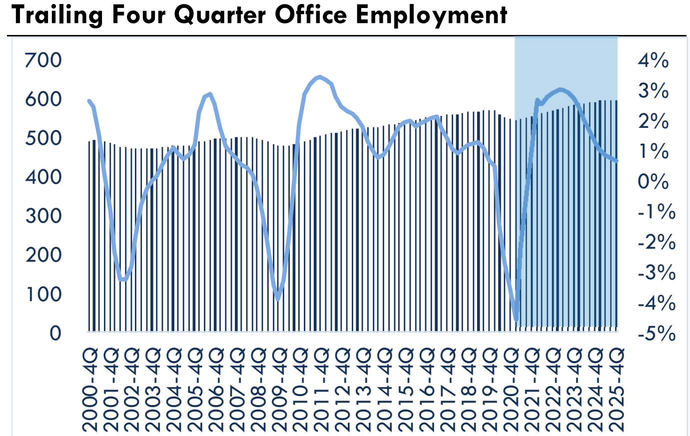
Source: Minneapolis-Dade Aviation Department

The airport added four new gates to Terminal 2 in 2016 and has been regularly undergoing capital projects to improve the traveler experience and increase efficiencies. Additionally, the airport commission is currently developing a 20-year long-range plan (the first one since 2010), which could hint at future expansion opportunities. Regardless, we do not expect capacity at the airport to meaningfully expand from current levels for several years.

Office Market

Over the past ten years, Minneapolis' office using employment has grown by a 1.5% CAGR vs. the national CAGR of 1.8%. In 2020, office employment is forecast to decline by 3.6% with a forward three-year CAGR of 0.1% and a forward five-year CAGR of 0.8%. Stable office employment should translate into stable lodging demand across the market.

Trailing Four Quarter Office Employment

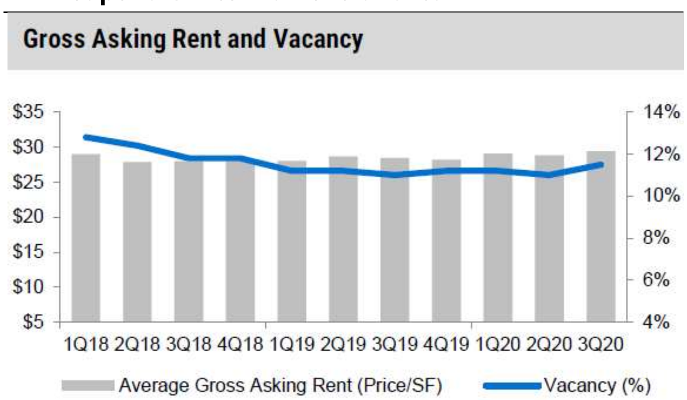


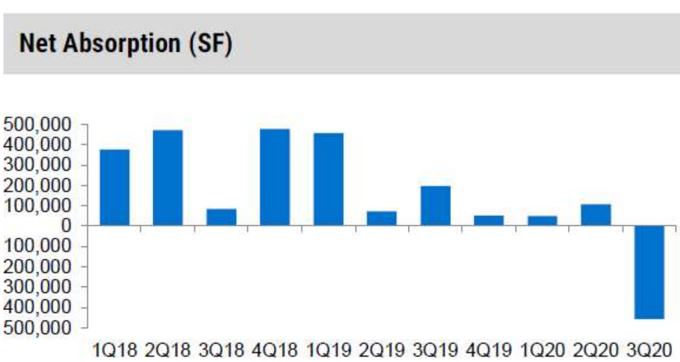
Source: Moody's Analytics

The Minneapolis-St. Paul office market continued to soften in the third quarter due to curtailed demand from the Covid-19 pandemic. Office net absorption in the Twin Cities was negative 456,000 square feet in the quarter, a level not seen since the Great Recession in 2009. Asa result, the vacancy rate increased by 30 bps, from 11.2% in the previous quarter, to 11.5%. Sublease availability also increased in the quarter, growing by 25% to 2 million square feet across the market. Asking rents surprisingly increased slightly to $29.30 per square foot, up from the prior quarter's $28.85. There are currently 2.1 million square feet of supply under construction, which equates to 1.8% of the existing inventory.

Covid-19 brought Minneapolis' office market activity to an abrupt halt during the second quarter, which translated to deteriorating fundamentals in the third quarter. New leasing activity will be limited, sublet availability will continue to rise and asking rents will decline in the near term. We expect office market fundamentals will be dependent on the effectiveness of social distancing measures and the timing of a vaccine or therapeutic. While space utilization rates coming out of the pandemic remain uncertain, early forecasts predict most office-using tenants will not experience a notable decline in their office space needs. Rather, a configuration shift is expected.

Minneapolis Office Market Statistics





Source: Newmark Knight Frank

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

We estimate that special events in Minneapolis boost the market's quarterly RevPAR by over $8. These special events which include the Super Bowl, Final Four and College Football Championship have occurred three times in Minneapolis since 2000 and twice since 2018. The City of Minneapolis claimed that the Final Four generated over $140 million of economic impact. Independent economists believe that the 2018 Super Bowl had a $450 million economic impact on the market. There are no special events planned to take place in Minneapolis over the next five years.

Minneapolis Special Event Calendar

	Special Event
2001-2Q	Final Four
2018-1Q	Super Bowl
2019-2Q	Final Four

Source: Lodging Analytics Research & Consulting

Lodging Supply

We incorporate two supply outlooks into our market outlook. First, is an actual supply outlook that takes into account temporary closures. This outlook aligns with STR's actual reported market results. Note that we do not assume any Covid-19 related property closures will be permanent. Instead we assume that all closed hotels in 2Q will gradually reopen by 1Q-2021. We also present economic supply data which assumes all temporarily closed hotels are in fact open.

We estimate that at the peak of Covid-19 related closures in April, there were approximately 3,000 rooms closed across the Minneapolis market, equating to approximately 8% of the market's room inventory. However, since then we have seen hotels gradually reopen and as of September, over 75% of those rooms had already reopened. We expect almost all of the remaining roughly 1,000 rooms to reopen gradually by year-end with only a handful of properties delaying reopening unto early 2021.

Minneapolis supply growth has averaged 1.7% since 2000, which is slightly below the national long-run average. In 2019, supply growth was moderate at 3.1%, however we expect economic supply growth to accelerate to 5.9% in 2020 even after accounting for the pandemic-induced construction delays that will push openings to 2021. We also expect 2021 supply growth to be elevated but believe the peak economic supply growth was in 3Q-2020.

Overall, 6.1% of Minneapolis' current room count is under construction with another 9.7% in various planning stages. Supply growth in Minneapolis through 2024 is ranked 5th among the country's top 26 markets, suggesting heightened supply risk relative to other major markets

Lodging Supply Growth *(forecasts begin 2020-4Q)*

	1Q	2Q	3Q	4Q	Year
2018	3.1%	3.1%	4.5%	4.9%	**3.9%**
2019	3.0%	3.1%	2.6%	3.5%	**3.1%**
2020 F	*4.9%*	*-1.2%*	*3.4%*	*5.8%*	***3.2%***
2021 F	*6.1%*	*12.4%*	*7.0%*	*3.5%*	***7.3%***
2022 F	*1.9%*	*2.2%*	*2.2%*	*1.8%*	***2.0%***
'19 - '22F CAGR	***4.1%***				
'19 - '24F CAGR	***3.2%***				

Source: BuildCentral, STR, Lodging Analytics Research & Consulting

Economic Supply Growth *(forecasts begin 2020-4Q)*

	1Q	2Q	3Q	4Q	Year
2018	3.1%	3.1%	4.5%	4.9%	**3.9%**
2019	3.0%	3.1%	2.6%	3.5%	**3.1%**
2020 F	*4.9%*	*5.9%*	*6.5%*	*6.0%*	***5.9%***
2021 F	*5.9%*	*4.8%*	*3.9%*	*3.4%*	***4.5%***
2022 F	*2.1%*	*2.2%*	*2.2%*	*1.8%*	***2.1%***
'19 - '22F CAGR	***4.1%***				
'19 - '24F CAGR	***3.2%***				

Source: BuildCentral, STR, Lodging Analytics Research & Consulting

Submarket Supply & Openings *(as % of existing stock)*

	In Constr.	In Planning	2020	2021	2022	2023	After
Bloomington, MN	11.2%	7.0%	8.3%	9.5%	0.7%	1.4%	1.4%
Minneapolis CBD, MN	10.9%	4.4%	7.8%	3.1%	3.6%	0.9%	0.9%
Minneapolis South Area, MN	8.8%	5.5%	10.1%	0.6%	1.2%	1.1%	1.1%
Minneapolis North Area, MN	1.1%	14.3%	2.6%	0.0%	2.5%	2.9%	2.9%
St Paul, MN	0.0%	20.0%	4.6%	0.0%	2.0%	4.0%	4.0%
Minneapolis Market	**6.1%**	**9.7%**	**5.9%**	**4.5%**	**2.1%**	**1.9%**	**1.7%**

Source: BuildCentral, Lodging Analytics Research & Consulting

On a submarket level, like the rest of the country, supply growth is concentrated in the two demand-centric submarkets of the CBD and Bloomington. These two submarkets combine to account for over 75% of the market's rooms under construction, but just 25% of the market's rooms in planning. With most of the supply under construction in these strong submarkets, we expect the supply growth to have a ripple effect throughout the market, making it harder for the market to absorb this supply.

Major Hotel Developments

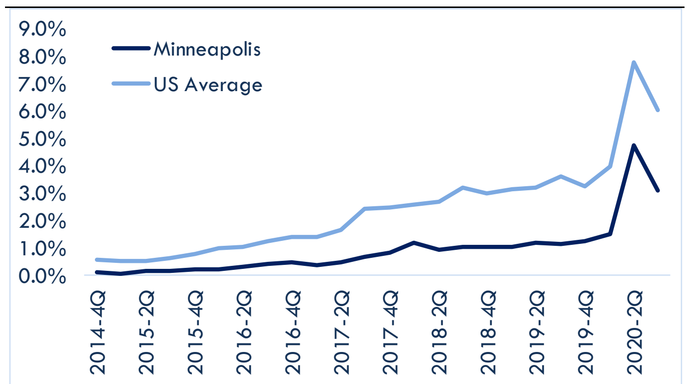
Hotel	Rooms	Development Phase	Projected Opening
Snelling-Midway Mixed-Use Development	400	Planning	
Omni Viking Lakes Hotel	320	Construction	Q4/2020
Rosedale Center Hotel	290	Planning	
RBC Gateway	280	Construction	Q4/2021
Park 'N Fly Redevelopment Hotel	279	Planning	
Mall of Entertainment Hotel	275	Planning	
Rand Tower Conversion	250	Construction	Q4/2020

Source: BuildCentral, Lodging Analytics Research & Consulting

Home Sharing Supply

The short-term rental market currently has less impact on Minneapolis than the broader country and many other major markets. Home sharing accounted for 3.1% of all accommodation revenues (defined as hotel-comparable home sharing revenue + hotel rooms revenue) in Minneapolis in 3Q20 and averaged 1.1% in 2019. This compares to the national average of 6.0% in 3Q20 and 3.3% in 2019.

Hotel-Comparable Home Sharing Segment Share of Accommodations Revenue

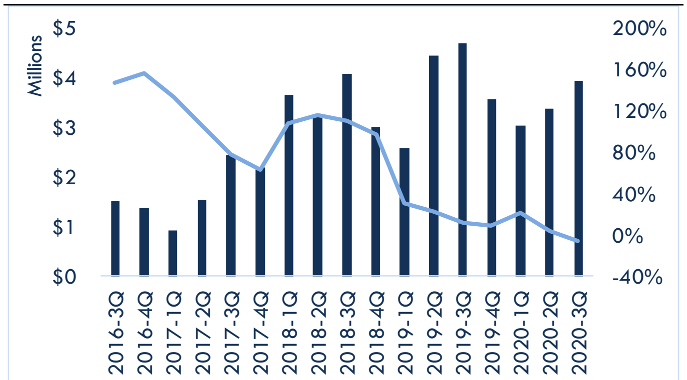


Source: Lodging Analytics Research & Consulting, AirDNA

Market share gains by the home sharing industry are driven by the sector's stronger revenue growth. Not surprisingly, we have seen meaningful growth across the Minneapolis home sharing market, which experienced revenue growth of 21% over the twelve months leading up to the pandemic, on a 22% increase in hotel-comparable available room nights (20% excluding the Super Bowl comparison). Meanwhile ADRs for hotel-comparable home sharing units were flat over the same period, illustrating that the revenue growth has been fueled by an increase in supply. While those growth levels have experienced a gradual deceleration since data tracking began in late 2014, they remain noteworthy.

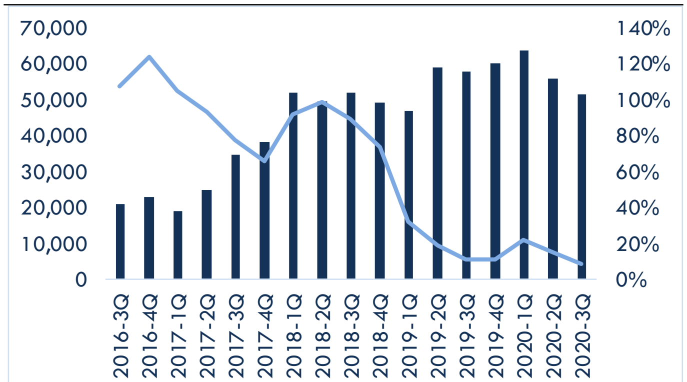
The Minneapolis home sharing market share over the past twelve months ranks 21st among the top 26 markets.

Hotel-Comparable Home Sharing Revenue and YoY Growth on a Rolling 4-Quarter Basis



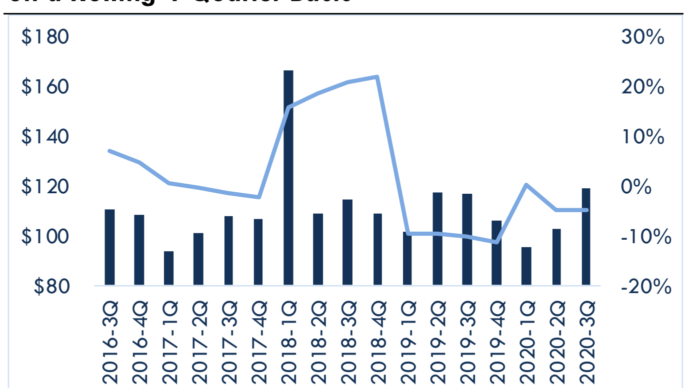
Source: Lodging Analytics Research & Consulting, AirDNA

Hotel-Comparable Home Sharing Available Room Nights and YoY Growth on a Rolling 4-Quarter Basis



Source: Lodging Analytics Research & Consulting, AirDNA

Hotel-Comparable Home Sharing ADR and YoY Growth on a Rolling 4-Quarter Basis



Source: Lodging Analytics Research & Consulting, AirDNA

Home Sharing Regulation Update

Short-term rental regulation in Minneapolis is minimal at present. Hosts who rent their unit out without being present must register with the City and prove through inspection every few years that the property is up to code. The registration process is not well enforced and lacks any real control over the short-term rental market.

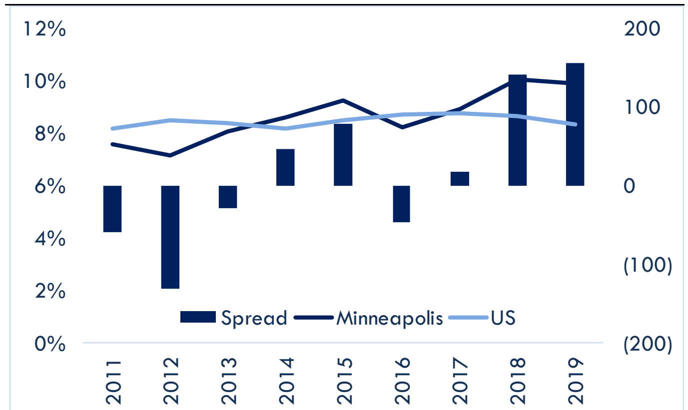
There have been multiple attempts in the City Council to begin the regulation of short-term rentals, but as of now, they have not gotten very far. An ordinance was proposed in Summer 2019 by Council member Steve Fletcher, but it has not progressed. It is possible that regulation materializes, which would be a positive for the lodging industry, but it is worth noting that as of now, home sharing has not been as disruptive in Minneapolis as many other markets.

Recent Transactions

Minneapolis hotel cap rates have been volatile since 2010, ranging from a high of 10.0% in 2018 to a low of 7.2% in 2012, while averaging 8.6%. Additionally, spreads between the Minneapolis cap rate and the U.S. cap rate have also been volatile, ranging from a high of 155 bps in 2019 to a low of (131) in 2012, averaging 19 bps since 2011. 2019 levels are at the high end of these ranges, suggesting that there is more risk to cap rates or cap rates spreads moving lower than moving higher.

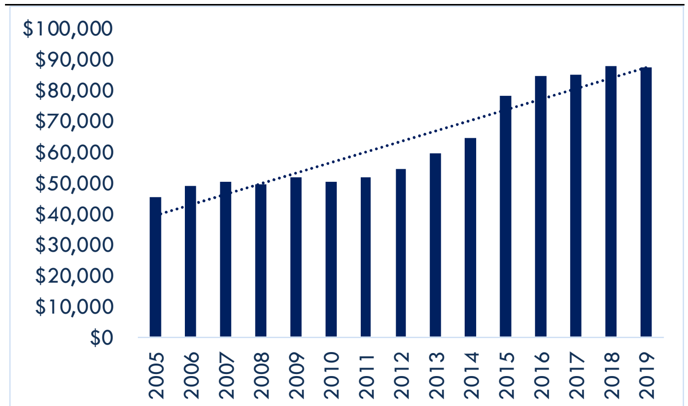
Despite volatile cap rates, values per room have experienced more stable growth. Since 2009, values per room have grown at a 5.4% CAGR, but most of that growth occurred by 2016 as the 3-year growth CAGR since then was just 1.0%.

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

Recent transactions have ranged from $46,000 per room for an older full-service hotel to $220,000 per room for a new well-branded extended stay property.

Recent Hotel Transactions ($10 million and above)

Property Name	Date	Units	Submarket	Price (000)	Price/ Unit (000)	Buyer	Seller
Doubletree	Jul-20	568	Minneapolis - Proper	$26,000	$46	Vinakom Communications	Platinum Equity
Element by Westin	Dec-19	155	Minneapolis - CBD	$34,120	$220	Lion Hotel Group	United Properties
Westin Edina Galleria	Dec-19	225	Minneapolis - Proper	$42,600	$189	Olympus Ventures	Ryan Companies
Oak Ridge Hotel & Conference Center	Jul-19	145	Minneapolis - Other	$10,000	$69	RCS-RCA Oak Ridge LLC	Ameriprise Financial
Hampton Inn Eagan	Jun-19	122	Minneapolis - Other	$11,858	$97	National Hospitality	North Central Group
Residence Inn St Paul	Jun-19	100	St Paul - CBD	$12,751	$128	Inland RE Group	Kaeding Mgmt Group
Holiday Inn Express & Suites - Bloomington	May-19	163	Minneapolis - Proper	$13,000	$80	Harshal Patel, Ninja0128 LLC	Madison Hospitality Group LLC
La Quinta Inn	Mar-19	108	Minneapolis - Other	$11,400	$106	Titanium Partners	Pelican Lake Consulting Inc
Cambria Suites	Mar-19	129	Minneapolis - Proper	$11,500	$89	DE Gustie LLC, Harshal Patel	China Life
Radisson Hotel	Mar-19	176	Minneapolis - Proper	$10,000	$57	Minn Hotels LLC	Boxer Property
Hampton Inn & Suites Downtown St. Paul	Feb-19	160	St Paul - CBD	$31,690	$198	Apple Hospitality REIT	Vista Host
Fmr Embassy Suites-Saint Paul	Jan-19	210	St Paul - CBD	$29,000	$138	Drury Southwest	Platinum Equity

Source: Real Capital Analytics, LW Hospitality Advisors

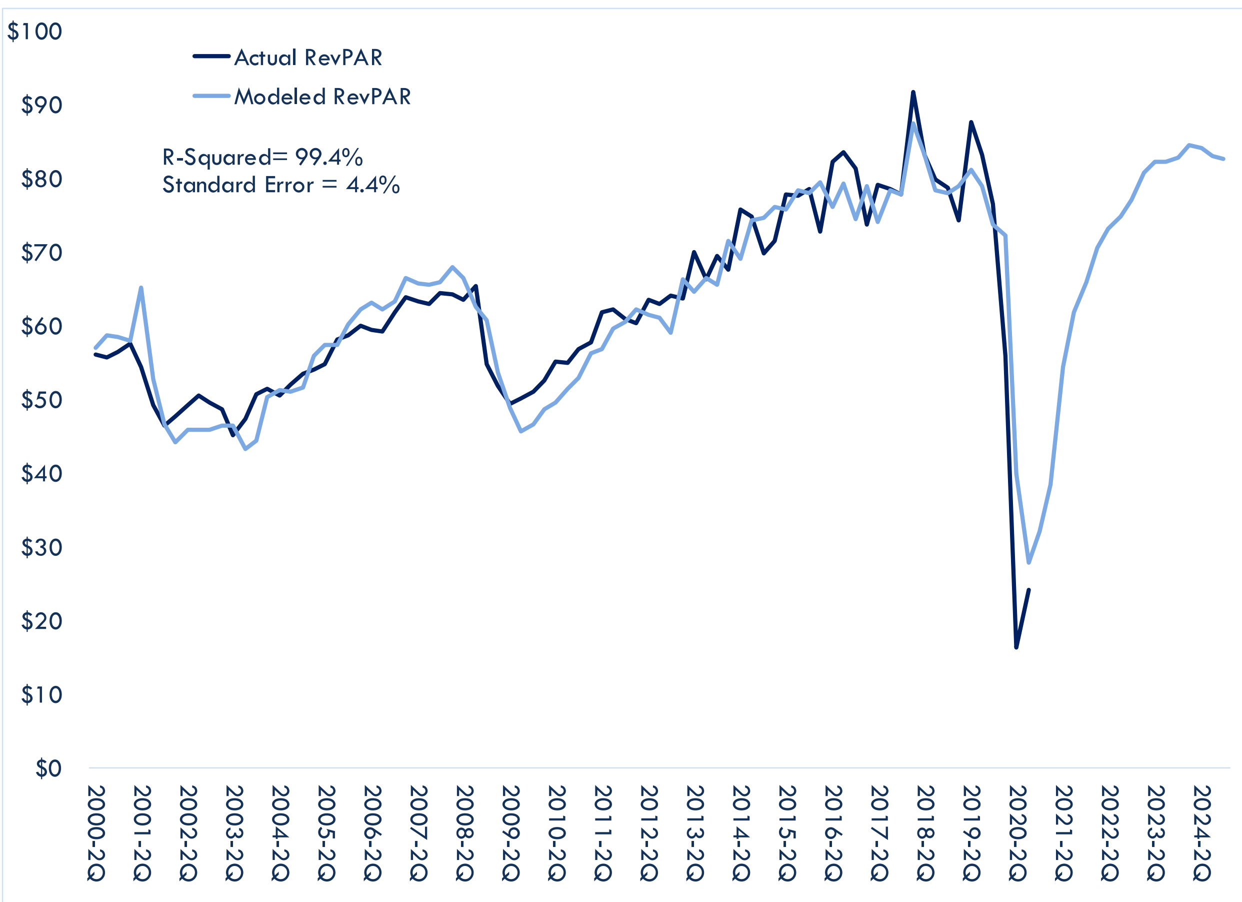
Revenue Forecast Models

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

- MSA Real GMP (68.0% correlation)
- MSA Non-Farm Jobs (79.0% correlation)
- MSA Lodging Supply (45.3% correlation)
- Special Events Calendar (23.6% correlation)

Based on these variables along with several others, we have created a regression forecast model that has a 99.4% R-Squared, indicating an extremely high prediction confidence level, within a standard error of 4.4%. Moody's Analytics forecasts a (0.7)% 3-year CAGR for Minneapolis Non-Farm Jobs and a 0.1% 5-year CAGR. Moody's Analytics forecasts a 1.1% 3-year CAGR for Real GMP into the U.S. and a 2.1% 5-year CAGR.

RevPAR, Seasonally Adjusted



Source: Lodging Analytics Research & Consulting, STR

RevPAR Growth Sensitivity to Key Variables: 3-Year Outlook

3-Year Real GMP CAGR	3-Year Non-Farm Jobs CAGR						
	-2.2%	-1.7%	-1.2%	-0.7%	-0.2%	0.3%	0.8%
-1.9%	-8.3%	-7.7%	-7.1%	-6.5%	-5.8%	-5.2%	-4.6%
-0.9%	-7.2%	-6.5%	-5.9%	-5.3%	-4.7%	-4.1%	-3.5%
0.1%	-6.0%	-5.4%	-4.8%	-4.2%	-3.6%	-3.0%	-2.4%
1.1%	-4.8%	-4.2%	-3.6%	**-3.0%**	-2.4%	-1.9%	-1.3%
2.1%	-3.6%	-3.0%	-2.5%	-1.9%	-1.3%	-0.7%	-0.2%
3.1%	-2.4%	-1.9%	-1.3%	-0.7%	-0.2%	0.4%	0.9%
4.1%	-1.2%	-0.7%	-0.2%	0.4%	0.9%	1.5%	2.0%

Source: Lodging Analytics Research & Consulting

RevPAR Growth Sensitivity to Key Variables: 5-Year Outlook

5-Year Real GMP CAGR	5-Year Non-Farm Jobs CAGR						
	-1.4%	-0.9%	-0.4%	0.1%	0.6%	1.1%	1.6%
-0.9%	-5.4%	-4.7%	-3.9%	-3.2%	-2.5%	-1.8%	-1.1%
0.1%	-4.0%	-3.3%	-2.6%	-1.9%	-1.3%	-0.6%	0.1%
1.1%	-2.6%	-2.0%	-1.3%	-0.7%	0.0%	0.6%	1.3%
2.1%	-1.3%	-0.7%	0.0%	**0.6%**	1.2%	1.8%	2.4%
3.1%	0.1%	0.6%	1.2%	1.8%	2.4%	3.0%	3.6%
4.1%	1.4%	1.9%	2.5%	3.1%	3.6%	4.2%	4.7%
5.1%	2.7%	3.2%	3.7%	4.3%	4.8%	5.3%	5.9%

Source: Lodging Analytics Research & Consulting

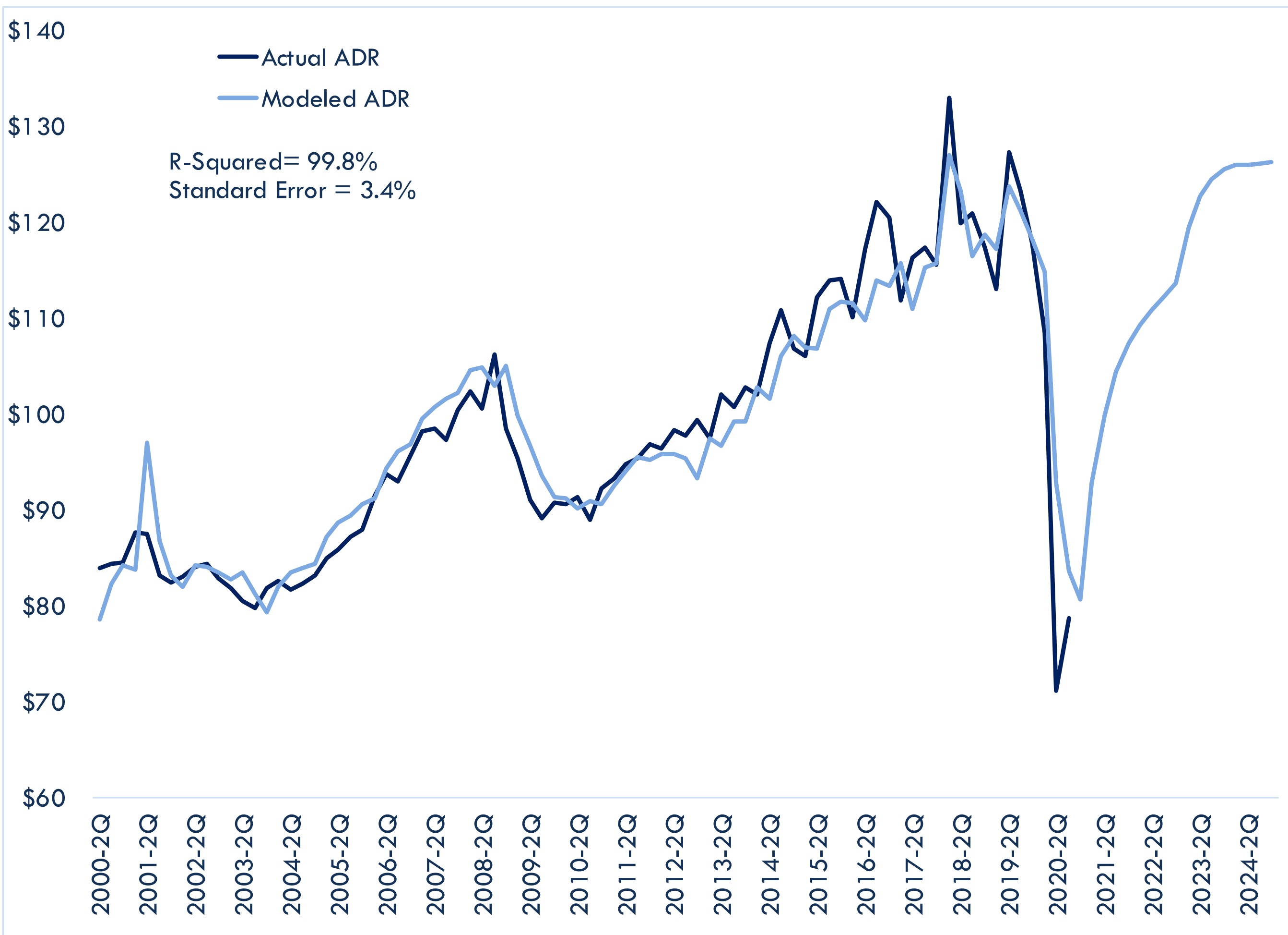
ADR Growth Outlook

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

- MSA Non-Farm Jobs (89.3% correlation)
- MSA Retail Sales (80.6% correlation)
- MSA Office Employment (86.5% correlation)
- Special Events Calendar (25.7% correlation)

Based on these variables and a few others, we have created a regression forecast model that has a 99.8% R-Squared, indicating an extremely high prediction confidence level, within a standard error of 3.4%. Moody's Analytics forecasts a (0.7)% 3-year CAGR for Minneapolis Non-Farm Jobs and a 0.1% 5-year CAGR. Moody's Analytics forecasts a 6.3% 3-year CAGR for Retail Sales into the U.S. and a 5.1% 5-year CAGR.

ADR, Seasonally Adjusted



Source: Lodging Analytics Research & Consulting, STR

ADR Growth Sensitivity to Key Variables: 3-Year Outlook

3-Year Retail Sales CAGR	3-Year Non-Fram Jobs CAGR						
	-2.2%	-1.7%	-1.2%	-0.7%	-0.2%	0.3%	0.8%
3.3%	-8.5%	-7.0%	-5.5%	-4.0%	-2.5%	-1.0%	0.4%
4.3%	-8.1%	-6.5%	-5.0%	-3.6%	-2.1%	-0.7%	0.7%
5.3%	-7.6%	-6.1%	-4.6%	-3.1%	-1.7%	-0.3%	1.1%
6.3%	-7.2%	-5.7%	-4.2%	**-2.7%**	-1.3%	0.1%	1.5%
7.3%	-6.7%	-5.2%	-3.7%	-2.3%	-0.9%	0.5%	1.9%
8.3%	-6.2%	-4.8%	-3.3%	-1.9%	-0.5%	0.9%	2.3%
9.3%	-5.8%	-4.3%	-2.8%	-1.4%	0.0%	1.4%	2.7%

Source: Lodging Analytics Research & Consulting

ADR Growth Sensitivity to Key Variables: 5-Year Outlook

5-Year Retail Sales CAGR	5-Year Non-Farm Jobs CAGR						
	-1.4%	-0.9%	-0.4%	0.1%	0.6%	1.1%	1.6%
2.1%	-5.8%	-3.9%	-2.2%	-0.6%	1.0%	2.6%	4.0%
3.1%	-5.2%	-3.4%	-1.7%	-0.1%	1.4%	2.9%	4.4%
4.1%	-4.7%	-2.9%	-1.2%	0.3%	1.9%	3.4%	4.8%
5.1%	-4.1%	-2.4%	-0.7%	**0.8%**	2.3%	3.8%	5.2%
6.1%	-3.5%	-1.8%	-0.2%	1.3%	2.8%	4.2%	5.6%
7.1%	-2.9%	-1.3%	0.3%	1.8%	3.2%	4.6%	6.0%
8.1%	-2.3%	-0.7%	0.8%	2.3%	3.7%	5.1%	6.4%

Source: Lodging Analytics Research & Consulting

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
(forecast begins 2020-4Q)

	Supply Growth	Demand Growth	Occupancy	Occupancy Growth
2018-1Q	3.1%	7.6%	60.8%	4.5%
2018-2Q	3.1%	5.2%	72.1%	2.1%
2018-3Q	4.5%	3.2%	76.4%	-1.3%
2018-4Q	4.9%	4.3%	61.0%	-0.6%
2018	3.9%	5.0%	67.6%	1.0%
2019-1Q	3.0%	-1.7%	57.9%	-4.7%
2019-2Q	3.1%	2.5%	71.7%	-0.6%
2019-3Q	2.6%	4.8%	78.0%	2.1%
2019-4Q	3.5%	0.5%	59.2%	-3.0%
2019	3.1%	1.7%	66.6%	-1.3%
2020-1Q	4.9%	-16.6%	45.4%	-21.6%
2020-2Q	-1.2%	-68.0%	23.8%	-66.8%
2020-3Q	3.4%	-51.3%	35.4%	-54.7%
2020-4Q F	*5.8%*	*-32.8%*	*36.3%*	*-38.6%*
2020 F	*3.2%*	*-43.9%*	*35.2%*	*-47.2%*
2021-1Q F	*6.1%*	*-13.4%*	*36.5%*	*-19.5%*
2021-2Q F	*12.4%*	*150.6%*	*56.7%*	*138.2%*
2021-3Q F	*7.0%*	*100.6%*	*68.4%*	*93.5%*
2021-4Q F	*3.5%*	*57.4%*	*55.9%*	*53.9%*
2021 F	*7.3%*	*61.7%*	*54.4%*	*54.4%*
2022-1Q F	*1.9%*	*57.7%*	*56.9%*	*55.8%*
2022-2Q F	*2.2%*	*23.2%*	*68.6%*	*21.0%*
2022-3Q F	*2.2%*	*14.7%*	*77.0%*	*12.6%*
2022-4Q F	*1.8%*	*12.4%*	*61.8%*	*10.6%*
2022 F	*2.0%*	*23.5%*	*66.1%*	*21.5%*
2023-1Q F	*1.9%*	*6.7%*	*59.6%*	*4.8%*
2023-2Q F	*2.0%*	*3.6%*	*69.7%*	*1.7%*
2023-3Q F	*1.9%*	*1.2%*	*76.5%*	*-0.7%*
2023-4Q F	*1.9%*	*-1.1%*	*60.0%*	*-2.9%*
2023 F	*1.9%*	*2.5%*	*66.4%*	*0.6%*
2024-1Q F	*1.8%*	*0.9%*	*59.1%*	*-0.9%*
2024-2Q F	*1.8%*	*1.3%*	*69.4%*	*-0.4%*
2024-3Q F	*1.8%*	*1.3%*	*76.1%*	*-0.5%*
2024-4Q F	*1.8%*	*1.0%*	*59.5%*	*-0.8%*
2024 F	*1.8%*	*1.2%*	*66.0%*	*-0.6%*

Source: Lodging Analytics Research & Consulting, STR, BuildCentral

EBITDA Forecast

According to Smith Travel Research, in 2018, Minneapolis generated an average hotel EBITDA margin of 22.4%. We estimate that the 2019 margin ranked 25th among the top 26 markets and is over 800 bps below the national average. The primary drivers of EBITDA growth, in addition to the top line, are labor and property taxes. Labor accounts for 31.9% of total costs in the market and property taxes account for 6.7% of the overall cost structure.

Property Taxes
Minneapolis property taxes are driven by state, county, municipal and special tax zone tax rates and assessed values. The 2020 effective commercial property tax rate across Minneapolis is estimated to be approximately 3.0%. Assessment values are based on the County Assessor's estimation of market value (adjusted for any exemptions). Overall, commercial tax rates across Minneapolis have not moved around too much, but the aggregate tax levy across the city is up 7% in 2020. While that includes all properties across the market, including new developments, it is a good gauge of average assessment increases. As such, we forecast a 5.1% property tax CAGR over the next five years.

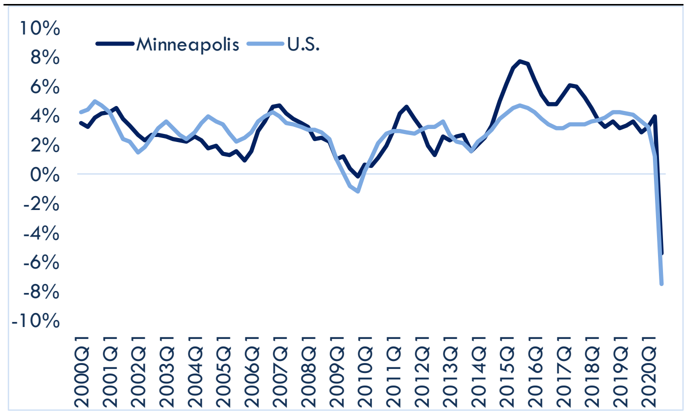
It is worth noting that the political movement to reduce police force funding could lead to a lower municipal budget which could limit the need to increase property taxes. While that dynamic is far from certain, it is worth watching in markets like Minneapolis where that movement has garnered momentum.

Labor Costs
Labor is the primary factor driving expense growth in Minneapolis. Accounting for 31.9% of total hotel costs, increases in labor costs across the lodging industry in this market will continue to limit profit growth.

Minneapolis' labor wages across the lodging industry on a per employee basis grew at an elevated rate from 2015 to the middle of 2018, when growth rates slowed to below national averages.

We expect Minneapolis lodging wage rates to rise at a slower rate (or decline at a faster rate) than the national average moving forward. We forecast a (4.2)% wage rate CAGR over the next five years, which translates into a (1.6)% labor cost CAGR over the same time frame, when accounting for changing occupancies and cost flexing in negative environments.

Historical Lodging Wage Rate Growth (TTM)



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

Minneapolis Lodging Wage Rate Growth Forecast

	1Q	2Q	3Q	4Q	Annual
2018	3.5%	3.3%	3.0%	4.2%	**3.5%**
2019	1.7%	3.9%	4.2%	1.5%	**2.8%**
2020 F	*3.2%*	*6.8%*	*-33.2%*	*-22.6%*	***-11.6%***
2021 F	*-37.3%*	*-33.5%*	*5.9%*	*-7.1%*	***-21.3%***
2022 F	*14.8%*	*2.9%*	*3.4%*	*3.9%*	***6.0%***
2023 F	*3.6%*	*4.0%*	*4.2%*	*4.6%*	***4.1%***
2024 F	*5.0%*	*5.0%*	*5.0%*	*4.7%*	***4.9%***

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

Expense Growth Forecast

Our expense growth forecast is primarily driven by the Minneapolis market hotel cost structure and our expected increases in property taxes and labor costs in the market. We also assume a standard level of cost flexing related to changing occupancies and negative environments. As a result, we forecast an expense CAGR over the next five years of 1.0%, below the 2.2% national average.

Minneapolis Expense Growth Forecast

	1Q	2Q	3Q	4Q	Annual
2020 F	*-17.1%*	*-71.6%*	*-66.2%*	*-54.8%*	***-54.4%***
2021 F	*-27.7%*	*158.0%*	*137.3%*	*92.5%*	***65.8%***
2022 F	*60.0%*	*26.2%*	*18.8%*	*16.8%*	***27.3%***
2023 F	*9.7%*	*6.9%*	*4.7%*	*2.8%*	***5.9%***
2024 F	*3.1%*	*3.5%*	*3.4%*	*3.0%*	***3.3%***

Source: Lodging Analytics Research & Consulting

Hotel EBITDA Growth Forecast

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

Minneapolis Hotel EBITDA Margin Change Forecast (bps)

	1Q	2Q	3Q	4Q	Annual
2020 F	*(903)*	*(4,013)*	*(1,253)*	*(659)*	***(1,639)***
2021 F	*(501)*	*2,641*	*665*	*563*	***880***
2022 F	*1,322*	*545*	*143*	*8*	***345***
2023 F	*376*	*415*	*386*	*366*	***384***
2024 F	*119*	*(97)*	*(195)*	*(276)*	***(123)***

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

Minneapolis EBITDA Growth Forecast

	1Q	2Q	3Q	4Q	Annual
2020 F	*-85.3%*	*-111.6%*	*-85.8%*	*-76.4%*	***-93.2%***
2021 F	*-187.9%*	*-337.0%*	*297.9%*	*242.4%*	***526.5%***
2022 F	*-780.9%*	*101.3%*	*30.2%*	*17.6%*	***69.4%***
2023 F	*55.8%*	*41.0%*	*31.1%*	*35.2%*	***37.8%***
2024 F	*13.3%*	*-2.6%*	*-7.4%*	*-15.8%*	***-4.6%***

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

Investment Forecast Model

Minneapolis Cap Rates

As mentioned earlier, Minneapolis hotel cap rates have been relatively volatile over the past few years. The primary macro factors driving cap rate changes in Minneapolis include both factors that are national in nature and local in nature. The national macro factors include:

- Baa Bond Yields (12.4% correlation)
- U.S. Hotel Cap Rates (37.4% correlation)
- S&P 500 Index (34.4% correlation)

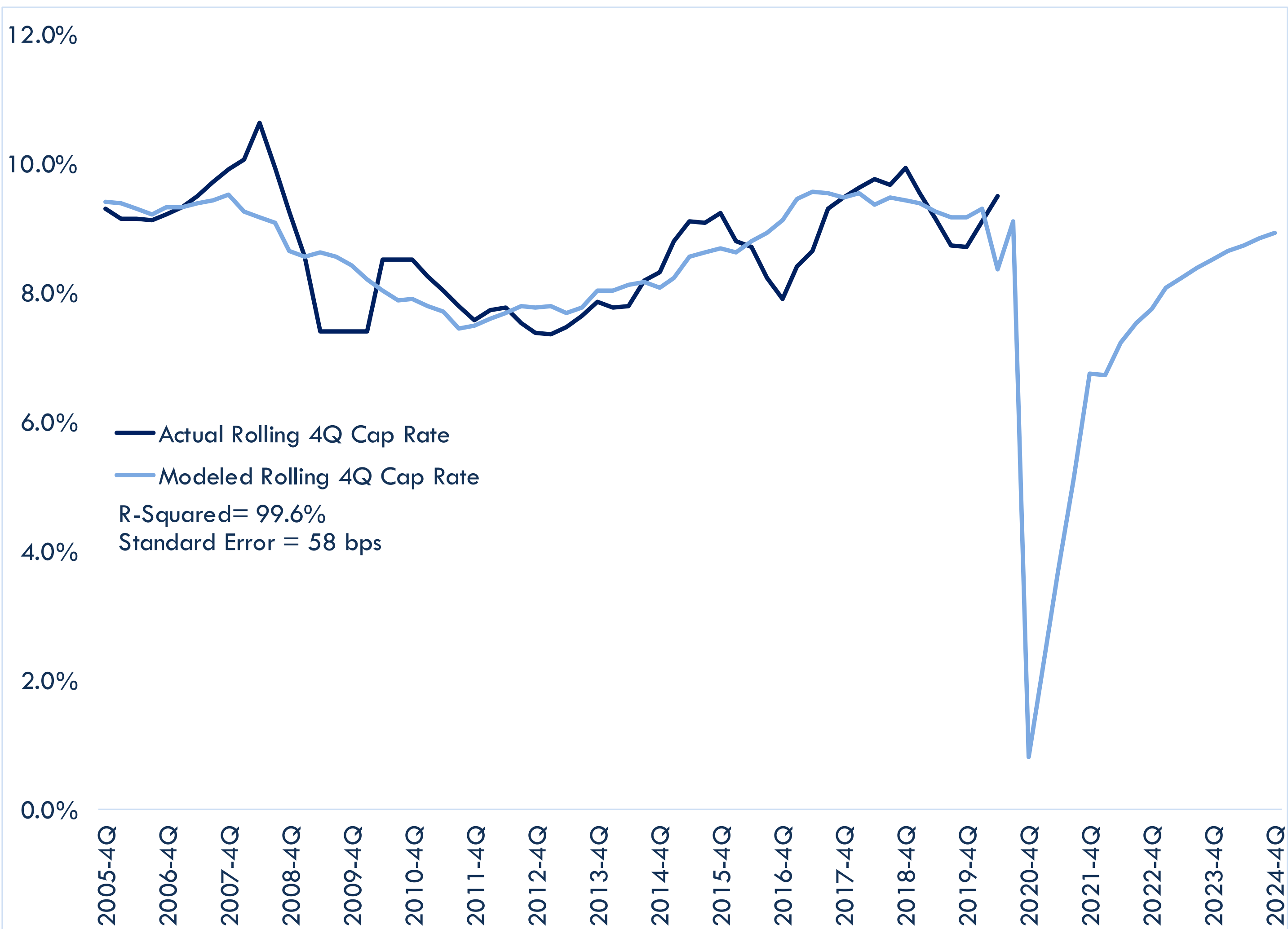
Local factors impacting Minneapolis cap rates most include:

- MSA Real GMP (23.2% correlation)
- MSA CPI (-1.4% correlation)

Based on these variables and other factors, we have created a regression forecast model for Minneapolis cap rates that has a 99.6% R-Squared, indicating a high prediction confidence level, within a standard error of 58 bps.

We believe this model offers a highly accurate forecast for Minneapolis cap rates, given the limited data points. Moody's Analytics forecasts a 1.1% 3-year CAGR for Real GMP and a 2.1% 5-year CAGR. Moody's Analytics forecasts a 2.3% 3-year CAGR for local CPI and a 2.5% 5-year CAGR

Minneapolis Hotel Cap Rate Regression Forecast



Source: Lodging Analytics Research & Consulting, Real Capital Analytics

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

3-Yr Local CPI CAGR \ 3-Year Real GMP CAGR	-0.4%	0.1%	0.6%	1.1%	1.6%	2.1%	2.6%
0.8%	(119)	(105)	(90)	(76)	(61)	(46)	(31)
1.3%	(140)	(126)	(111)	(97)	(82)	(67)	(52)
1.8%	(161)	(147)	(133)	(118)	(103)	(88)	(73)
2.3%	(183)	(169)	(154)	**(139)**	(125)	(110)	(95)
2.8%	(205)	(190)	(176)	(161)	(147)	(132)	(116)
3.3%	(227)	(212)	(198)	(183)	(169)	(154)	(139)
3.8%	(249)	(235)	(220)	(206)	(191)	(176)	(161)

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

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

5-Yr Local CPI CAGR \ 5-Year Real GMP CAGR	0.6%	1.1%	1.6%	2.1%	2.6%	3.1%	3.6%
1.0%	46	71	98	125	153	181	210
1.5%	7	33	60	87	115	143	172
2.0%	(32)	(6)	21	48	76	104	133
2.5%	(72)	(46)	(19)	**8**	36	64	93
3.0%	(113)	(87)	(60)	(33)	(5)	23	52
3.5%	(154)	(128)	(102)	(75)	(47)	(19)	10
4.0%	(197)	(171)	(145)	(117)	(90)	(61)	(32)

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

Investment Value Change

Our cap rate model suggests that Minneapolis cap rates would drop almost 800 bps in 2020 in a fully transparent market (an environment that we do not expect to materialize in 2020). That drop is similar to the drop we forecast across the industry as a whole. Over the course of the next three years, we expect cap rate compression to lag the national average by approximately 50 bps and over the next five years by 20 bps.

Based on our EBITDA forecasts and cap rate forecasts, we derive our property value forecasts for the Minneapolis market. We expect values to fall sharply in 2020 before beginning to recover in 2021. We forecast strong appreciation by 2023, with values getting all the way back to 2019 levels that year. However, as growth moderates, and cap rates stabilize, we forecast values to decline in 2024, ending our forecast period below 2019 levels. With 2024 cap rates on par with 2019 levels, the driver of the modest five-year value erosion is Hotel EBITDA, which we forecast to be down 5% from 2019 levels in 2024.

Overall, we forecast property values to decrease by a 4.8% CAGR over the next three years and by a 1.2% CAGR over the next five years. That translates to a 5.7% decrease in hotel values over the next five years. This ranks as the 17th highest value change across the 26 major U.S. hotel markets over the next five years.

Property Value Change Forecast *(forecast begins 2020)*

	EBITDA % Chg	Cap Rate	Cap Rate Chg (bps)	Asset Value YoY Change	Asset Value Change from 2019
2019	-12.7%	8.7%	(124)	-	-
2020 F	*-93.2%*	*0.8%*	*(789)*	*-26.1%*	*-26.1%*
2021 F	*526.5%*	*4.4%*	*364*	*13.4%*	*-16.2%*
2022 F	*69.4%*	*7.3%*	*286*	*3.0%*	*-13.7%*
2023 F	*37.8%*	*8.3%*	*100*	*21.2%*	*4.6%*
2024 F	*-4.6%*	*8.8%*	*48*	*-9.8%*	*-5.7%*

Source: Lodging Analytics Research & Consulting, Real Capital Analytics

Forecast Revision Summary

Forecast Variance vs. Last Quarter

Current Outlook

	Supply Growth	Demand Growth	Occ	ADR	RevPAR	EBITDA Margin*	EBITDA % Chg	Cap Rate	Value Change (from 2019)
2020-1Q	4.9%	-16.6%	45.4%	$104.73	$47.54	2.2%	-85.3%		
2020-2Q	-1.2%	-68.0%	23.8%	$71.60	$17.04	-15.5%	-111.6%		
2020-3Q	3.4%	-51.3%	35.4%	$81.88	$28.95	12.1%	-85.8%		
2020-4Q F	5.8%	-32.8%	36.3%	$79.47	$28.86	8.4%	-76.4%		
2020 F	**3.2%**	**-43.9%**	**35.2%**	**$86.89**	**$30.60**	**3.6%**	**-93.2%**	**0.8%**	**-26.1%**
2021-1Q F	6.1%	-13.4%	36.5%	$89.56	$32.72	-2.8%	-187.9%		
2021-2Q F	12.4%	150.6%	56.7%	$100.58	$57.00	11.0%	-337.0%		
2021-3Q F	7.0%	100.6%	68.4%	$108.60	$74.30	18.7%	297.9%		
2021-4Q F	3.5%	57.4%	55.9%	$105.94	$59.20	14.1%	242.4%		
2021 F	**7.3%**	**61.7%**	**54.4%**	**$102.63**	**$55.81**	**12.4%**	**526.5%**	**4.4%**	**-16.2%**
2022-1Q F	1.9%	57.7%	56.9%	$105.58	$60.08	10.4%	-780.9%		
2022-2Q F	2.2%	23.2%	68.6%	$111.72	$76.62	16.4%	101.3%		
2022-3Q F	2.2%	14.7%	77.0%	$116.71	$89.90	20.2%	30.2%		
2022-4Q F	1.8%	12.4%	61.8%	$112.01	$69.23	14.1%	17.6%		
2022 F	**2.0%**	**23.5%**	**66.1%**	**$111.92**	**$73.96**	**15.9%**	**69.4%**	**7.3%**	**-13.7%**
2023-1Q F	1.9%	6.7%	59.6%	$115.36	$68.78	14.2%	55.8%		
2023-2Q F	2.0%	3.6%	69.7%	$123.67	$86.21	20.5%	41.0%		
2023-3Q F	1.9%	1.2%	76.5%	$129.37	$98.93	24.0%	31.1%		
2023-4Q F	1.9%	-1.1%	60.0%	$123.87	$74.32	17.8%	35.2%		
2023 F	**1.9%**	**2.5%**	**66.4%**	**$123.49**	**$82.06**	**19.7%**	**37.8%**	**8.3%**	**4.6%**
2024-1Q F	1.8%	0.9%	59.1%	$121.68	$71.90	15.4%	13.3%		
2024-2Q F	1.8%	1.3%	69.4%	$126.99	$88.13	19.6%	-2.6%		
2024-3Q F	1.8%	1.3%	76.1%	$131.04	$99.73	22.1%	-7.4%		
2024-4Q F	1.8%	1.0%	59.5%	$124.48	$74.09	15.0%	-15.8%		
2024 F	**1.8%**	**1.2%**	**66.0%**	**$126.40**	**$83.46**	**18.5%**	**-4.6%**	**8.8%**	**-5.7%**

Change

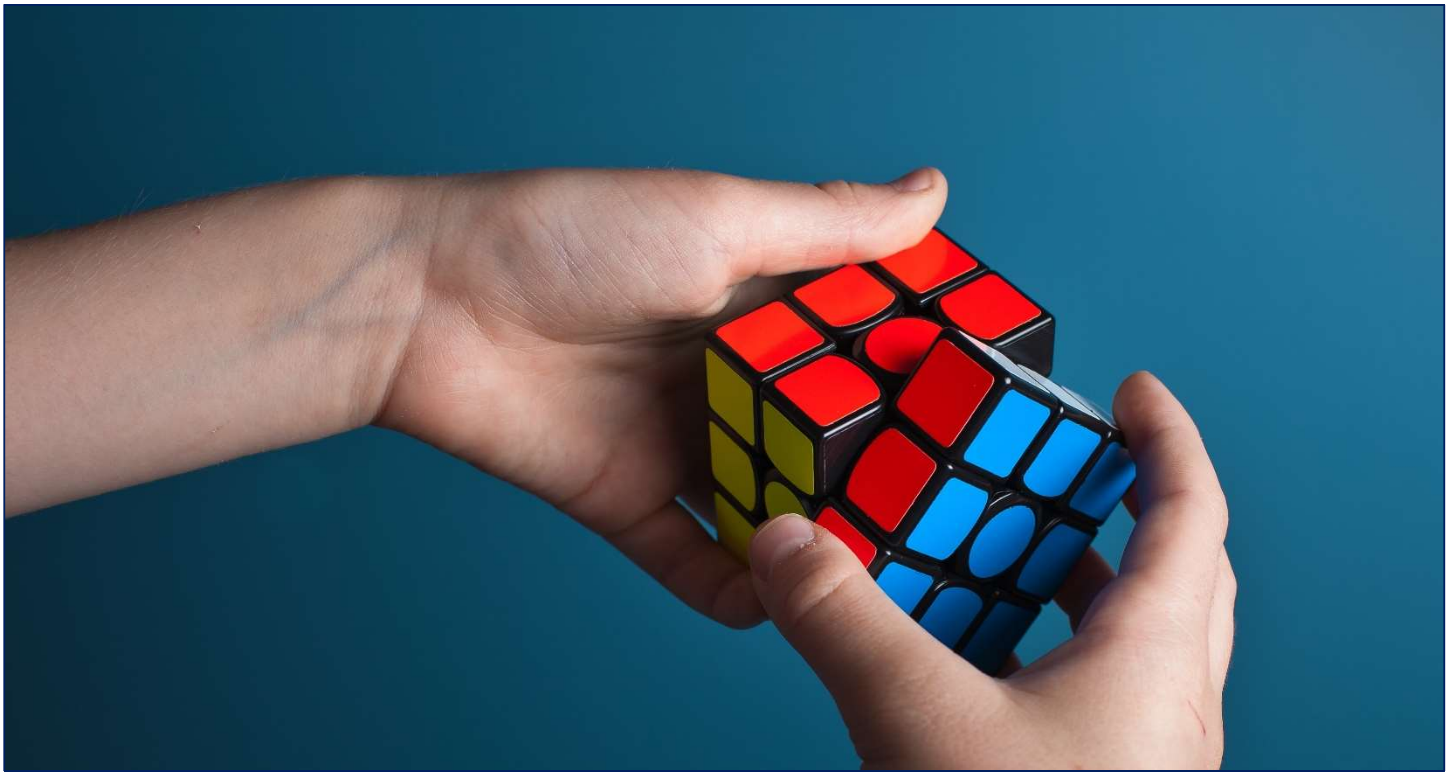
	Supply Growth (bps)	Demand Growth (bps)	Occ (%)	ADR (%)	RevPAR (%)	EBITDA Margin (bps)*	EBITDA % Chg (bps)	Cap Rate (bps)	Value Change (from 2019, bps)
2020-1Q	0	0	0.0%	0.0%	0.0%	(244)	(1,561)		
2020-2Q	0	0	0.0%	0.0%	0.0%	268	213		
2020-3Q	208	(62)	-5.6%	0.2%	-5.5%	14	(79)		
2020-4Q F	133	1,959	42.4%	-3.0%	38.2%	754	2,173		
2020 F	**85**	**412**	**6.6%**	**-1.1%**	**5.4%**	**100**	**211**	**9**	**1,641**
2021-1Q F	36	(1,566)	-16.6%	7.9%	-10.0%	683	7,107		
2021-2Q F	(41)	(2,959)	-10.9%	2.0%	-9.1%	364	(8,849)		
2021-3Q F	(314)	816	0.2%	-0.4%	-0.2%	200	5,723		
2021-4Q F	(182)	(5,203)	7.3%	-1.7%	5.5%	186	(335,864)		
2021 F	**(125)**	**(1,916)**	**-4.5%**	**1.8%**	**-2.8%**	**347**	**(5,054)**	**12**	**1,958**
2022-1Q F	(69)	3,275	6.2%	-2.7%	3.3%	(192)	(47,609)		
2022-2Q F	32	2,278	9.4%	-3.4%	5.6%	(208)	(9,078)		
2022-3Q F	121	1,167	10.5%	-3.9%	6.2%	(231)	(2,245)		
2022-4Q F	120	379	9.9%	-4.1%	5.4%	(243)	(4,130)		
2022 F	**51**	**1,568**	**9.1%**	**-3.5%**	**5.3%**	**(216)**	**(7,722)**	**(17)**	**(530)**
2023-1Q F	128	(244)	2.6%	-0.4%	2.1%	(137)	988		
2023-2Q F	103	(531)	3.0%	1.0%	4.0%	(8)	1,344		
2023-3Q F	66	(638)	3.2%	1.5%	4.7%	26	1,303		
2023-4Q F	29	(689)	2.3%	1.6%	4.0%	47	2,136		
2023 F	**99**	**(520)**	**2.8%**	**1.0%**	**3.8%**	**(10)**	**1,421**	**(31)**	**638**
2024-1Q F	8	(322)	-0.7%	1.2%	0.5%	(16)	717		
2024-2Q F	7	(178)	1.1%	0.6%	1.7%	(50)	(440)		
2024-3Q F	5	(50)	2.6%	0.1%	2.7%	(74)	(600)		
2024-4Q F	4	12	2.4%	-0.1%	2.3%	(92)	(913)		
2024 F	**7**	**(130)**	**1.4%**	**0.4%**	**1.9%**	**(57)**	**(436)**	**3**	**(216)**

Prior Outlook

	Supply Growth	Demand Growth	Occ	ADR	RevPAR	EBITDA Margin*	EBITDA % Chg	Cap Rate	Value Change (from 2019)
2020-1Q	4.9%	-16.6%	45.4%	$104.73	$47.54	4.6%	-69.7%		
2020-2Q	-1.2%	-68.0%	23.8%	$71.60	$17.04	-18.1%	-113.7%		
2020-3Q	1.3%	-50.7%	37.5%	$81.74	$30.62	11.9%	-85.0%		
2020-4Q F	4.5%	-52.4%	25.5%	$81.90	$20.89	0.9%	-98.2%		
2020 F	**2.4%**	**-48.0%**	**33.0%**	**$87.84**	**$29.02**	**2.6%**	**-95.3%**	**0.7%**	**-42.5%**
2021-1Q F	5.7%	2.2%	43.8%	$82.97	$36.35	-9.6%	-259.0%		
2021-2Q F	12.8%	180.2%	63.6%	$98.60	$62.72	7.3%	-248.5%		
2021-3Q F	10.2%	92.4%	68.3%	$109.05	$74.43	16.7%	240.7%		
2021-4Q F	5.3%	109.5%	52.1%	$107.78	$56.11	12.2%	3601.0%		
2021 F	**8.5%**	**80.9%**	**56.9%**	**$100.82**	**$57.40**	**8.9%**	**577.0%**	**4.3%**	**-35.8%**
2022-1Q F	2.6%	24.9%	53.6%	$108.52	$58.15	12.3%	-304.8%		
2022-2Q F	1.9%	0.4%	62.7%	$115.69	$72.52	18.5%	192.1%		
2022-3Q F	1.0%	3.1%	69.7%	$121.41	$84.63	22.5%	52.7%		
2022-4Q F	0.6%	8.6%	56.2%	$116.80	$65.68	16.6%	58.9%		
2022 F	**1.5%**	**7.9%**	**60.6%**	**$116.01**	**$70.25**	**18.0%**	**146.6%**	**7.5%**	**-8.4%**
2023-1Q F	0.6%	9.1%	58.1%	$115.88	$67.36	15.5%	46.0%		
2023-2Q F	1.0%	8.9%	67.7%	$122.40	$82.86	20.6%	27.5%		
2023-3Q F	1.3%	7.6%	74.1%	$127.51	$94.50	23.8%	18.1%		
2023-4Q F	1.6%	5.8%	58.6%	$121.88	$71.45	17.3%	13.8%		
2023 F	**1.0%**	**7.7%**	**64.6%**	**$122.28**	**$79.04**	**19.8%**	**23.6%**	**8.6%**	**-1.8%**
2024-1Q F	1.7%	4.1%	59.5%	$120.22	$71.57	15.5%	6.2%		
2024-2Q F	1.7%	3.1%	68.6%	$126.26	$86.67	20.1%	1.8%		
2024-3Q F	1.7%	1.8%	74.2%	$130.90	$97.08	22.8%	-1.4%		
2024-4Q F	1.7%	0.9%	58.1%	$124.66	$72.44	16.0%	-6.6%		
2024 F	**1.7%**	**2.5%**	**65.1%**	**$125.84**	**$81.94**	**19.0%**	**-0.3%**	**8.7%**	**-3.5%**

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

MARKET INTELLIGENCE REPORT



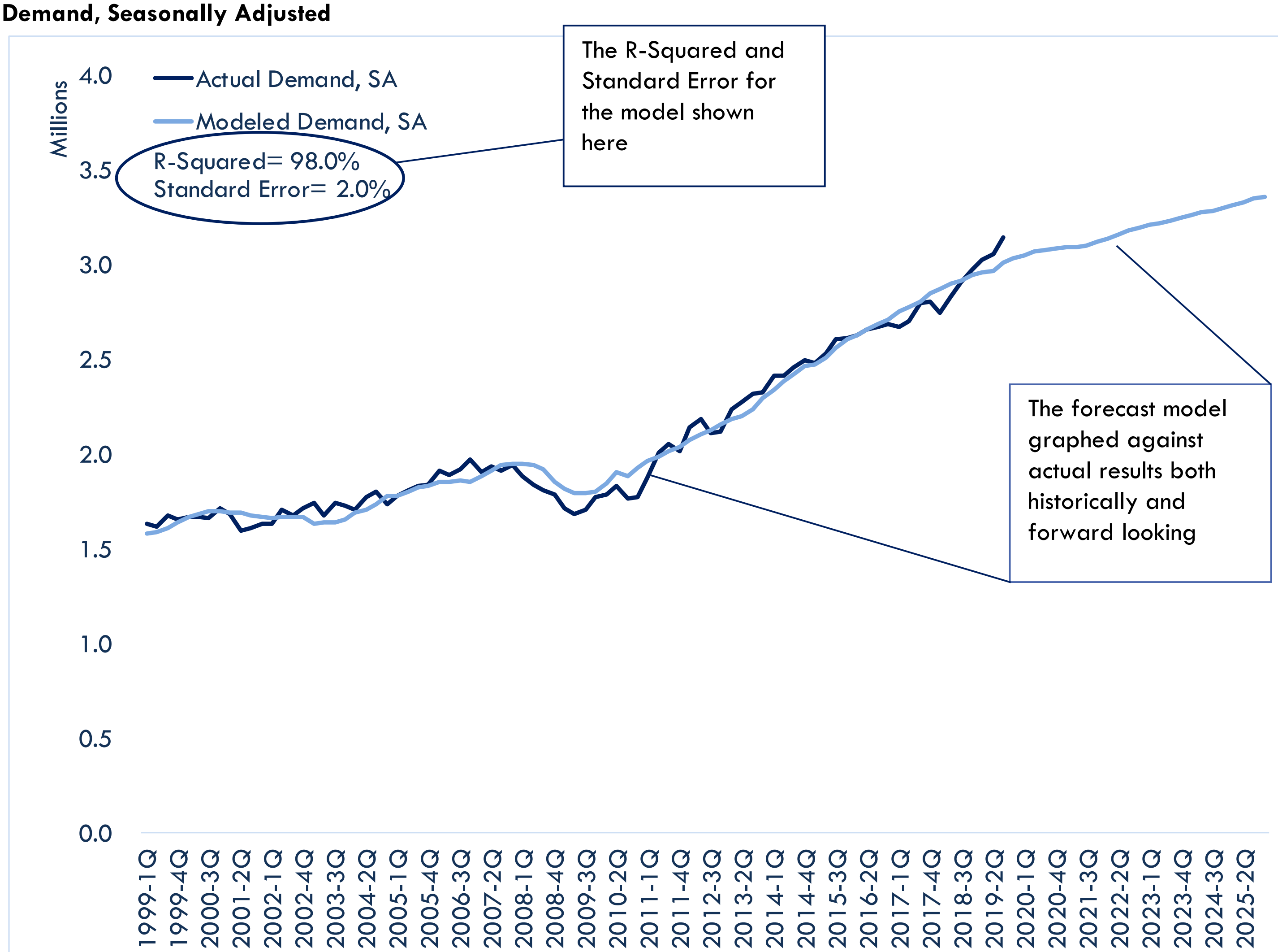
APPENDIX

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 indicators 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.

Demand, Seasonally Adjusted



Source: Lodging Analytics Research & Consulting, STR

In addition to showing a chart plotting the model's forecasted projections 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 above 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 U.S. destinations vs. other global destinations
- Foreign Direct Investment into the U.S. – a component representing the flow of investment funds into the U.S.

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.
- Lodging Supply – supply often has a meaningful impact on a local market's ability to drive occupancy, ADR and RevPAR higher. Our supply forecasts assume on average a 6-month lag in openings in 2020 and a 3-month lag in 2021 due to Covid-19 related construction and opening delays. We also assume that properties that temporarily closed in 2Q-2020 will gradually reopen by 1Q-2021.
- 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 has become significant 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 Office Emp CAGR	3-Year Retail Sales CAGR						
	1.2%	2.2%	3.2%	4.2%	5.2%	6.2%	7.2%
-1.9%	-2.1%	-1.8%	-1.4%	-1.1%	-0.7%	-0.3%	0.0%
-0.9%	-1.2%	-0.9%	-0.5%	-0.2%	0.2%	0.6%	0.9%
0.1%	-0.2%	0.1%	0.4%	0.8%	1.1%	1.5%	1.9%
1.1%	0.7%	1.1%	1.4%	**1.7%**	2.1%	2.4%	2.8%
2.1%	1.7%	2.0%	2.3%	2.7%	3.0%	3.4%	3.7%
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 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 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
Economic Lodging Supply	The effective room supply assuming no temporary hotel closures due to Covid-19
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, which are tied to the urban center economiccally, but not 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

LARC®

LODGING ANALYTICS RESEARCH & CONSULTING

Better Lodging
Analytics for Better
Business Decisions

(929) 416-4783 • 200 West 41st Street, Suite 602, New York, NY 10036
information@larcanalytics.com • larcanalytics.com