

May 1, 2018

## **NAPA LODGING MARKET STUDY ECONOMIC, FISCAL, AND LABOR/HOUSING IMPACT ANALYSES**

PREPARED FOR THE CITY OF NAPA CITY COUNCIL

### **FOREWARD**

In September 2017, Cushman & Wakefield was engaged by the City of Napa to perform a lodging market study that presents historical trends and projects future performance in the City of Napa. The study analyzes the lodging supply and demand by product category providing a timeline for the absorption of proposed projects in the pipeline, and a longer-term analysis of the market's capacity for supporting additional hotel rooms. This report examines changes in Napa's lodging market since the last study, conducted in 2007.

Concurrent with the Cushman & Wakefield study, BAE Urban Economics was engaged to study the impacts of the hotel sector on the local economy and the city's revenues, as well as the ability to attract hospitality workers. Using the findings related to hotel development and performance in the Cushman & Wakefield report, BAE projected the spinoff economic impacts and new jobs created by the additional lodging. BAE also projected sales taxes, property taxes, and transient occupancy taxes (TOT), and other revenues related to new hotel development that contribute to the city's General Fund. Finally, BAE evaluated the need and availability of housing for the new hotel workers needed to support the additional hotel demand identified by Cushman & Wakefield.

The Napa Valley is a premier visitor destination, and lodging market activity is constantly evolving. This report takes into consideration the various issues currently facing the Napa and Napa Valley hotel market at the time of this study; however, as with any study, unforeseen events or circumstances can impact hotel supply and demand and may produce results that could affect the forecasts and recommendations.

**CUSHMAN & WAKEFIELD WESTERN, INC.**

**BAE URBAN ECONOMICS**



**bae urban economics**



## Napa Valley Lodging Market Study

### Prepared For:

City of Napa  
Community Development Department  
1600 First Street/PO Box 660  
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### Prepared By:

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C&W File ID: 18-38002-900003



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March 14, 2018

Mr. Rick Tooker  
City of Napa  
Community Development Director  
**Community Development Department**  
1600 First Street/PO Box 660  
Napa CA 93899

Re:  
**Napa Valley Lodging Study**  
Napa Valley, Napa County, California

C&W File ID: 18-38002-900003

CLIENT ID#: C2017 294

Dear Mr. Tooker:

The City of Napa has engaged Cushman & Wakefield Western, Inc. ("C&W") to prepare a hotel market supply and demand study for the city and county of Napa, California, for economic planning purposes. For this assignment, C&W researched and inventoried hotels, motels, inns, bed-and-breakfast facilities, and banquet and meeting space facilities in the city and county of Napa. New lodging and meeting facilities proposed for the area were also evaluated. Primary research was conducted by administering questionnaires; interviewing area operators, government officials, and representatives of tourist organizations and attractions; and through a review of planning records. The operating performance of existing hotels and meeting facilities was also evaluated.

Based on the data collected and information from our in-house files, we have classified the existing and proposed lodging supply into four categories: 1) bed-and- breakfast facilities, 2) limited-service hotels and inns, 3) full-service hotels, and 4) independent and boutique hotels. Considering the current and proposed hotel inventory in the city and county of Napa, lodging supply and demand analyses were prepared; these culminated in the preparation of forecasts of occupancy and average rate for the four categories. Meeting and banquet space in hotels and other venues was analyzed to consider its relevance to hotel demand. Finally, topical issues affecting hotel development and future lodging and meeting demand in the city and county of Napa were investigated.

The market study report contained herein concludes with our recommendations for future hotel development within the city of Napa. Our consulting report was prepared in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP), as provided by the Appraisal Foundation.

The analysis contained in this market study is based upon assumptions and estimates that are subject to uncertainty and variation. These estimates are often based on data obtained in interviews with third parties, and such data are not always completely reliable. In addition, we make assumptions as to the future behavior of consumers and the general economy, which are highly uncertain. However, it is inevitable that some assumptions will not materialize and unanticipated events may occur that will cause actual achieved operating results to differ from the financial analyses contained in this report and these differences may be material. Therefore, while our analysis was

conscientiously prepared on the basis of our experience and the data available, we make no warranty that the conclusions presented will, in fact, be achieved. Additionally, we have not been engaged to evaluate the effectiveness of management and we are not responsible for future marketing efforts and other management actions upon which actual results may depend.

We take no responsibility for any events, conditions, or circumstances affecting the market that exists subsequent to the last day of our fieldwork, January 1, 2018.

The opinions in this report are qualified by certain assumptions, limiting conditions, certifications, and definitions. We particularly call your attention to the extraordinary assumptions and hypothetical conditions listed below.

This letter is invalid detached from the report, which contains the text, exhibits, and Addenda.

Respectfully submitted,

**CUSHMAN & WAKEFIELD WESTERN, INC.**

**DRAFT**

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## Executive Summary

The following is an executive summary of the information that we present in more detail in the report.

### Key Findings

- Demand for hotel rooms has been strong for all product segments and barring any unforeseen event, is expected to continue to grow over the long-term.
- In the past ten years, despite a large number of entitled hotel sites, only a small number of new projects have actually been built. New supply in the city of Napa in the past seven years has been fairly modest. The room Westin Verasa opened in 2008, the Andaz hotel opened in 2009, the Hampton Inn opened in 2016, and the Archer Hotel opened in 2017. Other hotel rooms in the city of Napa represent expansions or renovations of existing lodging. Note that the number in the chart below represent only the hotels that report to Smith Travel Research and different from the inventories used elsewhere in the analysis.

Historical Lodging Inventory - Number of Rooms as reporting to STR												
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
American Canyon	248	0	101	0	0	0	0	0	0	0	0	349
Calistoga	667	0	0	0	0	0	0	0	0	0	0	667
Napa	1,832	180	141	0	0	165	0	41	-5	115	46	2,515
Rutherford	136	0	0	0	0	0	0	0	0	0	0	136
St. Helena	251	0	0	0	0	0	0	0	0	0	51	302
Yountville	298	0	82	0	0	0	0	0	0	0	0	380
Unincorporated	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,432	180	324	0	0	165	0	41	-5	115	97	4,349
Napa County												
Cummulative Totals	3,432	3,612	3,936	3,936	3,936	4,101	4,101	4,142	4,137	4,252	4,349	
Percent Change		5%	9%	0%	0%	4%	0%	1%	0%	3%	2%	
Cummulative Increase		5%	15%	15%	15%	19%	19%	21%	21%	24%	27%	
City of Napa	1,832	2,012	2,153	2,153	2,153	2,318	2,318	2,359	2,354	2,469	2,515	
Percent Change		10%	7%	0%	0%	8%	0%	2%	0%	5%	2%	
Cummulative Increase		10%	18%	18%	18%	27%	27%	29%	28%	35%	37%	
City as % of County		56%	55%	55%	55%	57%	57%	57%	57%	58%	58%	

*Note 2017 new supply represent partial year openings*

- The Napa Valley continues to be a seasonal destination, however, the number of peak nights has expanded and annual occupancy and rates are at very high levels. Since the 2007 HVS study, occupancy has rebounded but has been more stable in the last three years. Average rates soared from 2010 to 2015 and are still strong, though the rate growth has moderated. The fires in October 2017 significantly influenced the 4th Quarter and annual performance for last year. According to market participants, many hotels were on track for another record year until the fires. Hotels in the Napa Valley instead provided lodging for displaced residents, visitors, and first responders at courtesy rates. Since the fires, operators report uneven recovery of demand. Some properties continue to be negatively impacted while the performance of others is generally improved. The appraisal assumes that the impact from the fire is limited and demand returns to prior levels in 2018.
- The city of Napa has a large pipeline of proposed hotels, many of which are entitled. Some of the properties have been entitled for many years and only two new hotels and some expansions have opened in the last 7 years. Although a number of the proposed hotels are assumed to be built in the study, the reality of what gets developed and opened may differ from the projections. While not all the rooms may get built and the

timing of projects may differ from the assumptions used in the report, the analysis indicates that demand for hotel rooms will exceed the proposed supply in the long term. In the short term, the absorption of new rooms will likely transitionally impact hotel performance.

- Luxury hotels are the most complicated and expensive hotels to build. Because of the large investment, the properties require high average rates and occupancies to be feasible. There are no products in the city of Napa that are categorized as Luxury with rates that compete with the Up Valley Resorts so there is no evidence that this property type can be supported in the city. Generally luxury properties in the Napa Valley are small with high service levels. While we have included larger luxury proposed hotels in the analysis for the city of Napa, the feasibility of these projects may impact their actual development. Limited- and select-service hotels are less expensive to build. Branded limited- and select-service hotels benefit from sales, marketing, and reservation systems that can drive demand and facilitate a quick ramp-up.
- Consistent with the 2007 HVS study, the development of a core of downtown full- service hotels does not preclude the need for a range of additional lodging products in a variety of locations throughout the city and county. In recent years, hotel development in the city has been more achievable than in other areas of the county. Strong demand exists for additional limited-service, full-service, and resort accommodations and the pricing ranges due to seasonal and locational attributes of particular properties are important to maintain to continue to make the destination accessible for all hotel guests.
- Hotel products are changing with the shifts in demographics of visitors. Upscale hostels, wellness retreats, and lodging with communal public spaces and orientation to group activities are successfully being developed in other resort destinations. We also recommend that a wide variety of lodging products be considered for the market beyond the conventional categories considered in this study. The range of hotel products, brands, and locations, and also serve to expand the base of lodging demand by offering a number of unique guest experiences.
- While a core of downtown hotels would contribute to the overall success of the area, not all new hotels have to be built downtown. Some properties may be more feasibly developed on sites outside of the core.
- The entitlement and development process for new hotels in Napa, along with the cyclical nature of the industry, has resulted in some hotel construction being delayed, sometimes for years. It may be that by the time the market would support construction, the optimal facility programming for the site may differ from what was approved. Adjusting the entitlements could then further delay or hamper the project. The consultants recommend that additional flexibility be incorporated into the approval process.

## Objective of the Market Study

The objective of the assignment is to evaluate supply and demand conditions for lodging and meeting facilities in the city and county of Napa. Note that the study refers to the Napa Valley and Napa County as synonymous designations for the geography considered in the analysis. Major tasks in the scope of work included:

1. Preparing an inventory of existing and proposed lodging facilities;
2. Developing definitions for different lodging products;
3. Reviewing demand generators for lodging demand in the Napa Valley;
4. Forecasting occupancy and average rate and potential capacity by lodging product type;
5. Reviewing the available meeting and banquet facilities;
6. Making recommendations for future lodging and meeting space development; and
7. Discussing hotel development issues and constraints.

Cushman & Wakefield was engaged by the City of Napa's Community Development Department to provide a market study of the lodging performance in the city and county of Napa. In 2000 and 2007, similar studies were performed by HVS. We have been provided with a copy of the 2007 HVS study and asked to discuss notable differences between our findings and those of HVS. Our references to the 2007 HVS study are not intended as commentary or review; but serve to state different assumptions and findings between the two periods in time. These relevant differences in the content of this study and the 2007 HVS study are noted throughout the report.

The hotel market has seen many changes since the 2007 study including the completion of major components of the flood control project in the city of Napa, the opening of new hotels, the earthquake in 2014, and more recently, the fires in 2017. Lodging performance has set records since 2010 and operators anticipate continued improvement. In this environment, just as when the 2007 HVS Market Study was underway, additional hotels are being proposed for sites in the city and county of Napa. As with hotel development in general, particularly in areas with stringent development challenges, the specifics and timing of the projects are subject to change. Unlike the market conditions at the time of the 2007 HVS study, which was prepared as the market cycle was subsiding, hotel performance since 2010 has improved, and new hotel projects open since 2007 have been readily absorbed. As expected in the earlier study, the majority of the new hotel rooms in the Napa Valley have been built within the city of Napa.

It is important to note that while the Napa lodging market is very fragmented and much of the inventory is independently owned and operated, national investors are more present in the market than in the prior study and the area is seeing additional hotel development that is affiliated with national and global brands. This study considers a number of specific lodging projects in the development pipeline, however, their actual construction may or may not occur. The actual completion of new hotels may be significantly different from the data presented in the report and the forecasts and findings of this study may be impacted by future economic trends.

The forecasts in this study are projected for the next ten years based on the known pipeline of new rooms for years 1 through 6 and the sustainable occupancy for years 7 through 10. These projections result in residual or potential demand in each year and are intended to demonstrate the overall general absorption of the current pipeline of hotel projects and to mark the timing when additional new hotels could be considered.

Although the study takes into consideration the various issues currently facing the Napa Valley at the time of this writing, as with any study, unforeseen events can impact hotel supply and demand that may produce results that could affect the forecasts and recommendations.

## Intended Use of the Study

This study is being prepared for use by the City of Napa Community Development Department for economic-planning purposes. This report or any information, analysis, or conclusions presented in this report should not be disseminated to or relied upon by the public or third parties without the express written consent of Cushman & Wakefield.

## Summary of Findings

1. Our research indicates that Napa Valley contains 135 lodging properties with 5,074 guestrooms. On average this implies an average room count of 44 units; in reality, approximately 60 percent of the properties have 20 rooms or fewer, with an average of 7.5 units. Almost all of these smaller properties are independently owned and operated – most as bed and breakfasts. Conversely only 17 properties have 90 guestrooms or more. These 17 properties include the majority of branded hotels and most are located in the city of Napa. The inventory of lodging facilities in Napa Valley can be considered a highly decentralized market comprised of many individual owners and operators, each with their own business strategies and

objectives. The fragmented nature of the lodging market means that performance expectations and operating and marketing practices differ from property to property.

2. In addition to the range of property types and owners and operators, the inventory is scattered in a variety of locations. Over the past four to five decades (and for some locations longer), four major destinations have evolved: Calistoga, St. Helena, Yountville, and the city of Napa. Other secondary locations are also supporting improved lodging performance. Since the 2007 HVS Study, the aforementioned destinations have each evolved with an increase in hotel rooms and complementary retail, food and beverage, and entertainment uses including tasting rooms and wineries. These locations have become more distinctive destinations over the past 10 years. It is our opinion that visitors to the Napa Valley are more sophisticated about their lodging choices, however, lodging continues to sell out during peak periods and selection of lodging can be based on availability and price.
3. Lodging inventory has markedly increased since the 2007 HVS Study. The following chart summarizes the inventory identified for this study compared to the 2007 report. Some of the differences are the result of different categorization of particular properties among the categories, largely based on estimated average rates and facilities. For example, the full-service hotels in downtown Napa have all been categorized in the full-service category. Some small inns in the city were included in the B&B and Small Inns category and may have been considered luxury in the 2007 HVS study. We have not designated any hotels as luxury in the city. The luxury hotels Up Valley support an average rate exceeding \$600 which is higher than the estimated rates achieved at the existing inventory. All in all, there are more rooms and the reclassification of the hotels into the four categories reflects the expansion of the different property types.

#### Napa Valley Existing Lodging Supply

Property Type	Current Inventory				Inventory from the 2007 Study			
	Number of Properties	% of Total	Number of Guestrooms	% of Total	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	75	60%	675	13%	93	62%	503	10%
Limited Service Hotels	27	22%	1,521	30%	17	11%	1,068	21%
Full Service Hotel	11	9%	1,907	38%	6	4%	1,193	24%
Luxury Hotels & Resorts	12	10%	972	19%	33	22%	1,215	24%
Totals	125	100%	5,074	100%	149	100%	3,979	78%

4. Overall, the number of available rooms is 28 percent greater than in 2007. As was anticipated in the 2007 study, the majority of the hotels that opened are located in the city of Napa and have contributed to the evolution of the city as a distinct lodging destination.

Below is the allocation of lodging inventory for the county and city of Napa.

**Napa Valley Existing Lodging Supply - as of December 2017**

Property Type	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	75	60%	675	13%
Limited Service Hotels	27	22%	1,521	30%
Full Service Hotel	11	9%	1,907	38%
Luxury Hotels & Resorts	12	10%	972	19%
Totals	125	100%	5,074	100%

**City of Napa Existing Lodging Supply -as of December 2017**

Property Type	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	23	51%	251	10%
Limited Service Hotels	13	29%	731	30%
Full Service Hotel	9	20%	1,435	59%
Luxury Hotels & Resorts	0	0%	-	0%
Totals	45	100%	2,417	100%

**Distribution of Lodging Inventory - as of December 2017**

## City of Napa as a ratio of Napa Valley

Property Type	Number of Properties	Number of Guestrooms
Bed and Breakfast	31%	37%
Limited Service Hotels	48%	48%
Full Service Hotel	82%	75%
Independent and Luxury Hotels	0%	0%
Totals	36%	48%

Note that Bed and Breakfast and Small Inns range from 2 to approximately 40 rooms. Limited service hotel range from 15 to 115 rooms and as a group are lower rated than the B&B and Small Inns. Full service hotels range in size from 80 to 370 rooms. Luxury hotels and resorts include properties that are 50 to 115 rooms.

- The most notable growth in inventory has been in the full-service segment with the openings of The Andaz Hotel, The Westin Verasa Hotel, The Meritage Resort, and most recently The Archer Hotel. The Napa Valley offers a wider range of lodging types than ever before and average rates in 2017 ranged from a low of \$192.00 for the limited service category to over \$600.00 for the independent and luxury hotels. On a nightly basis, the range can be even greater – from approximately \$100 to over \$2,000 depending on the property type and season. A number of factors have been considered when determining the category each property but most notably rate positioning and facilities.

Note that in the current study, we have not included any existing hotels in the city of Napa in the Luxury Hotels and Resorts category although we have included proposed supply in this category. This category was evaluated only for the county as a whole.

6. While Napa is supporting a growing hotel market, the inventory of existing lodging is relatively small. The number and type of operating properties limits the analysis to considering the market based on two geographical categories: lodging in the Napa Valley and in the City of Napa. In this study, the Valley reference is synonymous to the County. The study does not provide for smaller geographical analysis as the lodging inventory in the city and the county is not expansive enough to allow for reasonable findings from the analyses. The study is intended to provide insight on overall market performance, not to opine on the feasibility of particular projects or submarkets.
7. Meeting and banquet space in the Napa Valley is mostly contained in the full service and luxury hotels, and is inexorably linked to hotel room availability. Meeting and group activity is an important driver of hotel demand during slower periods as operators seek out groups to fill rooms, typically at lower room rates. As the peak season for transient demand in the market has expanded and overall group demand nationally has declined, the importance of meeting and group facilities for many of the smaller properties has diminished. Even the full-service hotels, including those affiliated with global hotel companies, are extremely sophisticated and judicious in their accommodation of groups so as to maximize rate and occupancy. The larger hotels in the current pipeline are planned with a complement of meeting space that is important for those projects. Smaller and limited service hotels are not as reliant on meeting and group demand. It is our opinion that additional meeting and group space will be beneficial for the larger hotels and resorts proposed in the market, particularly those not affiliated with global brands. The trends over the past 20 years have shown that the appeal of meeting space is more important to larger hotels and during softer economic periods.
8. The importance of brands for a number of the existing and proposed hotels cannot be overstated. This is not to imply that all hotels should be branded. The Napa Valley is expected to continue to benefit from a wide range of lodging which adds to the attraction of the destination. However, those properties opening with globally affiliated brands and distribution networks are able to quickly ramp up. In addition, the Napa Valley is a prime destination for redemptions of brand loyalty program points. It is our opinion that brand affiliations have the ability to expand demand for particular hotels and to grow the market.
9. Since the 2007 study, the availability of online booking engines has exploded. Consumer use of the internet for researching and making reservations has changed the marketing and reservation practices of hotels. Independent hotels are also benefactors of this evolution as having an online presence is efficient and effective to secure bookings for all categories of lodging. It is our opinion that the strong performance of the B&B category is directly related to greater online presence and the newly found ease of making reservations for these properties.
10. The pipeline of proposed hotels for the city and county of Napa continues to be a constantly changing inventory. Some of the proposed properties and sites discussed in the 2007 HVS study are still speculative ten years later. And those projects in the pipeline of the current report may end up being developed with alternative lodging products, different facilities and configurations, or not at all. Other sites that are not referenced in this document may ultimately be used for lodging facilities. The actual opening dates are always subject to change. The availability of specific sites, the securing of entitlements, and construction financing are material components of hotel development. This study assumes that the proposed pipeline of hotels considered as new supply in this analysis comes to fruition however, the future market performance may be significantly impacted based on what is actually built.

11. Demand for hotel rooms by transient and group hotel guests in the city and county of Napa is strong and barring any unforeseen event, is anticipated to continue to grow. The study analyzes the impact of new hotels in the two markets (City and County) assuming that a majority of the proposed hotel rooms in the pipeline are actually built. New hotels typically require an occupancy and rate ramp period and their performance is expected to improve over time. Existing hotels in the market can be transitionally impacted when new hotels open.
12. The study assumes that a number of hotels will open in the near term during the next five years. Through this period, the demand is not forecast to keep up with supply. This is represented by some years of negative supply numbers when there are more hotel rooms than guests to fill them. In these transitional years, the performance of existing hotels could be negatively affected. This is a short term proposition where the negative numbers in the analysis represent the years when the new hotels are being absorbed. The net result (conclusion) is that over the long-term, the current pipeline of proposed hotels could get built and absorbed. In the long term, the growing demand would then support additional hotel rooms. That is when the positive numbers represent excess or unsatisfied demand.
13. During periods when negative supply is indicated, it is likely that occupancy and rate will be impacted by new supply absorption. The positive numbers in the later years are not meant to be literally the number of rooms that should be built but indicate that there is more demand than supply.
14. As was noted in the 2007 HVS study, the performance of the current and proposed supply will always be subject to each property's specific management. Differences in operational experience, labor capacity, marketing strategies, and brand benefits can result in a wide range of achieved occupancies and rates. This analysis assumes that the existing and proposed lodging facilities are competently managed and maximize their operating potential.
15. The city and county of Napa are not immune from the problems of labor, traffic, and housing that are challenging throughout the San Francisco Bay Area. Traffic congestion is still a major concern among residents and visitors and can negatively affect the visitor's experience. The availability of employees to fill service level and managerial positions is a consistent anxiety of hotel operators and is impacted by the cost of housing in the area relative to the pay scale for hotel employees. These issues are expected to continue to be challenging for operators but do not appear to have deterred the development of new hotels, the interest of hotel developers, and the successful operations of existing lodging.

## Forecasts of Rate and Occupancy and Lodging Capacity

Based on our research and analysis, forecasts of rate and occupancy and potential for additional development were prepared for each of the four lodging product categories for both the county of Napa as a whole and for the city of Napa. These forecasts assume a level of variability of approximately 3.0 to 5.0 percent on either side of the projections. The operating and marketing efforts of hotel operators are directly related to the success of any particular property and the market as a whole. The projections assume that some of the demand for new hotels will be effectively induced and managed to maximize performance. The forecasts also assume that the general economic trends in the market continue for the foreseeable future and that, like the lodging market's recovery from the 2014 earthquake, the impact of the recent fires on the hotel market is short-lived. Any changes in these conditions will alter the outcome of our forecasts and corresponding future hotel development recommendations.

Is it also important to note that the potential demand findings are not meant to be a recommendation of absolute numbers of hotel rooms that should be approved or developed. The negative numbers in the projections of potential demand represent the absorption of the pipeline of proposed lodging and the positive numbers mark the anticipated point in time when demand is expected to be strong enough to support additional hotel rooms. As the positive

numbers occur at least five to seven years from the start of the projections, the specifics of proposed lodging at that time are purely speculative.

Below are the forecasts for each of the four categories and the potential demand. The charts include the projections for the county of Napa and then for the city of Napa.

## Bed and Breakfasts and Small Inns – Napa Valley

Projected Rooms Revenue - Napa Bed and Breakfast Sector - Napa Valley CA										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	675	675	675	675	675	675	675	675	675	675
Occupancy	69%	69%	68%	67%	68%	68%	68%	68%	68%	68%
Occupied Rooms	170,841	169,799	167,294	165,324	166,977	167,535	167,535	167,535	167,535	167,535
Average Rate	\$351.52	\$365.58	\$380.21	\$391.61	\$403.36	\$415.46	\$427.93	\$440.77	\$453.99	\$467.61
RevPAR	\$242.55	\$252.25	\$258.54	\$262.38	\$274.29	\$282.52	\$290.99	\$299.72	\$308.71	\$317.97
Rooms Revenue	\$60,055,000	\$62,076,000	\$63,607,000	\$64,743,000	\$67,352,000	\$69,605,000	\$71,693,000	\$73,844,000	\$76,059,000	\$78,341,000

Bed & Breakfast and Small Inns - Estimate of Additional Capacity - Napa County											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	675	684	706	743	778	778	778	778	778	778	778
Estimated Available Annual Room Nights	246,375	249,478	257,690	271,195	283,970	283,970	283,970	283,970	283,970	283,970	283,970
Total Projected Potential Demand	170,215	172,992	177,597	184,147	190,551	192,456	194,381	196,325	198,288	200,271	202,274
Estimated Sustainable Annual Occupancy	69%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
Estimated Sustainable Annual Demand		169,645	175,229	184,413	193,100	193,100	193,100	193,100	193,100	193,100	193,100
Total Projected Potential Demand		172,992	177,597	184,147	190,551	192,456	194,381	196,325	198,288	200,271	202,274
less Est. Sustainable Annual Demand		169,645	175,229	184,413	193,100	193,100	193,100	193,100	193,100	193,100	193,100
Unsatisfied Annual Demand		3,348	2,368	(265)	(2,549)	(644)	1,281	3,225	5,188	7,171	9,174
Cumulative Potential Supply Expansion		9	6	(1)	(7)	(2)	4	9	14	20	25

## Bed and Breakfasts and Small Inns – City of Napa

B&Bs and Small Inns - City of Napa -Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	260	282	319	354	354	354	354	354	354	354
Occupancy	65%	65%	63%	63%	65%	64%	64%	64%	64%	64%
Occupied Rooms	61,665	66,508	73,688	80,951	83,380	82,694	82,694	82,694	82,694	82,694
Average Room Rate	\$297.43	\$311.65	\$327.42	\$339.81	\$350.00	\$360.50	\$371.32	\$382.46	\$393.94	\$405.75
RevPAR	\$193.27	\$201.37	\$207.22	\$212.90	\$225.86	\$230.72	\$237.64	\$244.77	\$252.12	\$259.68
Rooms Revenue	\$18,340,950	\$20,727,074	\$24,127,289	\$27,508,216	\$29,183,280	\$29,811,698	\$30,705,849	\$31,627,345	\$32,576,435	\$33,553,378

B&B Estimate of Additional Capacity - City of Napa											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	251	260	282	319	354	354	354	354	354	354	354
Estimated Available Annual Room Nights	91,615	94,900	102,930	116,435	129,210	129,210	129,210	129,210	129,210	129,210	129,210
Total Projected Potential Demand	58,714	61,665	66,508	73,688	80,951	83,380	85,881	88,457	91,110	93,843	96,658
Estimated Sustainable Annual Occupancy		64%	64%	64%	64%	64%	64%	64%	64%	64%	64%
Estimated Sustainable Annual Demand		60,736	65,875	74,518	82,694	82,694	82,694	82,694	82,694	82,694	82,694
Total Projected Potential Demand		61,665	66,508	73,688	80,951	83,380	85,881	88,457	91,110	93,843	96,658
less Est. Sustainable Annual Demand		60,736	65,875	74,518	82,694	82,694	82,694	82,694	82,694	82,694	82,694
Unsatisfied Annual Demand		929	633	(830)	(1,743)	686	3,187	5,763	8,416	11,149	13,964
Cumulative Potential Supply Expansion		3	2	(2)	(5)	2	9	16	23	31	38

For both markets, the new supply from the pipeline is expected to open beginning in 2019. Demand is estimated to be adequate to absorb the proposed supply.

## Limited Service Hotels – Napa Valley

Limited Service Hotels - Napa Valley - Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	1,521	1,521	1,619	1,894	2,003	2,077	2,077	2,077	2,077	2,077
Occupancy	77%	77%	77%	74%	74%	74%	75%	75%	75%	75%
Occupied Rooms	425,351	429,604	453,218	514,959	540,111	559,070	568,579	568,579	568,579	568,579
Average Room Rate	\$200.03	\$208.03	\$217.01	\$225.04	\$232.29	\$239.58	\$246.76	\$254.17	\$261.79	\$269.64
RevPAR	\$153.26	\$160.98	\$166.43	\$167.63	\$171.61	\$176.68	\$185.07	\$190.62	\$196.34	\$202.23
Rooms Revenue	\$85,082,000	\$89,370,000	\$98,351,090	\$115,884,331	\$125,461,559	\$133,940,385	\$140,304,712	\$144,513,184	\$148,848,679	\$153,314,249

Limited Service Hotels Estimate of Additional Capacity - Napa Valley											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1521	1,521	1,521	1,619	1,894	2,003	2,077	2,077	2,077	2,077	2,077
Estimated Available Annual Room Nights	555,165	555,165	555,165	590,935	691,310	731,095	758,105	758,105	758,105	758,105	758,105
Total Projected Potential Demand	421,139	425,351	429,604	453,218	514,959	540,111	559,070	564,363	569,710	575,110	580,564
Estimated Sustainable Annual Occupancy		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Estimated Sustainable Annual Demand		416,374	416,374	443,201	518,483	548,321	568,579	568,579	568,579	568,579	568,579
Total Projected Potential Demand		425,351	429,604	453,218	514,959	540,111	559,070	564,363	569,710	575,110	580,564
less Est. Sustainable Annual Demand		416,374	416,374	443,201	518,483	548,321	568,579	568,579	568,579	568,579	568,579
Unsatisfied Annual Demand		8,977	13,230	10,017	(3,524)	(8,210)	(9,509)	(4,216)	1,131	6,531	11,985
Cumulative Potential Supply Expansion		25	36	27	(10)	(22)	(26)	(12)	3	18	33

## Limited Service Hotels – City of Napa

Limited Service Hotels - City of Napa - Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	731	731	829	1,104	1,213	1,287	1,287	1,287	1,287	1,287
Occupancy	77%	79%	77%	74%	73%	73%	75%	75%	75%	75%
Occupied Rooms	206,248	210,168	233,862	296,917	323,096	343,163	352,316	352,316	352,316	352,316
Average Room Rate	\$200.03	\$208.03	\$218.91	\$230.37	\$238.65	\$246.53	\$254.02	\$261.65	\$269.49	\$277.58
RevPAR	\$154.62	\$163.86	\$169.19	\$169.75	\$174.15	\$180.09	\$190.52	\$196.23	\$202.12	\$208.18
Rooms Revenue	\$41,255,000	\$43,721,000	\$51,194,343	\$68,401,266	\$77,105,796	\$84,600,066	\$89,496,841	\$92,181,907	\$94,946,664	\$97,795,214

Limited Service Estimate of Additional Capacity - City of Napa											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	731	731	731	829	1,104	1,213	1,287	1,287	1,287	1,287	1,287
Estimated Available Annual Room Nights	266,815	266,815	266,815	302,585	402,960	442,745	469,755	469,755	469,755	469,755	469,755
Total Projected Potential Demand	202,402	206,248	210,168	233,862	296,917	323,096	343,163	349,135	355,224	359,796	364,456
Estimated Sustainable Annual Occupancy		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Estimated Sustainable Annual Demand		200,111	200,111	226,939	302,220	332,059	352,316	352,316	352,316	352,316	352,316
Total Projected Potential Demand		206,248	210,168	233,862	296,917	323,096	343,163	349,135	355,224	359,796	364,456
less Est. Sustainable Annual Demand		200,111	200,111	226,939	302,220	332,059	352,316	352,316	352,316	352,316	352,316
Unsatisfied Annual Demand		6,137	10,057	6,924	(5,303)	(8,962)	(9,153)	(3,181)	2,908	7,480	12,140
Cumulative Potential Supply Expansion		17	28	19	(15)	(25)	(25)	(9)	8	20	33

For both markets, the new supply from the pipeline that is expected to open between 2020 and 2023. Demand is estimated to be adequate to absorb the proposed supply.

## Full Service Hotels – Napa Valley

Full Service Hotels - Napa Valley -Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	2,088	2,190	2,222	2,603	2,878	2,879	2,879	2,879	2,879	2,879
Occupancy	70%	71%	73%	71%	70%	72%	72%	72%	72%	72%
Occupied Rooms	535,932	568,411	590,322	678,630	739,160	759,821	752,712	752,712	752,712	752,712
Average Room Rate	\$264.32	\$276.05	\$290.21	\$302.62	\$313.83	\$323.25	\$332.95	\$342.94	\$353.22	\$363.82
RevPAR	\$185.90	\$196.32	\$211.26	\$216.18	\$220.84	\$233.75	\$238.51	\$245.67	\$253.04	\$260.63
Rooms Revenue	\$141,658,215	\$156,911,284	\$171,320,226	\$205,369,171	\$231,968,877	\$245,611,537	\$250,613,401	\$258,131,613	\$265,875,861	\$273,851,577

Full Service Hotels Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1907	2,088	2,190	2,222	2,603	2,878	2,879	2,879	2,879	2,879	2,879
Estimated Available Annual Room Nights	695,964	762,029	799,259	810,939	950,004	1,050,379	1,050,744	1,050,744	1,050,744	1,050,744	1,050,744
Total Projected Potential Demand	492,077	535,932	568,411	590,322	678,630	739,160	759,821	780,947	802,707	825,119	848,204
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		545,887	572,558	580,925	680,545	752,450	752,712	752,712	752,712	752,712	752,712
Total Projected Potential Demand		535,932	568,411	590,322	678,630	739,160	759,821	780,947	802,707	825,119	848,204
less Est. Sustainable Annual Demand		545,887	572,558	580,925	680,545	752,450	752,712	752,712	752,712	752,712	752,712
Unsatisfied Annual Demand		(9,955)	(4,147)	9,397	(1,916)	(13,290)	7,109	28,235	49,995	72,407	95,492
Cumulative Potential Supply Expansion		(27)	(11)	26	(5)	(36)	19	77	137	198	262

## Full Service Hotels – City of Napa

Full Service - City of Napa -Forecast of Room Revenue											
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Number of Days	365	365	365	365	365	365	365	365	365	365	
Number of Rooms	1,616	1,718	1,750	2,131	2,406	2,407	2,407	2,407	2,407	2,407	
Occupancy	70%	70%	72%	70%	68%	70%	72%	72%	72%	72%	
Occupied Rooms	410,468	439,183	457,218	541,533	597,950	614,374	632,494	632,494	632,494	632,494	
Average Room Rate	\$264.98	\$277.02	\$291.31	\$304.37	\$315.84	\$325.32	\$335.08	\$345.13	\$355.49	\$366.15	
RevPAR	\$184.43	\$194.05	\$208.55	\$211.93	\$215.07	\$227.52	\$241.26	\$248.49	\$255.95	\$263.63	
Rooms Revenue	\$108,767,362	\$121,663,016	\$133,191,287	\$164,826,362	\$188,854,523	\$199,868,868	\$211,935,827	\$218,293,762	\$224,843,144	\$231,588,419	

Full Service Estimate of Additional Capacity - City of Napa											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1435	1,616	1,718	1,750	2,131	2,406	2,407	2,407	2,407	2,407	2,407
Estimated Available Annual Room Nights	523,684	589,749	626,979	638,659	777,724	878,099	878,464	878,464	878,464	878,464	878,464
Total Projected Potential Demand	370,268	410,468	439,183	457,218	541,533	597,950	614,374	631,137	648,402	666,185	684,503
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		424,619	451,425	459,834	559,961	632,231	632,494	632,494	632,494	632,494	632,494
Total Projected Potential Demand		410,468	439,183	457,218	541,533	597,950	614,374	631,137	648,402	666,185	684,503
less Est. Sustainable Annual Demand		424,619	451,425	459,834	559,961	632,231	632,494	632,494	632,494	632,494	632,494
Unsatisfied Annual Demand		(14,151)	(12,242)	(2,616)	(18,429)	(34,281)	(18,120)	(1,357)	15,908	33,691	52,009
Cumulative Potential Supply Expansion		(39)	(34)	(7)	(50)	(94)	(50)	(4)	44	92	142

For both markets, the new supply from the pipeline that is assumed to open over the next five years. Demand is estimated to be adequate to absorb the proposed supply.

## Luxury Hotels and Resorts – Napa Valley

Luxury Hotels and Resorts - Napa Valley -Forecast of Room Revenue											
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	
Number of Days	365	365	365	365	365	365	365	365	365	365	
Number of Rooms	985	1,029	1,181	1,181	1,663	1,664	1,664	1,664	1,664	1,664	
Occupancy	69%	70%	70%	74%	68%	70%	70%	70%	70%	70%	
Occupied Rooms	248,682	263,908	300,089	317,904	411,663	425,067	425,067	425,067	425,067	425,067	
Average Room Rate	\$632.11	\$671.18	\$732.22	\$735.79	\$817.45	\$854.33	\$879.96	\$906.36	\$933.55	\$961.56	
RevPAR	\$437.38	\$471.77	\$509.88	\$542.79	\$554.51	\$598.03	\$615.97	\$634.45	\$653.49	\$673.09	
Rooms Revenue	\$157,194,622	\$177,130,689	\$219,730,453	\$233,910,449	\$336,514,940	\$363,147,981	\$374,042,450	\$385,263,824	\$396,821,839	\$408,726,374	

Luxury Hotels and Resorts - Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	972	985	1,029	1,181	1,181	1,663	1,664	1,664	1,664	1,664	1,664
Estimated Available Annual Room Nights	354,658	359,403	375,463	430,943	430,943	606,873	607,238	607,238	607,238	607,238	607,238
Total Projected Potential Demand	239,491	248,682	263,908	300,089	317,904	411,663	422,493	433,456	444,737	456,345	468,290
Estimated Sustainable Annual Occupancy		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Estimated Sustainable Annual Demand		251,582	262,824	301,660	301,660	424,811	425,067	425,067	425,067	425,067	425,067
Total Projected Potential Demand		248,682	263,908	300,089	317,904	411,663	422,493	433,456	444,737	456,345	468,290
less Est. Sustainable Annual Demand		251,582	262,824	301,660	301,660	424,811	425,067	425,067	425,067	425,067	425,067
Unsatisfied Annual Demand		(2,901)	1,084	(1,572)	16,244	(13,149)	(2,574)	8,389	19,670	31,278	43,223
Cumulative Potential Supply Expansion		(8)	3	(4)	45	(36)	(7)	23	54	86	118

The new luxury properties in the pipeline are assumed to open in the next five years. Demand is estimated to be adequate to absorb the proposed supply.

## Conclusions and Recommendations for New Hotel Development

- We recognize that there are inherent tensions in the Napa community on a number of issues; the development of additional lodging facilities solicits passionate opponents and supporters. Tourism is an important industry for the market and a major generator of public and private revenue. As lodging expands, other elements are affected – most notably traffic, parking, and housing. The availability of water may be an issue for properties in the unincorporated areas of the county. The experiences of residents, workers, and visitors are all impacted by these items and care must be taken to improve all the elements concurrently to the benefit of all.

The Napa Valley has been and remains a desirable location for hotel development. The expansion of the market over the last twenty years has been sporadic due to the challenges of development in the area and the economic cycles. Finding and acquiring a suitable site, obtaining entitlements, and financing new lodging construction is difficult in most locations but particularly demanding in the area. Compounding the development process is the rising cost of construction. As a result of these factors, lodging projects can take many years to come to fruition.

On the list of proposed hotels are developments that have been in the pipeline for more than a decade. While there is still expectation that these hotels and resorts will happen, the timeline for these projects is opined to be speculative. Furthermore, the facilities that were approved some time ago may be different than what would be proposed today. The difficulty of the approval process means that going back for revised approvals would further delay the project.

The opening of the Hampton Inn, the Archer, the expansion of the Meritage, and the development of the Cambria Hotel demonstrates that a variety of new hotels can be successfully opened within a relatively short time frame. A more expedited process helps to ensure a more successful development, giving investors and builders an ability to be more responsive to the timing, design, market trends, and financing aspects of the project.

- A number of full service hotels have opened in the city of Napa since the 2007 study and The Meritage is completing a major expansion in 2018. The pipeline for the city includes 24 lodging properties which are estimated to be completed in the next six years. These hotels represent a range of product types with different amounts of meeting space. Generally full service and luxury hotels and resorts are expected to have a minimum of 25 to 50 square feet of meeting space per room and limited-service hotels to have 5 to 15 square feet per room. Outdoor event space is highly sought-after for social events in the Napa Valley and should also be considered as additional features of these types of properties.
- Not all hotel development has to be downtown. Different types of hotels can thrive in different locations. The consultants recommend that a variety of sites in the city of Napa be considered for hotel use.
- In the 2007 HVS Study, the growth of hotel inventory in Napa was opined to be enhanced by the development of a conference/convention “multipurpose” facility. At the time of the last study, the hotel market performance was much more challenged than in the current cycle. As of this study, the strength of the market has demonstrated that the current inventory of hotels has been able to succeed with the existing meeting space. It would be anticipated that a larger meeting facility could serve to enhance hotel demand during less robust periods. With the improvements in annual transient demand for the area and the expansion of meeting space at the new full-service hotels and the space offerings at The CIA at Copia, the

development of a conference/convention center does not appear to be as catalytic for the hotel market as in the 2007 HVS study. Additional research would be suggested to explore this issue.

- The study does opine that a dedicated convention/conference may not be as recommended as in the 2007 HVS Study, however meeting space associated full service and luxury hotels is important to maintaining demand for these types of properties. The ratio of meeting space for the proposed full-service hotel at the current City Hall site should include an adequate complement of meeting space considering the amount of room inventory.
- Since the 2007 HVS study, ridesharing services as a means of transporting visitors to and within a destination have blossomed. In the Napa Valley, the use of these services by hotel guests visiting wineries and restaurants could be of benefit to ease the need for parking at hotels. We are not experts in parking and recommend further study of the impact of the increased use of rideshares and public transportation options.
- Demand for lodging in the city and county of Napa has been consistently strong in recent years and barring any unforeseen event, is expected to continue. The analysis in this study shows that the market appears capable of absorbing the existing pipeline of new hotels, although that absorption is anticipated to require a number of years. The hotel market in Napa has continued to thrive even as new hotels have opened. As the current pipeline of new supply is developed and absorbed, the need will arise for additional accommodations, and consideration of additional development should be analyzed. The depth of demand for all types of hotels in the area has yet to be fully tested. Due to the expectation that the market will be able to support additional hotels over the long-term and the long development timeline for hotel projects, we recommend that the city of Napa continue to review new hotel projects for development over the long-term. With more types of hotel products and brands available since the 2007 study and a changing demographic base of consumers, consideration should be given to the aspects of hotel projects which can expand the base of demand in the long-term. Experiential based lodging, dedicated wellness centers, lodging facilities with communal public space, upscale hostels, and other facilities are evolving hotel products that are being developed in other destinations. Over the next ten years, additional types of hotel facility trends are likely to gain popularity. It is our recommendation that a wide variety of hotel products be approved in order to support the long-term attraction of the destination.

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## Introduction

### Scope of Work

The objective of the study is to provide the City of Napa with a comprehensive understanding of the key characteristics of Napa Valley's current lodging inventory, the likely impact of hotel development on Napa Valley's market dynamics, and the market's overall capacity for future growth given prevailing demand and supply expectations. It is our understanding that the findings, including considerations for new hotel development, will be used for economic planning purposes.

The market study considered the existing and proposed hotels in the Napa Valley based on the available data. We understand that the hotel market in the City of Napa and the Napa Valley as a whole, has experienced strong growth in supply and performance in recent years and that a plentiful pipeline of new hotel projects are being proposed throughout the area. This study seeks to address the overall lodging performance of the existing and additional lodging inventory and determine the extent to which demand growth is likely to absorb proposed lodging supply.

The research and analysis for the study was conducted between December 2017 and January 2018. The project included the following process:

1. Cushman & Wakefield professionals met with representatives of the City of Napa, stakeholders identified by the city of Napa, hotel operators, investors, and developers.
2. Relevant data about the lodging market was gathered from the City of Napa, in-house databases, Smith Travel Research, and other sources in order to produce a detailed historical review of lodging inventory in Napa Valley as well as projections with respect to supply growth in the near term. These resources included.
3. Historical lodging performance was reviewed based on custom STR Reports for the four product classifications.
4. Publicly available information on current and future demand generators was reviewed.
5. Community growth levels and economic development activity trends were analyzed.
6. The existing hotel properties in the Napa Valley were inventoried and categorized into four lodging property types: Bed & Breakfasts and Small Inns, Limited-service Hotels, Full-service Hotels, Luxury Hotels and Resorts. For each category, we reviewed past performance and analyzed how the market has adapted to past hotel inventory changes.
7. Status information for current proposed hotel projects was reviewed and for the existing pipeline of hotel projects, the potential (likelihood) of construction and opening status was evaluated. Future hotel inventory was allocated to existing supply in the appropriate categories.
8. We analyzed historical and potential occupied room nights for each hotel category, evaluating group and transient demand, and latent demand.
9. Using the data developed in the prior steps, a ten-year forecast of supply and demand for each category was prepared resulting in annual occupancies.
10. Historical average rates for each category were analyzed and forecast. The RevPAR (revenue per available room or occupancy X average rate) was calculated, resulting in a projection of room revenue.

11. The operating performance of proposed lodging projects is estimated to provide the basis for the Impact Analysis being prepared by Bay Area Economics (BAE). From the findings developed in the Hotel Market Study, the forecasts are consolidated into the four product categories. For each of these product categories, the forecasts of room revenue are expanded into a representative year of revenue and expense using industry standards and/or information from our databases. This exercise provides general operating results for the expected inventory but not specific proformas for individual properties. The results are used by BAE to estimate and project direct and indirect/induced spending, tax revenue impacts, and employment for a stabilized year.
12. For the proposed hotel projects and inventory included in the supply and demand forecasts, general estimates of development costs per room (land, construction, and furniture, fixtures, and equipment) were using market based costing sources, allocations, and/or information from our databases. These costs were used by BAE to develop property tax projections.
13. Alternative Accommodations Assessment – Cushman & Wakefield prepared a broad narrative of the impact of alternative accommodation units (e.g. Airbnb, Homeaway, Vrbo, etc.) on demand for traditional hotel rooms in the Napa lodging market based upon its knowledge of the Napa lodging market as well as recently compiled survey data with respect to consumer utilization of alternative accommodation units in other leisure destination markets as well as in key U.S. urban markets. The impact of alternative accommodations is difficult to validate due to the decentralized and private nature of this business. The findings considered available historical data on transient occupancy tax collections and the number of alternative accommodation units presently available in the Napa market into its analysis to the extent such data are available from the City of Napa.
14. Using the supply and demand forecasts, the consultants considered the relationship between lodging demand and the anticipated supply growth based on the current pipeline of projects in all phases, and developed opinions of the impact on market performance by product category, particularly RevPAR. The consultants evaluate as reasonably as possible, the ability of the market to absorb new supply over the long-term and trend the potential for growth or decline in room revenue. It is very important to consider that changes in RevPAR may be transitional or cyclical. Proposed hotels currently in the pipeline will be given the greatest analysis and weight. Based on these projects, the ability to support additional hypothetical inventory was considered. A qualitative evaluation of the historical and future hotel market occupancy, average rate, and RevPAR trends was also prepared. Periods of absorption of new rooms are reflected in negative potential demand; conversely, the market's capacity for new rooms is shown by positive room potential.
15. Meeting space in the Napa Value was reviewed and analyzed. A discussion of the meeting space is presented.
16. The consultant developed recommendations with regard to the potential for future lodging development as well as means of inducing sufficient demand growth to support future development given the aforementioned market analysis and projections.

Projecting demand is both a skill and an art. To estimate the levels of occupied room nights, we rely on historical trends and our professional experience working with lodging markets over 30 years. The hotel market is cyclical but not always predictable. In general, periods of robust growth has changed course due to unforeseen and/or systemic events. As lodging is an industry built on one-night leases, the impact of an event can be swift and deep. Economic downturns can impact the lodging industry in a more subtle manner as operators have strategies to manage nightly rates to attract hotel guests.

As of January 2018, global lodging industry leaders are not expressing concern about a downturn affecting the current cycle, which is still in a growth mode. The robust RevPAR growth that launched during the recovery from the great recession began to moderate in 2016. It is sometimes difficult to correlate a direct cause and effect in lodging performance but factors said to influence the moderation in RevPAR, particularly average rate, that year include the continued rise of Airbnb, the increase in new hotel supply, the presence of the Zika virus, and the uncertainty and anxiety surrounding the presidential election. These palls over the lodging industry continued through roughly mid-2017. With a renewed cautious optimism, leisure and business travelers started to hit the road in greater numbers and provided operators the confidence to increase rates. The regained sureness in the strength of the travel economy has resulted in a sentiment of continued growth in lodging revenues, albeit at lower levels than experienced post-recession.

While industry participants caveat their assurance about growth with caveats about “black swan events”, continued growth in lodging revenues nationally are anticipated to be in line with the post-2015 trends, in the 3.0 to 5.0 percent range. Our interviews and work with local Napa Valley lodging operators generally follow similar guidance, though the opportunities for specific properties to exceed those levels is possible due to particular circumstances such as new construction, renovation, and branding/marketing efforts.

The depth of the analysis is intended to be appropriate in relation to the significance of the issues as presented herein. The data have been analyzed and confirmed with sources believed to be reliable, in the normal course of business, leading to the conclusions set forth in this report.

This assignment is intended to comply with the Uniform Standards for Professional Appraisal Practice USPAP for an Appraisal Report. The report was also prepared to comply with the requirements of the Code of Professional Ethics of the Appraisal Institute.

## General Inflation and Growth Assumptions

Our projections incorporate an opinion of general price inflation based upon economic projections from various sources (including the U.S. Congressional Budget Office), tempered by our observations and expectations derived from historical perspectives both locally and nationally. Accordingly, to portray price level changes, we have assumed an average CPI inflation rate of 3.0 percent per year throughout the 10-year projection period. This assumption is intended only to portray an expected long-term trend in price movements, rather than for a specific interval in time.

## Quality Control

Cushman & Wakefield Western, Inc. has an internal Quality Control Oversight Program. This Program mandates a “second read” of all appraisals. Assignments prepared and signed solely by designated members (MAIs) are read by another MAI who is not participating in the assignment. Assignments prepared, in whole or in part, by non-designated appraisers require MAI participation, Quality Control Oversight, and signature.

For this assignment, Quality Control Oversight was provided by Mark D. Capasso – Executive Director and National Practice Leader – Hospitality & Gaming.

## Notable Market Trends

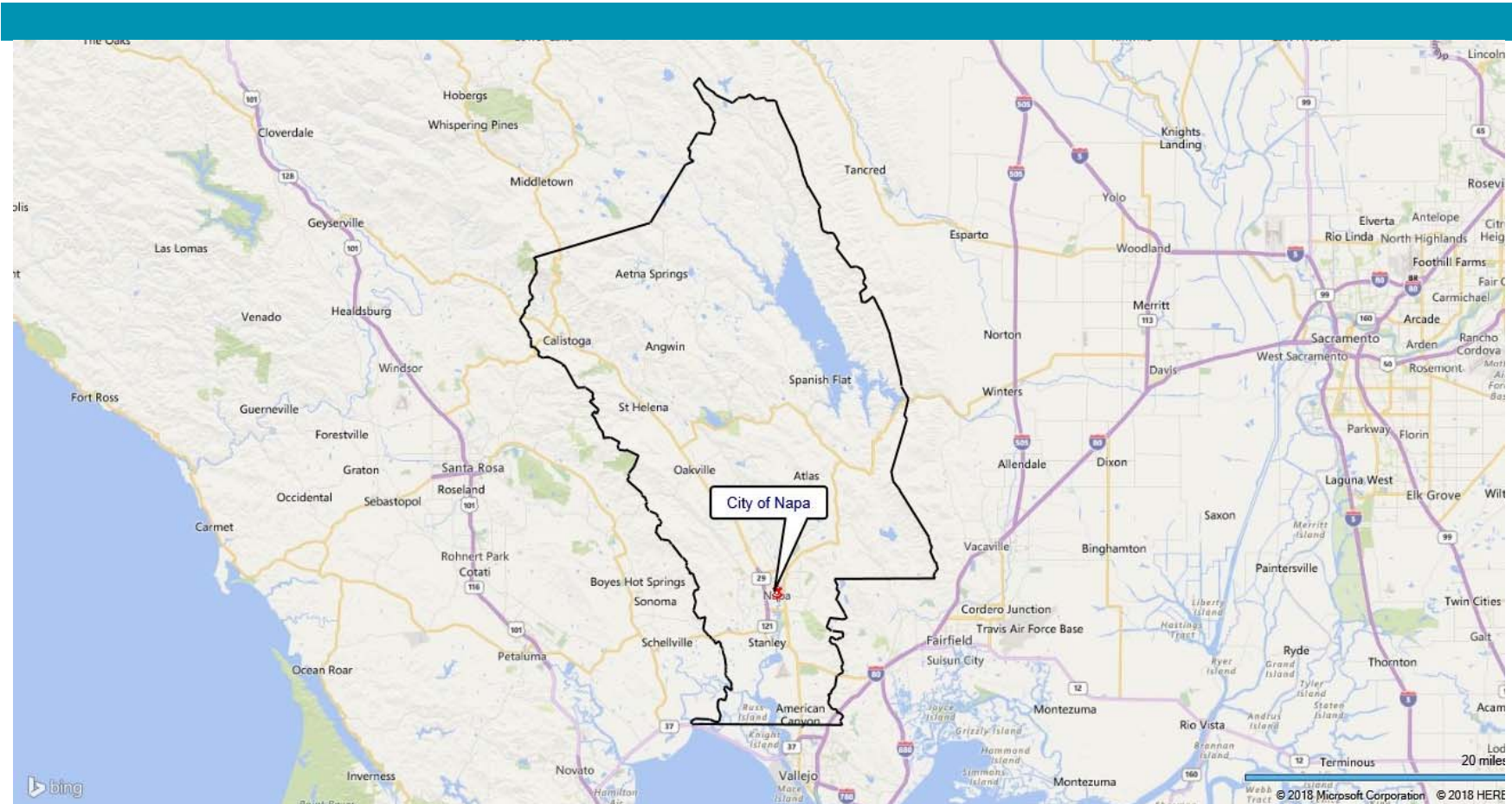
The research and analysis undertaken for this project revealed some major themes and trends in the Napa Valley lodging market.

In recent years, the Napa Valley has been impacted by a series of natural events that have affected some of the lodging properties and the overall market. In August 2014, a 6.0 magnitude earthquake was centered between the cities of Napa and American Canyon. Several older commercial buildings in downtown Napa showed signs of extensive external damage. Some of the historic buildings damaged in the earthquake have been repaired while others are still awaiting renovation and restoration. As examples, the Uptown Theater was the first to reopen on November 9, 2014. The United States Postal Service determined that repairing the post office would be too costly and sold it to a developer who plans to turn the building into a hotel. The contract for restoration of the courthouse was recently awarded by Napa County in August 2017. The heavily damaged Trefethen Vineyard Eschol building was restored from earthquake damage following over two years of repairs and improvements.

From a hotel perspective, the earthquake primarily affected lodging facilities in downtown Napa. The Andaz Hotel, the Westin Verasa HOfel, and the Marriott Hotel all suffered some damage. The Andaz Hotel partially reopened a few weeks later and was fully reopened in March 2015 after a renovation. The Marriott was open after a few weeks. The Westin Verasa Hotel suffered the most damage and reopened its rooms in stages. From a visitor perspective, operators report that some potential visitors were inquiring about the earthquake for over two years following the event.

Despite these challenges, the hotel market in Napa has been resilient and robust and continues to attract new development. The Napa Valley lodging market performance is at an all-time high and most owners and operators are participating in the benefits. The success of the market and record occupancies are also attractive to developers. We are seeing record levels of hotel market performance in the Napa Valley and the strength of the market at this point in time is anticipated to support additional projects. This is in contrast to the economic environment at the time of the last HVS 2007 Study.

## Regional Map



## Regional Analysis

### Introduction

The subject property is located in the city of Napa, within the Napa Metropolitan Statistical Area (MSA) of California. In this section, the various areas of influence in the Napa MSA will be defined and analyzed. The analysis concentrates on the four major forces affecting real property values. These four major influencing factors include social forces, economic conditions, governmental controls and regulations, and environmental conditions. Note that the following overview of demographic and economic characteristics and trends (charts and text) was prepared by Economy.com, Inc. and is used by permission. Note that the U.S. West area includes the states of Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming for the purpose of this analysis.

### Recent Performance

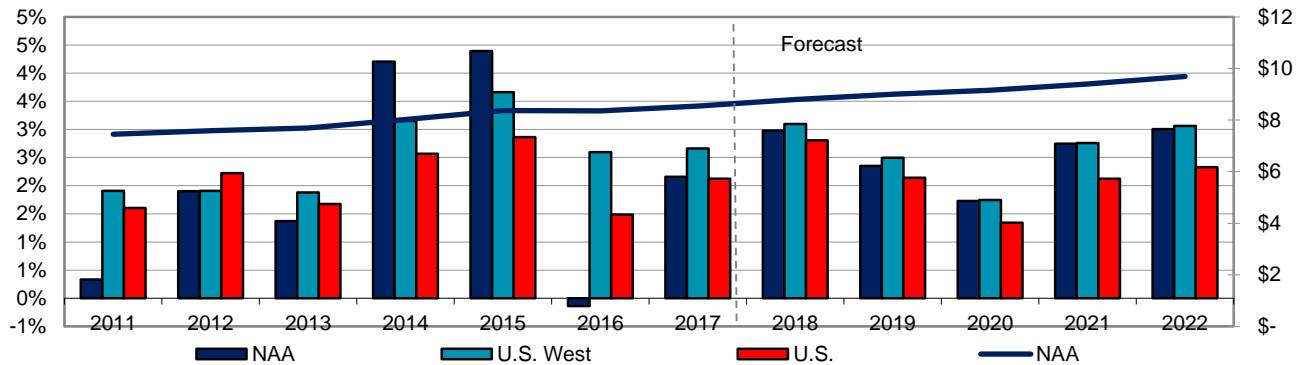
Napa's expansion is kicking into high gear. Payroll employment is climbing faster than a year earlier, and job growth exceeds the state and U.S. averages. Consumer industries and healthcare are leading the way, boosting job growth during the first half of the year following a lull in 2016. But progress in critical beverage manufacturing is slowing because of labor constraints. After little movement the last two years, the labor force is beginning to expand, and the unemployment rate is less than 4 percent for the first time since 2007. As low-wage consumer services have gained prominence, the rise in average hourly earnings has lagged that nationally, and the seasonal nature of these jobs is also reflected in a shorter average workweek. Nonetheless, superior income gains are fueling larger than average increases in single-family house prices, sales and construction.

### Economics

The economics of the commercial and residential real estate markets are reflected by an array of financial, employment, population, construction activity and housing indicators. In order to understand the characteristics of the subject's regional market, we reviewed the most recently published, statistically reliable reports that included an overview of these items.

### Gross Product

Gross Metropolitan Product (GMP) is a concept analogous to Gross Domestic Product, the commonly accepted measure used to calculate the total annual value of goods and services produced by a nation. The following graph reflects the Gross Product for the Napa Metropolitan Statistical Area (MSA), U.S. West, and United States.

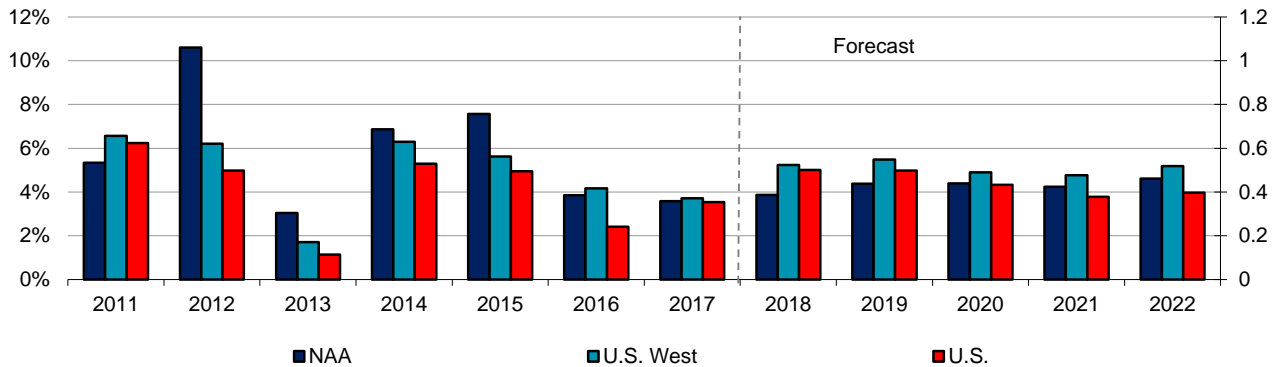
**Gross Product By Year (\$000)**

Source: Data Courtesy of Moody's Economy.com

The Napa GMP has increased from \$7.6 billion in 2012 to \$8.5 billion in 2017 reflecting a total change of 12.5 percent over the past six years and an average annual change of 2.4 percent. The Napa GMP is expected to increase from \$8.8 billion in 2018 to \$9.7 billion in 2022, representing an overall increase of 10.2 percent and an average annual change of 2.0 percent, over the five-year forecast period.

**Personal Income**

Personal income growth is measured by the change in income received by all persons from all sources year-over-year and provides a significant indication of the region's economic performance. The graph below reflects the personal income growth for the Napa Metropolitan Statistical Area (MSA), U.S. West, and United States.

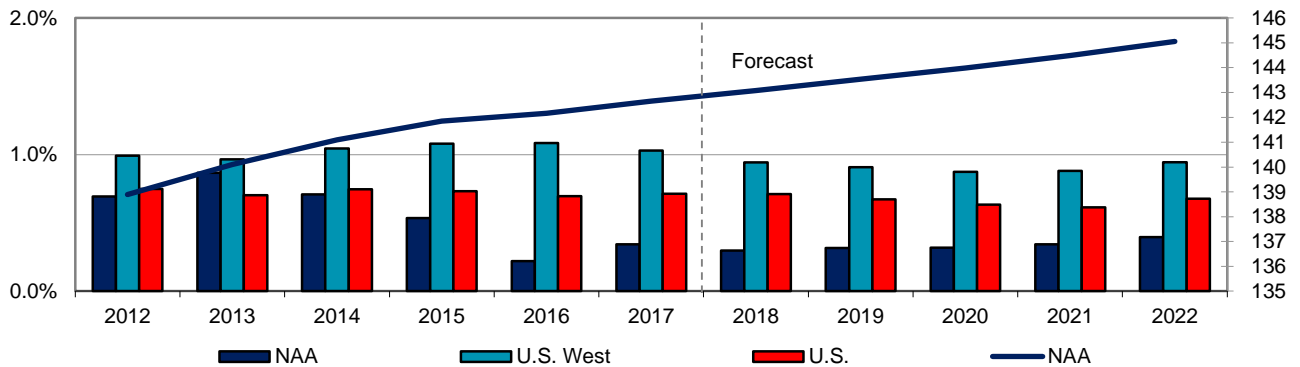
**Personal Income Growth by Year**

Source: Data Courtesy of Moody's Economy.com

Despite slow growth in 2013, personal income growth experienced strong years in 2014 and 2015, out performing the U.S. and U.S. West areas growth rates. Between 2018 and 2022, personal income growth is expected to be generally in-line with the growth rates expected for U.S. and U.S. West areas. Overall, personal income growth indicates a healthy regional economy.

**Population**

The graph below reflects the total population and population growth for the Napa Metropolitan Statistical Area (MSA), U.S. West, and United States.

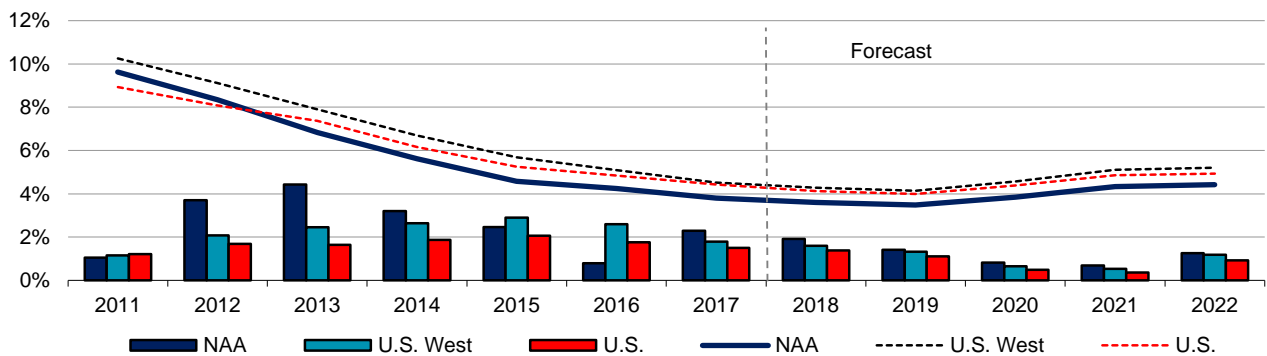
**Population Growth By Year (000)**

Source: Data Courtesy of Moody's Economy.com

Population trends have been favorable in the Napa MSA, with the metropolitan area increasing from 139,000 residents in 2012 to 143,000 in 2017. This represents a net increase of 4,000 persons, reflecting a total increase of 2.70 percent and an average annual increase of 0.6 percent. Population growth is expected to continue over the next five years. The metropolitan area's population (based on the year 2017 census) is projected to increase from 143,000 in 2018 to 145,000 in 2022. This represents an overall increase of 2,000 persons, reflecting a 0.3 percent annual growth rate.

**Employment**

The graph below reflects the total employment growth and unemployment rate for the Napa Metropolitan Statistical Area (MSA), U.S. West, and United States.

**Total Employment Growth and Unemployment Rate By Year**

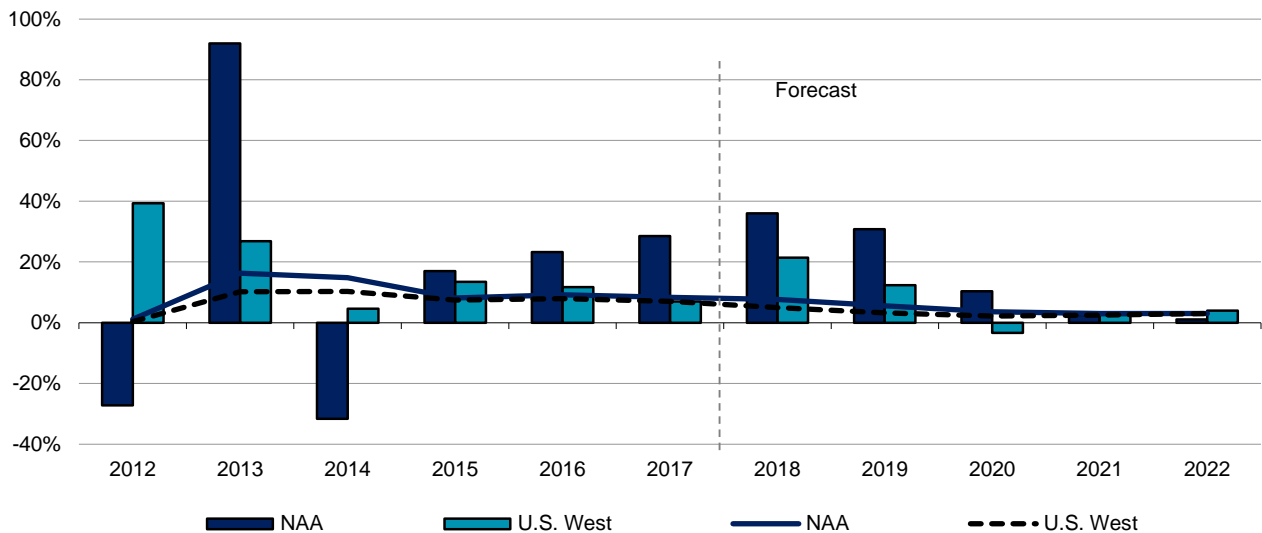
Source: Data Courtesy of Moody's Economy.com

The Napa MSA employment has increased from 63,733 in 2012 to 72,572 in 2017; this equates to an average annual growth rate of 2.6 percent. The unemployment rate decreased from 4.3 percent in 2016 to 3.8 percent in 2017, below the national trend. Total employment is projected to increase from 73,961 in 2018 to 77,098 in 2022; this equates to an average annual growth rate of 1.0 percent. Changes in total employment will factor into moderate changes in the unemployment rate, which is forecast to increase from 3.6 percent in 2018 to 4.4 percent in 2022.

**Housing Permits and Home Price Appreciation**

The graph below reflects the total housing permits and home price appreciation per year for the Napa Metropolitan Statistical Area (MSA), and the U.S. West area.

### Total Housing Permit Growth and Home Price Appreciation by Year



Source: Data Courtesy of Moody's Economy.com

Existing home prices in the Napa MSA have increased from \$187,952 in 2012 to \$321,457 in 2017, reflecting a total price increase of \$133,505, for an annual (average) home appreciation rate of 11.3 percent. Existing home prices are expected to continue to steadily escalate, as they are projected to increase from \$346,031 in 2018 to \$401,613 in 2022, reflecting a total price change of \$55,582, for an annual (average) price appreciation of 3.8 percent. Housing permits in the Napa MSA spiked in 2013 and between 2018 and 2022, are expected to achieve faster growth rates to U.S. and U.S. West areas.

## Housing Index and Cost Index

The Office of Federal Housing Enterprise Oversight (OFHEO) estimates and published quarterly house price indexes for single-family detached properties using data on conventional confirming mortgage transactions obtained from the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Federal National Mortgage Association (Fannie Mae). These indexes use a repeat-purchase method, as this method is not affected by the mix of homes sold. The House Price Index is based on transactions involving confirming, conventional mortgages purchased or securitized by Fannie Mae or Freddie Mac.

The Cost of Doing Business Index for the Napa MSA is 14.0 percent higher than the national average. The Cost of Doing Business Index is composed of labor costs, tax burdens, energy costs, and office costs. Labor costs are measured by unit labor costs, or earnings per dollar of output. Unit labor costs are determined for each 3-digit SIC industry for each MSA and compared to unit labor costs for the same industries nationally. Energy costs are measured by average cents per kilowatt-hour (Kwh) charged to commercial and industrial users. Tax burdens are measured by total taxes and fees as a percent of total personal income in each regional area. (Business contributions to unemployment and worker's compensation programs are also included in the tax measure because they represent costs for labor hired.) Office costs are measured as the average price paid per square foot for Class A office space.

The Cost of Living Index for this MSA is 32.0 percent above the national average. The cost of living index measures the relative cost to the average household in the nation to maintain its standard of living in each metropolitan area. The index is created by summing expenditures on various components of consumption in each regional area relative to average national expenditures on the components. The components that vary across metropolitan areas include housing food and apparel, utilities, transportation and auto insurance.

## Employment

The top employers in the Napa Metropolitan Statistical Area, according to Regional Financial Associates, are identified in the table below.

Napa MSA Top Employers	
Napa State Hospital	2,303
St. Joseph Health Queen of the Valley	1,250
St. Helena Hospital	1,050
Trinchero Family Estates	675
Treasury Wine Estates	600
Meadowood Napa Valley	600
Silverado Resort	425
Mezzetta	350
Boral Ltd.	325
Multi-Color Corp.	314
Pacific Union College	300
Vintage Inn & Spa	300
WestAmerica Bank	272
Wal-Mart Stores Inc.	250
Kaiser Permanente	225
The Meadows of Napa Valley	220
The Carneros Inn	200
Auberge Resorts	200
The Doctors Co.	200
Bank of the West	184

Sources: County of Napa, 2016, North Bay Business Journal Book of Lists, 2017

In terms of the nation's largest 409 metropolitan statistical areas, this market ranks 74th in current and projected employment growth from 2017 through 2019. Additionally, total growth occurring between 2017 and 2022 is expected to remain flat, ranking 77th.

As shown in the chart above, Napa State Hospital and St. Joseph Health Queen of the Valley employ the largest number of employees, with about 2,303 and 1,250 respectively. St. Helena Hospital and Trinchero Family Estates, followed by Treasury Wine Estates employ approximately 1,050 employees, 675 employees, and 600 employees respectively.

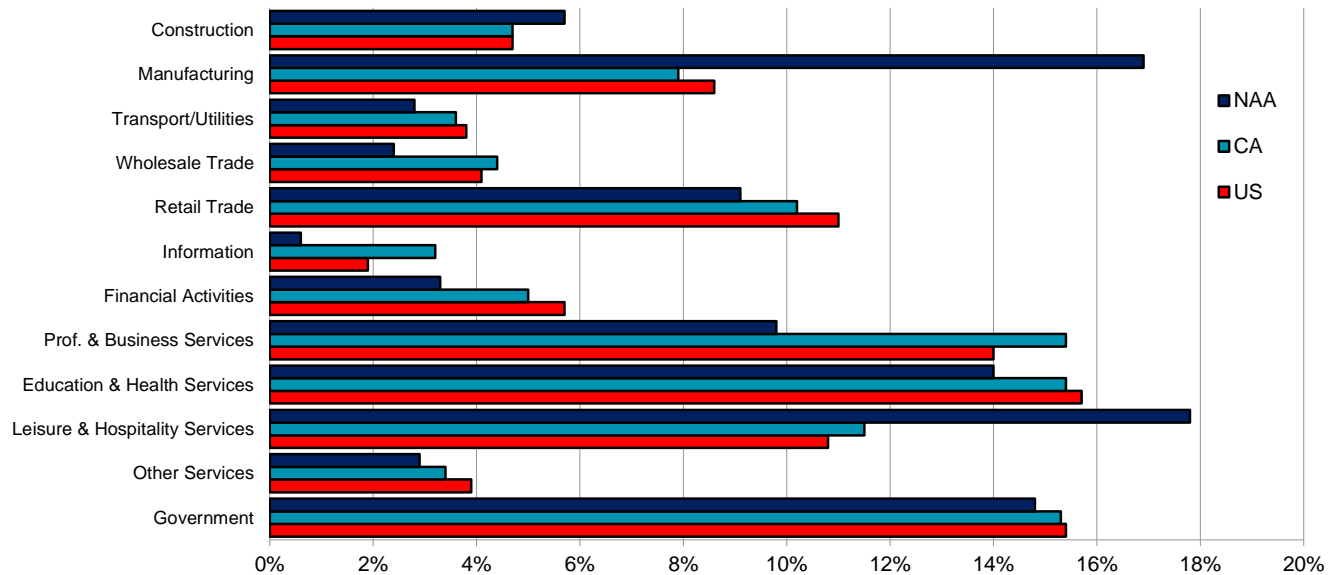
## Competition

Changing consumer preferences will force Napa's wine business to adapt to stay competitive. Profit margins are higher on sales made directly to consumers, since vintners are able to capture the markup that would otherwise go to retailers and restaurants. Up until recently, shipping alcohol to consumers directly was illegal in almost every state. But 44 states now allow it and sales are expanding. According to Silicon Valley Bank, direct-to-consumer sales made up 60 percent of wineries' revenue, up from 50 percent just four years earlier. Every wine region is experiencing strong online sales, especially neighboring Sonoma County. The trend bears watching because Napa specializes in fine wines, and millennials, who buy the most goods online, prefer cheaper wines.

## Employment/Income

The chart below reflects employment and income segregation for the Napa Metropolitan Statistical Area.

### Employment by Sector



Source: Data Courtesy of Moody's Economy.com

As shown in the chart above, the Napa MSA has a very large leisure and hospitality services sector that employs almost 18 percent of all employed. It should also be noted that the leisure and hospitality services sector represents the lowest average income of all industries in the area; manufacturing, government, and construction sectors represent the highest.

### Tourism

The growing prestige of other wine regions combined with higher development fees will limit job growth in tourism-related industries. In 2016, visitor industries generated \$80.3 million in tax revenues for Napa County, up 25 percent from \$64.2 million two years earlier. Tourism, and hotels in particular, has been a key source of investment, but a fourfold increase in hotel construction fees last August to help fund needed affordable multifamily rental housing will slow the pace of building. Though the hike in fees will help guard against overcapacity, there is also a risk of underinvestment. As the city and its residents push for affordable housing over new-hotel construction, room rates will increase as supply ebbs, and tourists may opt for cheaper wine regions such as those in Oregon or Washington, where they can get more bang for their buck.

### Migration

The summary chart below reflects the sources for migration into and from the Napa Metropolitan Statistical Area, according to 2014 tracking data from the IRS.

**Napa Migration Flows**

Into Napa		From Napa	
City	Number of Migrants	City	Number of Migrants
Vallejo, CA	1,516	Vallejo, CA	1,696
Oakland, CA	531	Santa Rosa, CA	487
Santa Rosa, CA	509	Oakland, CA	451
San Francisco, CA	386	Sacramento, CA	319
Sacramento, CA	259	San Francisco, CA	229
Los Angeles, CA	186	Los Angeles, CA	136
San Rafael, CA	172	Riverside, CA	111
San Jose, CA	155	San Rafael, CA	101
San Diego, CA	105	San Jose, CA	101
Riverside, CA	104	San Diego, CA	84
Total Immigration	6,029	Total Outmigration	5,838
<b>Net Migration</b>		<b>191</b>	

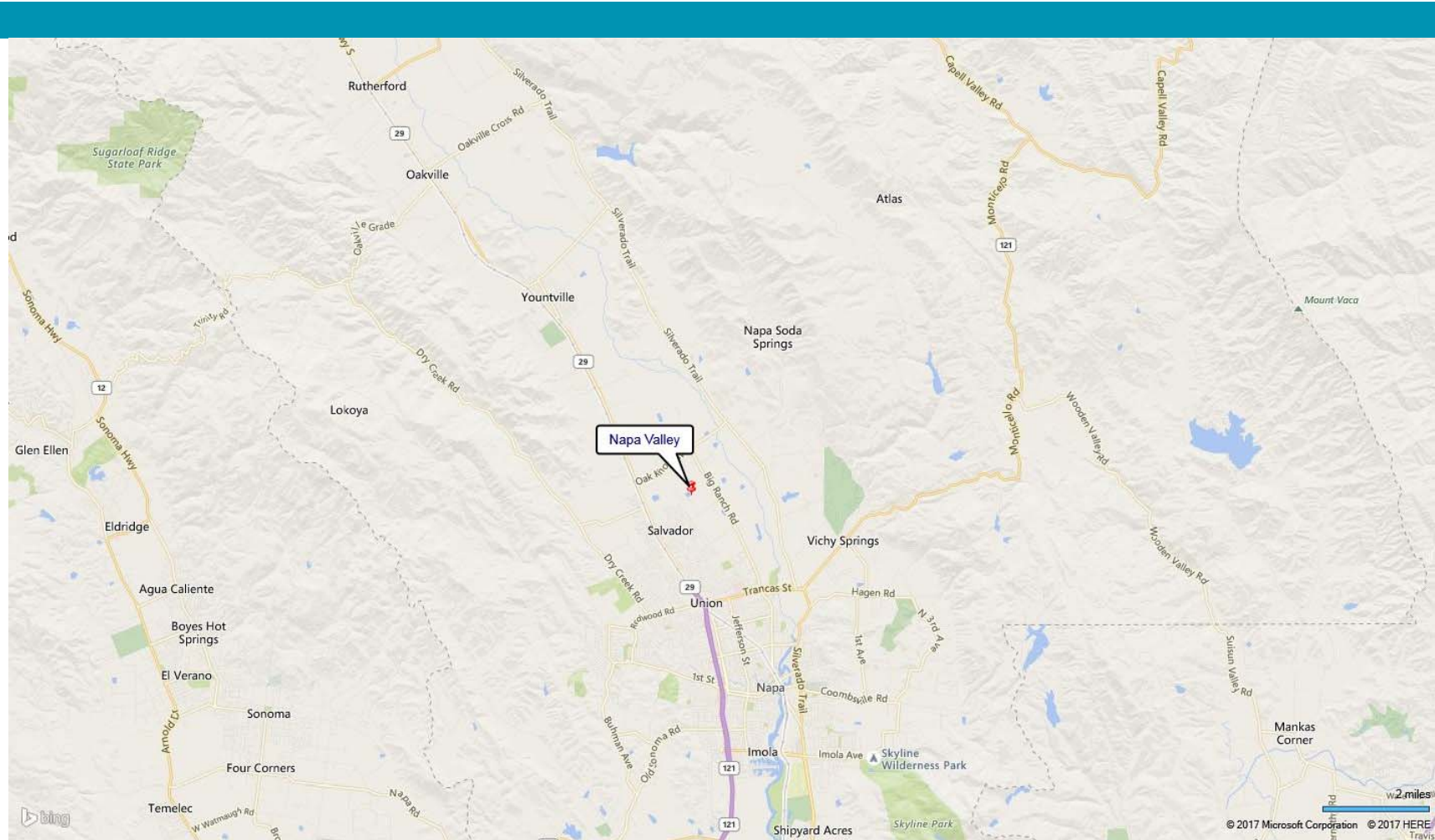
Sources: IRS, 2014, Census Bureau, Moody's Analytics

As shown above, Vallejo and Oakland have provided the greatest number of new residents with around 1,516 and 531 respectively. Vallejo and Santa Rosa represent the largest outflow of residents at around 1,696 and 487 respectively. The net migration was positive, with about 191 new residents in 2014.

## Conclusion

A run of strong job growth is responsible for an upgrade to this year's employment forecast, and next year's outlook is a bit stronger as well, but Napa's economy will lose some momentum over the coming year as labor scarcity becomes acute. Nevertheless, wine producers and tourism will benefit from increased consumer spending and lead the economy forward. The metro area has few other drivers. Long term, Napa's world-class wineries will attract tourists, enabling the metro area to keep pace with California in job and output gains.

## Local Area Map



## Napa Valley's Local Area Analysis

Napa Valley comprises most of Napa County and is flanked by two mountain ranges – the Vaca Mountains to the east and the Mayacamas to the west. The area's Mediterranean climate, dry conditions for much of the year, dramatic hills and celebrated vineyards provide an ideal environment for producing world-class wine and have made the area a popular year-round visitor destination.

The city of Napa is experiencing a revival. In downtown Napa alone, new public and private investment totals more than \$1.6 billion since 1996. The significant investment has resulted in new restaurants, tasting rooms, hotels, and markets, as well as the creation of a vibrant riverfront district. Downtown Napa began to see steady improvements and development in the area including the opening of the Oxbow Market and surrounding restaurants, the addition of new upscale full service hotels, and the opening of the CIA at Copia. The city now contains tasting rooms, restaurants, retail, and parking designed to attract residents and visitors.

One of the big draws for downtown is music, including the three-day Bottle Rock music festival, which draws marquee names, at the end of May. The rest of the year, there's live music seven nights a week between venues such as the Uptown Theatre (restored by locals including Francis Ford Coppola), Silo's at the Hatt Building, and Blue Note Napa, housed in the former Napa Valley Opera House.

"First Street Napa" is a \$200 million district redevelopment that spans three city blocks in the heart of downtown Napa. The project has been opening in phases since the fall of 2017, and consists of 325,000 square feet of mixed-use development, including 110,000 square feet in 45 shops, restaurants, tasting rooms, and live music venues; 30,000 square feet of office space; and a 183-room Archer Hotel.

### Access

The circulation system in the Napa Valley (and the county) is dominated by use of private vehicles, and most travelers to the area arrive by car. Highway 29 is the principal north-south arterial in the valley in terms of traffic volume, accommodating approximately 50,000 vehicles per day on a typical summer weekend.

The Silverado Trail, a county road paralleling Highway 29 on the east side of the Valley, carries considerably less traffic than Highway 29, although its capacity is comparable. Still, only approximately 28 percent of the total traffic using the two north-south Highways travels on the Silverado Trail during a typical summer weekend day, up slightly from 25 percent recorded in 1979. Visitors to the Napa Valley arriving via air travel can arrive either at the San Francisco International Airport, which is approximately 50 miles south, or the Oakland International Airport, which is 70 miles south. The Napa County Airport, located in southern Napa, south of the subject, has only charter or private airplane flights available.

## Local Area Characteristics

### Tourism

Visit Napa Valley (VNV) estimates approximately 3.5 million visitors visited the Napa Valley in 2016 (when the last Napa Valley visitor profile was conducted). That's an increase of 6.3 percent increase from 2014. Approximately 64.5 percent of these visitors spent one day in the Valley while 35.5 percent of visitors stayed overnight. Annual visitor spending is estimated at approximately \$1.92 billion, an increase of 17.5 percent since 2014, with visitor spending at \$1.63 billion. Officials suggest that a survey of tourists indicated that the primary reason for visiting the valley was for leisure purposes (a weekend getaway or vacation), representing 77.3 percent of all visitors. Second in that survey was for business travel, representing 7.9 percent, and 6.3 percent for personal travel and wedding, or special events. The tourism survey further indicated that the majority of the tourist traffic in Napa Valley emanates

from the greater San Francisco Bay Area. Approximately 20.8 percent of the visitors represent international travelers. It is reported that visitors to the Napa Valley tend to visit multiple towns within the area, and in 2016, 50.2 percent of all visitors made it to the St. Helena area.

The Napa Valley does not have a central convention or conference center; however, many of the hotels have meeting space available for small groups, with the largest at the Meritage Resort & Spa, Silverado Country Club and Resort, Embassy Suites, and the Marriott Hotel. According to the VNV, there were more than 3,500 conferences annually in the Napa Valley in recent years. To assist with tourism development and information disbursement, VNV has an information office at the welcome centers in central Napa, which handles an estimated 140,000 visitors annually.

Activities and services offered to the visitors are the expansion of visitor services such as new restaurants, glider plane rides, hot air balloon rides, and older attractions such as the Lake Berryessa recreational area, the mineral springs and mud baths, museums, antique and art stores, and various sport activities including golf. There are a number of special community events during the year, some of which include the Napa Valley Wine Auction, the Robert Mondavi Summer Jazz Festival, the Napa Valley Film Festival, and the Napa Valley Marathon.

## **Viticulture**

Approximately 45,300 acres of land in Napa Valley are planted with grapevines of varying grape varieties, representing approximately four percent of the total wine production in California. The demographics of the region show 700 grape growers and that 95 percent of the appellation's wineries are family owned. The Napa Valley Vintners association has 540 members, of which 80 percent produce fewer than 10,000 cases annually. Approximately 65 percent produce fewer than 5,000 cases annually.

According to the United States Department of Agriculture, National Agricultural Statistical Service's 2016 Grape Crush Report (the most recent report available), California's 2016 crush totaled approximately 4.23 million tons, up 9.3 percent from the 2015 crush of 3.89 million tons. Red wine varieties accounted for the biggest share of all grapes crushed at 2.28 million tons, and white wine varieties totaled 1.75 million tons, according to the 2016 final wine grape crush report. The average price for the 2016 crop of red wine grapes was \$918, up 16.3 percent from 2015. The average price for white wine grapes came in at \$598, up 10.7 percent from 2015. The economic impact of the wine industry in Napa, as reported by Napa Valley Vintners, provides an annual economic impact of more than \$13 billion locally.

We understand that since 1997, due to the recent increase in grape production and annual returns, there has been a growing interest in vineyard expansions and new vineyards in the area. However, according to the Napa Valley Vintners Association, only about three percent of the total land area in Napa County is available to develop as vineyards, which has resulted in a significant appreciation of vineyard land in recent years.

## **North Coast Fires**

In November 2017, the Wine Institute reported that the October wildfires in the North Coast wine communities were not significantly affected, as 90 percent of Napa, and 85 percent of Mendocino's harvests were already picked and in production at wineries prior to the fires.

## **San Francisco, Oakland, and Sacramento International Airports**

San Francisco International Airport (SFO) is located approximately 70.2 miles south of Napa Valley, between the cities of South San Francisco and Millbrae. Oakland International Airport (OAK) is located roughly 66.5 miles south of Napa Valley, west of San Francisco, across the San Francisco Bay, and the Sacramento International Airport

(SAC) is located about 71.3 miles northeast of Napa Valley. The following chart illustrates historical passenger traffic at the airports since 2004.

San Francisco, Oakland and Sacramento International Airports								
Year	SFO		OAK		SAC		Total	
	Pax Traffic	% Change	Pax Traffic	% Change	Pax Traffic	% Change	Pax Traffic	% Change
2004	17,183,331	----	14,098,327	----	9,580,722	----	40,862,380	----
2005	33,395,737	94.3 %	14,417,575	2.3 %	10,203,066	6.5 %	58,016,378	42.0 %
2006	33,574,807	0.5	14,433,669	0.1	10,362,800	1.6	58,371,276	0.6
2007	35,790,835	6.6	14,613,489	1.2	10,767,639	3.9	61,171,963	4.8
2008	37,402,455	4.5	11,474,456	(21.5)	10,202,953	(5.2)	59,079,864	(3.4)
2009	37,453,634	0.1	9,505,281	(17.2)	9,112,277	(10.7)	56,071,192	(5.1)
2010	39,391,234	5.2	9,542,333	0.4	9,047,775	(0.7)	57,981,342	3.4
2011	41,045,431	4.2	9,266,570	(2.9)	8,929,289	(1.3)	59,241,290	2.2
2012	44,477,209	8.4	10,040,864	8.4	8,910,570	(0.2)	63,428,643	7.1
2013	45,011,764	1.2	9,742,887	(3.0)	8,685,368	(2.5)	63,440,019	0.0
2014	47,155,100	4.8	10,336,778	6.1	8,972,756	3.3	66,464,634	4.8
2015	50,067,094	6.2	11,205,063	8.4	9,609,880	7.1	70,882,037	6.6
2016	53,110,671	6.1	12,070,967	7.7	10,118,794	5.3	75,300,432	6.2
2017	55,832,518	5.1	13,072,245	8.3	10,912,079	7.8	79,816,842	6.0
Avg. Annual % Change		9.5 %			(0.6) %		1.0 %	
							5.3 %	

Source: San Francisco International Airport; Oakland International Airport; Sacramento International Airport

Air travel in 2009 was affected by the recession and the downturn of the economy that began in 2008. However, after two short years, air travel at the San Francisco Airport had completely recovered, but the Oakland and Sacramento airports struggled, reporting a decline of 3.0 percent, and 2.5 percent, respectively, in 2013.

Every year since 2014, the airports have reported positive passenger counts, and year-end 2017 figures show increases of 5.1 percent, 8.3 percent, and 7.8 percent, respectively. The recovery of the market and increase in total passengers to the Bay Area bodes well for the local hotel market.

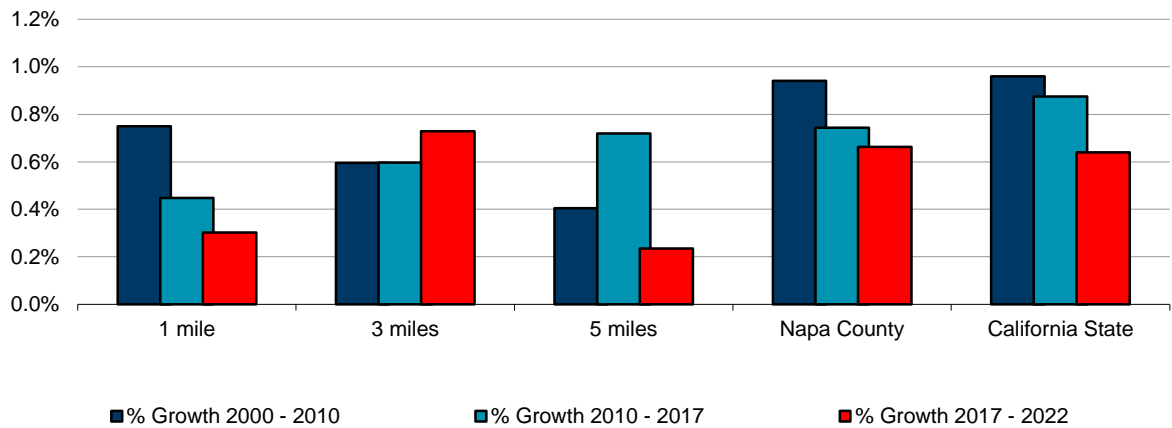
## Local Demographics

The following discussion is based upon an Experian Marketing Solutions, Inc. demographic study for a one, three, and five-mile radius of the Napa Valley. To add perspective, we have included data for Napa, Napa County, and the state of California.

### Population

Population in 2017 within a one, three, and five-mile radius of the Napa Valley has been estimated at 5,519, 39,046, and 84,379 residents, respectively. The following chart contains both historical estimates and future expectancies in terms of local compounded population growth.

### Population Growth (Compounded)

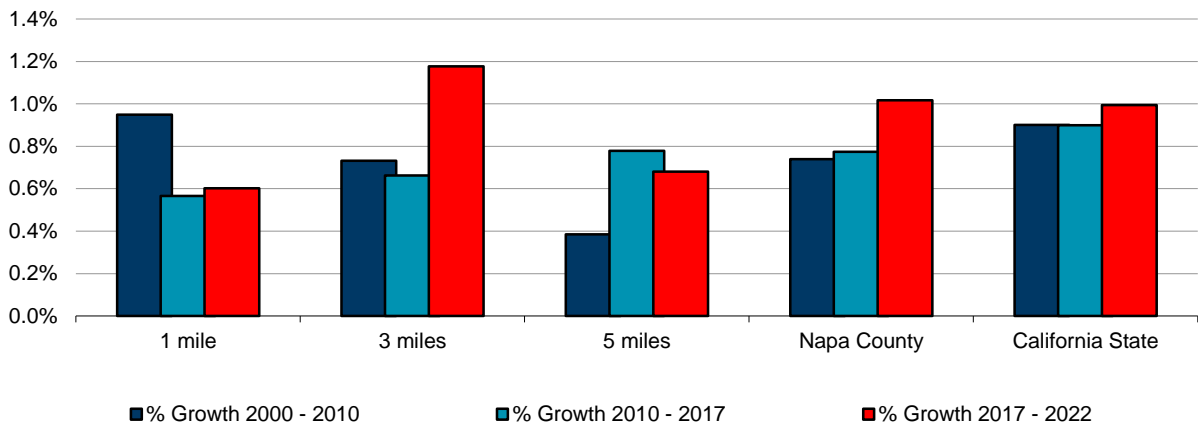


Population statistics for a one-mile radius show that between 2010 and 2017, population increased at a compound annual rate of approximately 0.4 percent, slower than the growth rates experienced by Napa County, and the state of California of 0.7 percent, and 0.9 percent, respectively. Through 2022, the population within the Napa Valley's one-mile area is expected to increase at a compound rate of 0.3 percent, while the county is expected to experience growth rates of 0.7 percent, and the state of 0.6 percent. Overall, the immediate area is expected to experience moderate growth levels.

### Households

A household consists of all the people occupying a single housing unit. While individual members of a household purchase goods and services, these purchases actually reflect household needs and decisions and levels of disposable income. Thus, the household (and subsequently income) is one of the critical units to be considered when reviewing market data and forming conclusions about the demographic impact on existing and proposed facilities.

### Household Growth (Compounded)

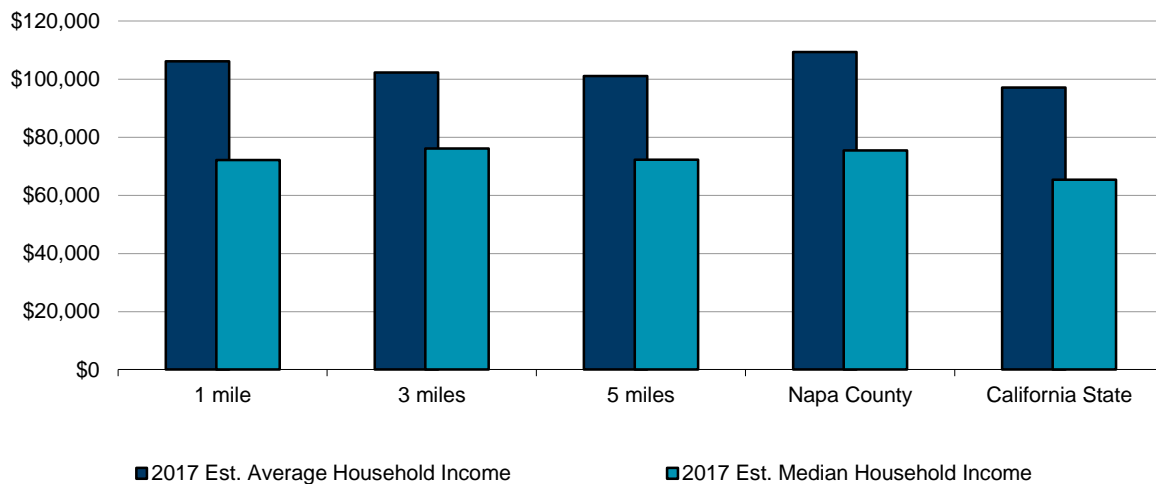


According to Experian, household formation has occurred over the last seven years at a 0.6 percent compound rate of growth within the Napa Valley's one-mile area. Between 2017 and 2022, households within this area are expected to grow at the same pace of 0.6 percent per year. As shown in the preceding chart, household growth in Napa County, and the state of California are expected to achieve faster growth rates to the local area of 1.0 percent, and 1.0 percent, respectively.

### Income

Income levels in a trade area reflect the potential expenditures of the residents; thus forming an important component of trade area analysis. In other words, average household income times the number of households yields one significant measure of an area's retail sales potential.

### Income



According to Experian, average household income within a one-mile radius is \$106,221, which is in line with the county level, and greater than the state level of \$109,364, and \$97,218, respectively. Approximately 18.2 percent of the population over the age of 25 within the Napa Valley's one-mile radius has a Bachelor's Degree versus 20.4 percent in the county. Additionally, 4.5 percent of residents within the Napa Valley's one-mile radius have a Master's Degree and roughly 6.7 percent of Napa County residents have achieved the same.

## Conclusion

As the economy rebounded from the last economic downturn, the Napa Valley economy benefited from its proximity to the San Francisco Bay Area, Silicon Valley, and Sacramento, which provide a strong base of transient leisure and group demand. The Napa Valley area benefits directly from economic stability of the Bay Area, its primary feeder market.

Overall, the world-renowned Napa Valley is a highly desirable, international tourist destination, offering attractions ranging from golf to viticulture and cultural festivities. Accordingly, we believe that local demographic and economic factors will continue to support the Napa Valley. Overall, the neighborhood represents good locational characteristics for area service businesses and lodging operations.

## Classification of Lodging Facilities

The design, facilities, amenities, and service levels of lodging facilities are always evolving as hotel companies and developers respond to market trends. The shifts in demographics of hotel users from baby boomers to millennials and changing lifestyle trends are shaping the perception of hotel products and shifting the nomenclature to describe lodging. Hotels offerings are changing to appeal to different segments. Some of these changes are in the physical attributes while other changes are in the amenities and services.

Trends in the changing design of hotels include a renewed emphasis on public space. The return of the lobby as a social center is evident in the design and renovation of hotels at all price points and service levels. Comfortable seating, powerful WiFi, and readily available food and beverage at all hours are moving food service from traditional restaurant outlets to the lobby, and drawing guests from their rooms to these communal areas. Healthier food choices are being offered at all lodging price points. Hotel guests are seeking unique and local experiences and operators are offering more and more options for activity programming with options for group and individual classes, tours, tastings, and other events. While the trends point to the use of hotels as social hubs and more than just a place to spend the night, the general classifications of the lodging inventory in the Napa Valley remain generally consistent with the 2007 HVS Study.

We have four categories of lodging product in this study: Bed and Breakfasts/Small Inns (B&Bs), Limited- and Select-Service Hotel, Full-service Hotels, and Luxury Hotels and Resorts.

**Bed and Breakfasts (B&Bs)** – These are properties with typically fewer than 10 guestrooms, which are independently owned and operated (by the owners). These properties may have shared bathrooms. A continental or full hot breakfast is served and is usually included in the room rate. No meals are served to persons other than guests and residents. Bed- and-breakfast hotels generally cater to individuals and couples traveling for leisure purposes. B&Bs typically offer no meeting space and in the Napa Valley, usually in the 3 to 5 room range.

We have also included some independent small luxury inns in this category. These smaller independent and boutique hotels in Napa Valley also provide uniquely designed accommodations. The properties are generally owned and operated by individuals or small regional hotel management firms. These properties emphasize a personal experience, high service levels and more limited on-site meeting space facilities and other amenities. Generally these properties do not have a dedicated restaurant but often include an extensive breakfast offering as part of the room rate. These inns range from 12 to approximately 40 guestrooms. These inns may have a similar room count to a limited-service hotel but are more upscale or boutique in nature and support higher rates.

**Limited-service Hotels** – Depending on the age and affiliation of the property, limited-service hotels generally range from 30 to 160 rooms. Limited-Service hotels contain more than 10 guestrooms and may be more than one story in height. Food service, if any, consists of a market pantry. Guestrooms have private bathrooms. Public areas include a reception area and these properties may also have a pool and courtyard area. Meeting space may or may not be available. Many of the limited-service hotels offer a complimentary breakfast which can range from a continental offering to hot items. Limited-service hotels are typically owner-operated. Some are run as independent hotels while others are affiliated with brands such as Best Western, Hampton Inn, Motel 6, and American's Best Value Inn.

The inventory of limited-service hotels in the Napa Valley includes a wide range of properties that date from the 1950s to 2016. Properties include exterior older motel facilities and newer interior corridor branded prototype designs.

A subset of this group is Extended-stay hotels which are designed for patrons who use the guestrooms for longer periods (generally, at least one week in duration) and feature additional amenities such as a microwave, stovetop,

oven, and dishwasher. Extended-stay hotels typically offer a complimentary breakfast and evening reception. Discounts are usually afforded to patrons who stay for longer durations; however, it should be noted that Napa's transient occupancy tax is typically not applicable to guests staying more than 30 days.

**Full-Service Hotels** – These properties are larger hotels that provide a range of facilities and amenities for travelers. A restaurant and lounge is available and open for at least two meals daily. All guestrooms have an individual bathroom, and a variety of bed types and room layouts; suites are usually also available. Meeting space is also offered, and the hotel's kitchen will generally cater events that require food and beverage service. In the Napa Valley, these hotels usually have a swimming pool and fitness facilities. Full-Service hotel can also be independent or affiliated with a brand.

A subset of this group, select-service properties, typified by the Hilton Garden Inn and Courtyard by Marriott brands, offer some services. Select-service hotels have a café or bistro which, depending on local demand, may not offer service at all three meal periods and does not provide room service. These venues typically have a lounge area. Breakfast is available from the restaurant at an additional cost. Meeting space is generally limited, but most properties offer a business center and often guestrooms contain microwaves. Select-service hotels generally range in size from 90 to 150 rooms.

**Luxury Hotels and Resorts-** This classification is rather broad and often encompasses properties that would otherwise be classified as either full-service, boutique, or resort hotels. In the Napa Valley, all of the resort hotels are also considered the top-tier properties in terms of service, amenities, and quality of guestrooms. Resort hotels offer at least one full-service restaurant that is open for at least two meals daily and typically provides room service. Resort hotels also offer additional leisure amenities, above and beyond those that could be expected at typical full-service hotels; these amenities often include golf courses, tennis facilities, full-service spa, or multiple swimming pools. These properties are also typically in non-urban locations where ample recreational and leisure activities are readily accessible.

The lodging classifications are based on common product categories in the hotel industry based on sources including materials from Smith Travel Research (STR), development and marketing materials from hotel companies and brands, and our professional experiences.

Note that the lodging inventory in the Napa Valley represents a variety of product offerings and locations. In determining the allocation of each property, we have considered the physical facilities, amenities and services, and price point. It is important for an area to have viable lodging offerings at a range of price points. Part of the appeal of the Napa Valley as a destination is the variety of accommodations so that visitors of different means can participate in the experience. Some of the luxury hotels and resorts in the Napa lodging market are destinations in and of themselves.

We are of the same opinion expressed in the 2007 HVS study that well-maintained and safe older properties continue to provide a price-value option for less affluent travelers. While the majority of hotel guests in the Napa Valley are coming for purely leisure pursuits, hotels are important components of community activity and service local residents and their guests in times of both need and celebration. We believe that sustaining a range of lodging properties at different price tiers remains an important factor in success and perception of the hotel as part of the local community and economy.

## Historical Occupancy and Rate Analysis

The basic measure of hotel performance, whether for an individual property or a market, is room revenue. Room revenue is analyzed by occupancy and average rate. Demand is represented by occupied room nights and supply is the number of available rooms, the ratio of demand to supply is occupancy. Average rate is the total revenue divided by the number of occupied rooms. For this study, these data points are generally considered on an annual basis, although it is important to consider the monthly trends and impact of seasonal patterns.

We have relied on data from Smith Travel Research (STR). STR, a data and analytics specialist is recognized by the lodging industry as the standard source of reliable data, provided operating statistics on the local market as a whole. In reviewing the data compiled by STR, it is important to note some of its limitations. We have found that because hotels are occasionally dropped in and out of STR samples, and not every property reports data in a consistent and timely manner, the overall quality of this information may be affected. These variables can sometimes skew the data for a particular market. However, we find that STR data is generally relied upon by typical hotel investors. Therefore, it has been considered in this study. The table shown below illustrates the combined operating statistics for the hotels in Napa Valley that report to STR. As not all hotels in Napa Valley report to STR, the number of reporting properties differs from the overall inventory identified in this study but serves as a reliable proxy for the market's performance.

Market Supply, Demand, Occupancy, ADR and RevPAR - Napa Valley											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2010	3,698	1,349,770	-----	818,972	-----	60.7%	-----	\$226.48	-----	\$137.42	-----
2011	3,724	1,359,334	0.7%	881,194	7.6%	64.8%	6.8%	\$241.84	6.8%	\$156.77	14.1%
2012	3,838	1,400,721	3.0%	937,641	6.4%	66.9%	3.3%	\$255.04	5.5%	\$170.73	8.9%
2013	3,867	1,411,384	0.8%	986,038	5.2%	69.9%	4.4%	\$274.71	7.7%	\$191.92	12.4%
2014	3,841	1,401,926	-0.7%	983,556	-0.3%	70.2%	0.4%	\$289.31	5.3%	\$202.97	5.8%
2015	3,956	1,444,068	3.0%	1,048,894	6.6%	72.6%	3.5%	\$307.63	6.3%	\$223.45	10.1%
2016	4,053	1,479,191	2.4%	1,075,211	2.5%	72.7%	0.1%	\$324.61	5.5%	\$235.95	5.6%
2017	4,162	1,518,987	2.7%	1,079,637	0.4%	71.1%	-2.2%	\$322.88	-0.5%	\$229.49	-2.7%
Avg Annual Percent Change			1.7%			4.0%	2.3%			5.2%	7.6%
Average 2010 to 2017	3,892	1,420,673		976,393		68.7%					
Average 2015 to 2017	4,057	1,480,749		1,067,914		72.1%					

Source: STR

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Since 2010, most data for the Napa Valley lodging market indicates continued improvement with the exception of periods during 2014 and 2017 that were impacted by natural disasters. Since the great recession of 2008 and 2009, lodging has steadily recovered in both occupancy and average rate. In the last four years, occupancy has been generally stable reflecting the seasonal patterns of demand dictated by weather, travel trends, and annual wine industry and other scheduled events. Hotel guests and day trippers to Napa are primarily drawn from Northern California where the easy access supports visitation on the weekends and during vacation and holiday periods. As a result of a strong economy in recent years and the growth in venues in the Napa Valley, the hotel industry has flourished and new hotel supply has been readily absorbed.

## Seasonal Demand Patterns

Annual statistics do not tell the whole story as the lodging market is highly seasonal as shown in the following charts. The highlighted ranges show the peak occupancy periods.

Napa Valley Hotel Market Seasonality																
Month	Occupancy								Average Daily Rate							
	2010	2011	2012	2013	2014	2015	2016	2017	2010	2011	2012	2013	2014	2015	2016	2017
January	37.4%	40.0%	43.5%	46.8%	48.2%	54.4%	56.1%	55.0%	\$153.33	\$163.54	\$171.61	\$182.13	\$201.21	\$216.14	\$221.10	\$229.11
February	45.2%	50.4%	54.8%	56.0%	58.7%	64.6%	65.5%	67.3%	\$169.02	\$181.28	\$191.69	\$201.69	\$213.44	\$236.02	\$250.62	\$253.43
March	52.8%	56.6%	59.3%	61.9%	66.3%	68.4%	67.9%	70.0%	\$173.24	\$188.93	\$206.40	\$216.59	\$228.15	\$244.11	\$255.47	\$273.25
April	60.7%	63.9%	66.9%	71.1%	74.2%	74.8%	75.3%	73.6%	\$203.68	\$222.66	\$224.79	\$248.20	\$265.23	\$285.72	\$304.54	\$309.57
May	66.8%	69.9%	70.7%	76.5%	77.3%	77.6%	76.1%	78.1%	\$234.63	\$250.69	\$258.75	\$289.72	\$305.36	\$336.05	\$348.90	\$367.80
June	67.9%	71.5%	77.8%	76.5%	77.9%	75.6%	77.9%	78.6%	\$236.64	\$253.12	\$269.97	\$289.98	\$309.03	\$330.87	\$343.35	\$359.25
July	73.9%	77.7%	79.2%	80.9%	80.1%	79.5%	81.2%	80.1%	\$238.89	\$265.52	\$270.53	\$293.63	\$316.24	\$339.75	\$356.02	\$366.01
August	74.2%	81.4%	80.3%	84.2%	79.0%	82.1%	79.0%	78.6%	\$253.39	\$263.41	\$289.61	\$318.44	\$337.90	\$344.65	\$359.78	\$371.10
September	75.8%	82.5%	82.4%	83.2%	80.0%	83.6%	84.9%	83.0%	\$268.94	\$290.55	\$304.18	\$331.16	\$346.94	\$369.96	\$396.35	\$414.44
October	77.2%	79.2%	81.0%	82.4%	80.5%	85.3%	82.8%	63.1%	\$277.87	\$288.77	\$307.26	\$331.62	\$352.72	\$379.16	\$396.10	\$317.18
November	55.5%	60.0%	62.0%	70.8%	69.3%	69.4%	70.0%	68.4%	\$221.51	\$233.95	\$249.30	\$266.45	\$278.27	\$290.36	\$315.53	\$289.69
December	39.5%	43.7%	43.1%	47.2%	50.8%	55.8%	54.7%	57.9%	\$183.30	\$193.84	\$206.79	\$216.64	\$225.17	\$228.68	\$256.28	\$247.41
Full Year Avg.	60.7%	64.8%	66.9%	69.9%	70.2%	72.6%	72.7%	71.1%	\$226.48	\$241.84	\$255.04	\$274.71	\$289.31	\$307.63	\$324.61	\$322.88

Napa Valley Hotel Market Seasonality																
Month	Demand								Average Daily Rate							
	2010	2011	2012	2013	2014	2015	2016	2017	2010	2011	2012	2013	2014	2015	2016	2017
January	-----	6.8%	9.5%	11.7%	2.3%	16.2%	3.1%	0.9%	-----	6.7%	4.9%	6.1%	10.5%	7.4%	2.3%	3.6%
February	-----	12.4%	8.7%	6.0%	4.2%	13.2%	1.4%	5.7%	-----	7.3%	5.7%	5.2%	5.8%	10.6%	6.2%	1.1%
March	-----	7.9%	4.8%	8.3%	6.4%	6.1%	2.3%	4.8%	-----	9.1%	9.2%	4.9%	5.3%	7.0%	4.7%	7.0%
April	-----	6.0%	4.8%	10.2%	3.7%	3.9%	3.5%	-0.6%	-----	9.3%	1.0%	10.4%	6.9%	7.7%	6.6%	1.7%
May	-----	5.4%	5.6%	7.5%	0.5%	3.3%	0.8%	4.3%	-----	6.8%	3.2%	12.0%	5.4%	10.0%	3.8%	5.4%
June	-----	6.2%	13.6%	-2.3%	1.4%	-0.1%	6.0%	2.5%	-----	7.0%	6.7%	7.4%	6.6%	7.1%	3.8%	4.6%
July	-----	6.0%	6.5%	1.4%	-1.5%	2.2%	5.1%	0.3%	-----	11.1%	1.9%	8.5%	7.7%	7.4%	4.8%	2.8%
August	-----	10.5%	3.0%	4.2%	-6.7%	7.0%	-1.0%	1.2%	-----	4.0%	9.9%	10.0%	6.1%	2.0%	4.4%	3.1%
September	-----	9.7%	4.3%	0.5%	-7.2%	10.6%	4.5%	-0.6%	-----	8.0%	4.7%	8.9%	4.8%	6.6%	7.1%	4.6%
October	-----	3.4%	6.8%	1.3%	-3.7%	9.7%	-0.1%	-22.3%	-----	3.9%	6.4%	7.9%	6.4%	7.5%	4.5%	-19.9%
November	-----	9.0%	7.9%	13.7%	-3.5%	3.8%	3.8%	3.8%	-----	5.6%	6.6%	6.9%	4.4%	4.3%	8.7%	-8.2%
December	-----	11.6%	2.8%	8.5%	10.6%	9.8%	0.8%	12.5%	-----	5.8%	6.7%	4.8%	3.9%	1.6%	12.1%	-3.5%
Full Year Avg.		7.6%	6.4%	5.2%	-0.3%	6.6%	2.5%	0.4%		6.8%	5.5%	7.7%	5.3%	6.3%	5.5%	-0.5%

Hotel demand in the Napa Valley is strongest on the weekends and in the summer when occupancies can exceed 80 percent. With the exception of 2014, which was impacted by the earthquake and the fall of 2017 when the fires occurred, demand has increased almost every month for the last seven years. With strong occupancy level and relatively little demand, operators have been able to progressively increase rates. The 5.2 percent compound annual growth rate from 2010 to 2017 well exceeded annual inflation. Overall the rate increase during this period was over 42 percent with RevPAR increasing 67 percent. These trends bode well for the continued strength of the market and the ability to absorb new lodging.

## Lodging Supply

Using data from STR, publicly available information, Visit Napa Valley, individual property and brand web sites, and data from our in-house files, we have compiled a list of lodging facilities in the Napa Valley. As of December 31, 2017, we have accounted for 5,074 rooms in all categories. This represents a difference of 1,095 guestrooms or an approximately 28.5 percent in available inventory from the 3,979 guestrooms noted in the 2007 HVS study. As with the 2007 HVS study, it should be noted that the actual number of hotel rooms available at any particular time can differ due to renovations, expansions, or temporary and permanent closures. Based on our research, 902 new rooms in hotels and resorts have opened since 2007. The net difference of 193 rooms can be attributed to a number of factors and is likely to be due to the challenges of tracking B&B inventory which can be especially challenging. The operations and inventory of this segment has the least consistency, as these properties open and close with some frequency and are sometime purchased to be converted to residences. They may also report fluctuating number of available rooms and may or may not be accepting reservations for every day of the year. In addition, the room inventory of the Dolce Silverado Resort has fluctuated from year to year as the individual unit owner contributions to inventory affect the count. Overall the difference of 193 rooms is not considered material to the analysis and findings of this report.

Also note that rounding in the models can affect the total number of rooms in any particular category by one digit and is also not material to the analysis.

A list of properties considered in the Napa Valley inventory for this study is included in the addenda to the report.

Based on our findings, the following charts summarize the current distribution of lodging inventory in the Napa Valley. Those hotels located with the incorporated city of Napa are also shown.

### Napa Valley Existing Lodging Supply - as of December 2017

Property Type	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	75	60%	675	13%
Limited Service Hotels	27	22%	1,521	30%
Full Service Hotel	11	9%	1,907	38%
Luxury Hotels & Resorts	12	10%	972	19%
Totals	125	100%	5,074	100%

### City of Napa Existing Lodging Supply -as of December 2017

Property Type	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	23	51%	251	10%
Limited Service Hotels	13	29%	731	30%
Full Service Hotel	9	20%	1,435	59%
Luxury Hotels & Resorts	0	0%	-	0%
Totals	45	100%	2,417	100%

The majority of guestrooms by property type for both the county and the city are in full-service hotels, although combined all other segments provide a greater amount of inventory in the county and a less number in the city. As a comparison, the following chart shows the comparison of the Napa Valley inventory calculated in this study to the 2007 data.

Napa Valley Existing Lodging Supply								
Property Type	Current Inventory				Inventory from the 2007 Study			
	Number of Properties	% of Total	Number of Guestrooms	% of Total	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast and Small Inns	75	60%	675	13%	93	62%	503	10%
Limited Service Hotels	27	22%	1,521	30%	17	11%	1,068	21%
Full Service Hotel	11	9%	1,907	38%	6	4%	1,193	24%
Luxury Hotels & Resorts	12	10%	972	19%	33	22%	1,215	24%
Totals	125	100%	5,074	100%	149	100%	3,979	78%

## Historic Supply Changes

To show the historical supply characteristics of the Napa Valley hotel market, data from STR and our research is used to calculate the increase in hotel rooms since 2010. This data has some limitations as the hotels and number of rooms reported to STR may not be consistent from period to period. In addition, over 10 percent of the lodging rooms in the Napa Valley are contained in B&Bs. These facilities are difficult to track as only a few report to STR, while others operate and offer nightly accommodations based on the interest of particular owners. The data is presented as a general benchmark and does not directly correspond to the inventory considered in the Cushman & Wakefield analysis as it does not include hotels which do not report and/or B&Bs and Small Inns not tracked by STR. We have also included partial room inventory for those properties that opened during 2017 with the remainder of their room counts included in 2018.

Historical Lodging Inventory - Number of Rooms as reporting to STR												
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
American Canyon	248	0	101	0	0	0	0	0	0	0	0	349
Calistoga	667	0	0	0	0	0	0	0	0	0	0	667
Napa	1,832	180	141	0	0	165	0	41	-5	115	46	2,515
Rutherford	136	0	0	0	0	0	0	0	0	0	0	136
St. Helena	251	0	0	0	0	0	0	0	0	0	51	302
Yountville	298	0	82	0	0	0	0	0	0	0	0	380
Unincorporated	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,432	180	324	0	0	165	0	41	-5	115	97	4,349
Napa County												
Cumulative Totals	3,432	3,612	3,936	3,936	3,936	4,101	4,101	4,142	4,137	4,252	4,349	
Percent Change		5%	9%	0%	0%	4%	0%	1%	0%	3%	2%	
Cumulative Increase		5%	15%	15%	15%	19%	19%	21%	21%	24%	27%	
City of Napa												
City of Napa	1,832	2,012	2,153	2,153	2,153	2,318	2,318	2,359	2,354	2,469	2,515	
Percent Change		10%	7%	0%	0%	8%	0%	2%	0%	5%	2%	
Cumulative Increase		10%	18%	18%	18%	27%	27%	29%	28%	35%	37%	
City as % of County												
City as % of County		56%	55%	55%	55%	57%	57%	57%	57%	58%	58%	
Note 2017 new supply represent partial year openings												

Based on the data presented in the chart above, the county and city of Napa have experienced sporadic but notable supply growth. As expected, the majority of new rooms opened in the city of Napa. This historical period was negatively impacted by the great recession which hampered hotel performance from 2008 to 2010. As a result of the contraction of hotel revenues during the years, wary lenders constrained financing for new construction and some expected developments were postponed or abandoned. Combined with the challenging entitlement process, the lack of available sites, and the increasing cost of construction, new hotel openings over the last 10 years have been relatively limited. Note that this data reflects data reported to STR and differs from the inventories used in the forecasts.

## Future Supply Changes

Napa remains an attractive hotel destination sought after by developers. Challenges in the availability of suitable lodging sites, the entitlement process and escalating construction costs have served as effective dampers limiting the growth of new supply. We have identified proposed lodging projects in the Napa Valley using data from public agencies, interviews and work with market participants, and a search of publicly available data. These projects have been assessed as to the date of their potential completion. We have also categorized other projects as more speculative at this time.

Tracking new hotel development is a moving target. While some information is publicly available, the intricacies of each transaction, the ownership and financing structure, development costs, and timing, are often confidential. We have reviewed the current pipeline of proposed projects with a number of sources and estimated opening dates assuming optimal development conditions, available financing, and future market conditions as anticipated at this time.

It is very possible that the expectations of new supply set forth in this study materialize different than the forecasts. As evidenced by the already long development process of some of the proposed supply, changes in market conditions, construction costs, ownership, management, and financing can unexpectedly impact the timing of new hotel development. Also note that information regarding new lodging development was conducted through early-January 2018 and is believed to be reliable as of that time.

The following chart includes the properties considered as likely new supply in the next few years sorted by estimated opening date. The opening dates were estimated based on available information at the time of our research in order to reasonably forecast supply and demand of lodging in the market. The completion of any particular projects may or may not correspond to these dates. Other projects may also materialize which are not on this list. While we have taken reasonable steps to determine the potential of new supply within the market, it is impossible to determine every property that will be developed in the future, or what their impact in the market will be.

Proposed Hotel Supply Napa Valley						
Name	City	Type	Number of Rooms	Meeting Space (SF)	Status	Estimated Opening Date
Archer Hotel	Napa	Full Service	137		Remaining Rooms	January 1, 2018
Los Alcobas	St. Helena	Luxury	11		Remaining Rooms	January 1, 2018
Mendez Bed and Breakfast	Napa	B&B	3		Projects Under Construction	June 1, 2018
Finch House Annex, Blackbird Inn	Napa	B&B	4		Projects Under Construction	June 1, 2018
Coombs B&B	Napa	B&B	10		Projects Under Construction	June 1, 2018
Villagio Expansion	Yountville	Luxury	1	4,000	Projects Under Construction	June 1, 2018
Bardessono Expansion	Yountville	Luxury	3		Projects Under Construction	June 1, 2018
Meritage Expansion	Napa	Full Service	145	10,000	Projects Under Construction	August 1, 2018
Black Elk Inn	Napa	B&B	27		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	June 1, 2019
Four Seasons Calistoga	Calistoga	Luxury	83	7,540	Projects Under Construction	June 1, 2019
Milliken Creek Inn Expansion	Napa	B&B	16		Projects Approved/Construction Pending	January 1, 2020
1929 Bed & Breakfast Inn	Napa	B&B	7		Projects Approved/Construction Pending	January 1, 2020
Westin Expansion	Napa	Full Service	32		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2020
Cambria Hotel	Napa	Limited-Service	98	2,012	Projects Approved/Construction Pending	January 1, 2020
Rosewood Calistoga Hills	Calistoga	Luxury	110	4,464	Projects Under Construction	January 1, 2020
Hodge Hotel	Napa	B&B	10		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Eliza Yount Mansion Inn	Napa	B&B	25		Projects Approved/Construction Pending	January 1, 2021
Embassy Suites Addition	Napa	Full Service	54	4,045	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Franklin Station Post Office	Napa	Full Service	180	N/A	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
NV Wine Train Hotel	Napa	Full Service	148		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Napa River Inn Expansion	Napa	Limited-Service	26	3,000	Projects Approved/Construction Pending	January 1, 2021
Trinitas Planned Development	Napa	Limited-Service	250	1,500	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Ritz-Carlton Napa Valley	Napa	Luxury	351	21,100	Projects Approved/Construction Pending	January 1, 2022
Dwars Hotel Mixed Use Project	Napa	Limited-Service	108		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2022
Stanly Ranch	Napa	Luxury	132	15,500	Projects Approved/Construction Pending	January 1, 2022
Plenary Hotel Project	Napa	Full Service	275	10,000	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2022
First & Oxbow Pre-Application	Napa	Limited-Service	74		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2023
Montalcino Resort	Unincorporated	Luxury	379	34,000	Projects Approved/Construction Pending	Speculative
Silverado Trail Hotel	Napa	Limited-Service	98		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	Speculative
Widewaters Hotel	Napa	Full Service	140		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	Speculative
Hotel Condo Project	Napa	Luxury	84 to 124		Proposed - Speculative	Speculative
Adams Street RFP	St. Helena	Full Service	N/A		Proposed - Speculative	Speculative
Farmstead at Long Meadow Ranch	St. Helena	Luxury	50		Proposed - Speculative	Speculative
The Veranda	Calistoga	Luxury	170		Seeking Entitlements	Speculative
Downtown Main Street RFP	St. Helena	Full Service	N/A		Proposed - Speculative	Speculative
Watson Ranch Hotel	American Canyon	Full Service	200		Seeking Entitlements - Speculative	Speculative
Napa Pipe Hotel	Napa	Limited-Service	150		Proposed - Speculative	Speculative
French Laundry Inn	Yountville	Luxury	12		Proposed - Speculative	Speculative
Source: Cushman & Wakefield						

The following charts set forth the distribution of proposed new rooms by location and type.

### Napa Valley - Proposed Lodging Supply

Property Type	Number of Properties	% of Total	Number of Guestrooms	% of Total
Bed and Breakfast	8	30%	102	4%
Limited Service Hotels	5	19%	556	24%
Full Service Hotel	7	26%	971	42%
Luxury Hotels & Resorts	7	26%	691	30%
Totals	27	100%	2,321	100%

*Excludes Speculative Devevelopment*

*Source: Cushman & Wakefield*

### City of Napa - Proposed Lodging Supply

Property Type	Number of Properties	% of Total	Guestrooms	% of Total
Bed and Breakfast	8	36%	102	5%
Limited Service Hotels	5	23%	556	26%
Full Service Hotel	7	32%	971	46%
Luxury Hotels & Resorts	2	9%	483	23%
Totals	22	100%	2,112	100%

*Excludes Speculative Devevelopment*

*Source: Cushman & Wakefield*

Over 3,500 hotel rooms are proposed for the Napa Valley, including those allocated in the charts above and more speculative projects. A number of these developments have been proposed for many years. Construction, particularly for the larger properties, has been elusive due to entitlement and market timing, and/or internal ownership factors. We have only considered proposed lodging in the pipeline that is anticipated to be complete in the next six years. Projects noted as speculative in the charts are not included in the analysis.

### Projected Lodging Inventory - Number of Rooms by Location

Year	Existing	2018	2019	2020	2021	2022	2023	Additional Rooms
American Canyon	313	0	0	0	0	0	0	0
Calistoga	817	0	42	152	0	0	0	193
Napa	2,337	189	124	167	693	866	74	2,112
Rutherford	76	0	0	0	0	0	0	0
St. Helena	424	11	0	0	0	0	0	11
Yountville	453	2	2	0	0	0	0	4
Unincorporated	575	0	0	0	0	0	0	0
Total	4,994	203	167	318	693	866	74	2,321

We have prepared the following chart showing the potential increase in room supply, by city and for the Napa Valley market as a whole, by year for the next six years.

Projected Lodging Inventory - Number of Rooms by Property Type - Napa Valley								
Year	Existing	2018	2019	2020	2021	2022	2023	Additional Rooms
B&Bs/Small Inns	675	9	22	37	35	0	0	102
Limited/Select Service	1,521	0	0	98	276	108	74	556
Full Service	1,907	181	102	32	382	275	0	971
Luxury Hotels and Resorts	972	13	44	152	0	483	0	691
Total	5,074	203	167	318	693	866	74	2,321

Projected Lodging Inventory - Number of Rooms by Property Type - City of Napa								
Year	Existing	2018	2019	2020	2021	2022	2023	Additional Rooms
B&Bs/Small Inns	251	9	22	37	35	0	0	102
Limited/Select Service	731	0	0	98	276	108	74	556
Full Service	1,435	181	102	32	382	275	0	971
Luxury Hotels and Resorts	0	0	0	0	0	483	0	483
Total	2,417	189	124	167	693	866	74	2,112

Consistent with the recent hotel development trends, the majority of new hotel rooms are anticipated to open in the city of Napa relative to the county. A more favorable development process relative to other jurisdictions and the availability of developable sites are encouraging for new lodging supply in the city.

The following chart summarizes the new supply additions for the Napa Valley used in this analysis. Again we caution the reader that while we are including the projects that are deemed likely to happen, there is always a level of uncertainty associated with new hotel development and some of the projects may not materialize as anticipated.

Napa Valley Lodging Inventory by Property Type							
	Historical	2018	2019	2020	2021	2022	2023
Market Room Supply	5,074	5,277	5,444	5,762	6,453	7,319	7,395
% Change		4.0%	3.2%	5.8%	12.0%	13.4%	1.0%
Cumulative Change		4.0%	7.3%	13.6%	27.2%	44.2%	45.7%
<b>By Product Type</b>							
<b>Bed &amp; Breakfast</b>							
Existing Rooms	675	675	675	675	675	675	675
Proposed Rooms		9	22	37	35	-	-
Total Rooms	675	684	706	742	777	777	777
% Change		1.3%	3.2%	5.2%	4.7%	0.0%	0.0%
Cumulative Change		1.3%	4.5%	9.9%	15.1%	15.1%	15.1%
<b>Limited and Select Service</b>							
Existing Rooms	1,521	1,521	1,521	1,521	1,521	1,521	1,521
Proposed Rooms		-	-	98	276	108	74
Total Rooms	1,521	1,521	1,521	1,619	1,895	2,003	2,077
% Change		0.0%	0.0%	6.4%	17.0%	5.7%	3.7%
Cumulative Change		0.0%	0.0%	6.4%	24.6%	31.7%	36.6%
<b>Full Service</b>							
Existing Rooms	1,907	1,907	1,907	1,907	1,907	1,907	1,907
Proposed Rooms		181	102	32	382	275	-
Total Rooms	1,907	2,088	2,189	2,221	2,603	2,878	2,878
% Change		9.5%	4.9%	1.5%	17.2%	10.6%	0.0%
Cumulative Change		9.5%	14.8%	16.5%	36.5%	50.9%	50.9%
<b>Luxury and Resorts</b>							
Existing Rooms	972	972	972	972	972	972	972
Proposed Rooms		13	44	152	-	483	-
Total Rooms	972	985	1,029	1,180	1,180	1,663	1,663
% Change		1.4%	4.4%	14.7%	0.0%	40.9%	0.0%
Cumulative Change		1.4%	5.8%	21.4%	21.4%	71.1%	71.1%

A number of other lodging projects also proposed for the market but as noted earlier, are considered speculative at time. In addition, there may be developments that are being considered but have not been publicly announced. Based on our research, we have included only projects with publicly available information in the analysis. Other future development or changes in the status and timeline of identified projects may change the premises of this analysis and the forecasts set forth in the study.

# Demand Analysis and Forecast of Occupancy and Average Rate

## Occupancy and Potential Demand Methodology

A hotel's ability to generate rooms revenue is determined by two operating statistics: annual occupancy and average daily room rate. In most markets, a room night analysis may be performed to quantify and forecast room night demand. The occupancy of a given hotel may be projected based on its relative competitiveness with other hotels and its penetration through the market. Individual lodging facilities may operate above or below the area-wide occupancy or average rate, depending upon the particular attributes of the property.

The projection of area-wide occupancy is derived from the relationship between estimated future room night demand and future guestroom supply. Annual growth rates for each market segment are applied to the estimated current year-end area-wide room night demand for each market segment to arrive at a projection of area-wide annual lodging demand as set forth in the table on the following page. As mentioned previously, based on our analysis of the local market for transient accommodations for the current year, we have projected varying growth rates in each of the market demand segments over the course of our projection through an estimated period of stabilization.

The analysis results in point values for each year. Even if market conditions were to occur exactly as expected, actual occupancy typically fluctuates. Market participants generally consider a range of two to five percent above or below the point value to be reasonable.

The stabilized occupancy is intended to reflect the anticipated results of the market over its remaining economic life, given any and all changes in the life cycles of the properties that comprise it. Thus, the stabilized occupancy excludes from consideration any abnormal relationship between supply and demand, as well as any nonrecurring conditions that may result in unusually high or low occupancies. Although the hotels in each classification may operate at occupancies above this stabilized level, we believe it equally possible for new competition and temporary economic downturns to force the occupancy below this selected point of stability.

The analysis also develops estimates of the potential for additional rooms in each segment. This potential was determined by calculating the additional annual room night demand that exceeds the forecasted annual occupied room nights. This projections involved the following steps:

1. The available rooms are estimated based on the existing supply and the addition of new rooms as they open.
2. The overall occupancy levels for the market are forecast considering the based and latent demand for the rooms.
3. A sustainable or stabilized occupancy level for the market is established using historical trends.
4. The difference between the sustainable occupancy and the forecasted occupancy is calculated and divided by 365 days to represent potential new supply that could be absorbed over time.
5. **Note that new lodging supply generally requires a ramp-up period to be absorbed. The occupancy forecasts account for this absorption. Negative potential demand is the transitional quantification of the absorption. Negative demand does not mean that too many new hotel rooms are being proposed. It means that the market typically requires one to three years to absorb new rooms of**

**any particular project. All of the forecasts show that current levels of demand for hotel rooms in all segments in both geographies end up with positive capacity for additional rooms assuming all of non-speculative, proposed rooms in the existing pipeline open. It is important to understand that the absolute positive room numbers in the forecast are representative of the timing and potential for additional supply and not the specific number of future rooms that could be absorbed.**

6. Particular products or locations may present opportunities for successful new lodging. For example, hotels affiliated with brands or with facilities that are not presently available in Napa or facilities such as a dedicated wellness facility could bring additional demand to the market that grows the pie. Lodging at lower price-points may also attract new demand to the area. The city and county of Napa may be able to support lodging beyond what is quantified in this analysis depending on the characteristics of the particular project.
7. The analyses of potential demand do not address the feasibility of new hotel supply. Land and construction costs and the availability and cost of financing are influential factors in the decision to pursue hotel development.

However, as a note of caution and as shown in the 2007 HVS study, the hotel market is cyclical and Napa is not immune to national and regional economic trends or other events that impact the demand for hotel rooms. This study assumes a continuation of the positive economic trends that have supported the strong hotel market performance of recent years.

The analysis is based on the identified existing and new supply as of the end of 2017. Any changes such as expansion, demolition, or delays in construction in the inventory will impact the analysis. Hotel operators and owners have resources to influence demand and occupancy through marketing and reservation channels. The relationship between occupancy and rate cannot be understated and changes to one of these variables can influence the other. Raising or discounting rates at any particular time can influence a hotel's annual occupancy performance and vice-versa.

## Lodging Demand in the Napa Valley

The market for lodging accommodations is an all-encompassing term referring to the various types of travelers that utilize the lodging facilities in a given market area. The total number of rooms occupied by these travelers during a specific time frame represents a market's accommodated room night demand.

In analyzing demand (or occupied room nights) within a specific market, individual segments are considered based on the nature of travel present in the area. Three primary demand classifications occur in most markets including commercial, meeting and group, and leisure. With the dominance of the online booking portals as sources of reservations, it is challenging to accurately determine the purpose of travel and the influence on a hotel's segmentation and rate and occupancy. Based on our conversations with owners, operators, and other stakeholders in the Napa Valley lodging industry, we have used the transient demand segment to represent all overnight travelers. Transient demand also includes commercial (business) travelers, however the largest proportion of overnights guests to the Napa Valley are leisure tourists. Meeting and groups demand is included as a separate segment. This demand is predominantly captured by full-service and some luxury properties. Demand, which represents a nightly occupied guestroom, is considered and forecast on an annual basis.

Based upon our fieldwork and area analysis, we have estimated the distribution of accommodated hotel room night demand for the market as illustrated in the following table:

<b>Historical Accommodated Demand: Napa Valley</b>		
<b>2017</b>		
<b>Market Segment</b>	<b>Market-wide</b>	<b>Percent</b>
	<b>Accommodated</b>	<b>of Total</b>
	<b>Room Night Demand</b>	
Transient	1,151,369	86.7%
Meeting and Group	176,453	13.3%
<b>Total</b>	<b>1,327,822</b>	<b>100.0%</b>

## Transient Demand

Transient demand consists of individuals visiting the market and using hotels. Transient demand includes leisure and business travelers.

Tourism is a mainstay of Napa Valley and can be readily yielded by hotel operators. The Napa Valley is a regional, domestic, and global destination but primarily attracts visitors from California. Leisure demand is typically strongest Friday and Saturday nights, holiday periods, and during the summer and fall months. These peak periods generally are negatively correlated with meeting and group demand. Ease of highway access to the wineries, restaurants, and other attractions of the area are also important lodging locational considerations.

In the subject property's area, most leisure demand is generated by people who are taking advantage of the numerous wine- and food-oriented facilities, recreational opportunities, and tourist attractions available in the area. Recreational pursuits including ballooning, biking, and hiking are all readily accessible. These people are usually traveling as couples or in the summer, with families. The primary demand driver for all of Northern California's wine country is the residential population of Northern California. The market for transient demand has continued to benefit from the expansive growth of the local technology sector and San Francisco's continued strength in luring Pacific Rim visitors and investors.

Transient demand, particularly from leisure visitors to the Napa Valley, is expected to continue to remain strong. Napa is primarily a destination for regional residents, although demand from other US feeder markets and overseas continues to grow. As market occupancy climbs into the mid-70 percent range, capacity constraints will limit further growth due to the area's seasonal attractions.

Commercial travelers generally are not rate sensitive and represent a very desirable and lucrative market that provides a consistent level of demand at relatively high room rates. Commercial demand in the subject's market area is generated primarily by business travelers who seek the convenience of lodging close to the airport and by the wide variety of corporate tenants in the surrounding area. Hotels in the Napa Valley are used by business travel associated with the wine and leisure industries. Transient demand also includes some government demand. These sub-segments are selectively accommodated by individual properties in the competitive set.

Future transient demand is related to the overall economic health of the nation and the region's tourism industry. We have forecast demand by lodging type to remain generally consistent throughout the forecast period.

## Meeting and Group Demand

Meeting and group demand includes groups who reserve blocks of rooms for meetings, seminars, trade association shows, and other similar gatherings of ten or more persons. Meeting and group demand is typically strongest during the spring and fall months, while the summer months represent the slowest period for this segment as hotels are

generally yielding stronger transient room rates. Meeting and group travelers typically achieve an average length of stay of two to three days. Historically, most corporate groups met on weekdays and social groups used the weekend periods. However, in the recent past, corporate group booking trends have changed to include some or all of the weekend and incorporate leisure activities in with business events.

Meeting and group demand is generally quite profitable for hotels and resorts. Although room rates are sometimes discounted for groups, the hotel benefits from the use of meeting space and the inclusion of in-house banquets and cocktail receptions. In order to attract the meeting and group segment, hotels must offer meeting and banquet facilities, as well as an adequate number of guestrooms to house function attendees.

Meeting and group demand in the Napa Valley is generated primarily by weddings, reunions, and corporate board meetings and retreats. Corporate meetings typically range in size from 15 to 100 people, whereas weddings typically range from 50 to 200 people. Most wineries are legally prohibited from hosting large events to the benefit of the hotels, and particularly the subject property due to its event facilities and size. Meeting and groups at the higher end of the size range are only able to be accommodated in a handful of existing hotels in the market, which generally are in the Full-Service product segment. And even though these hotels have facilities to accommodate larger groups, operators carefully consider the revenue potential of groups compared to individual guests, especially concerning room revenue.

Many of the hotels in the Napa Valley actively pursue small corporate groups, retreats, and board meetings, particularly mid-week. With 10 to 20 attendees, hotels can provide personal experience with a range of social and recreational activities. The amount of needed meeting space is more limited and can be found in a wider range of the lodging inventory. Weddings and social functions are also popular in the market and many lodging facilities host room blocks for guests while some have venues for the ceremonies and receptions.

Future demand potential in the meeting and group market segment is closely related to tourism activity in Napa Valley and the economic health of the region and nation. Napa continues to be a popular location for destination weddings. Many of the wineries are not permitted for events and hotels benefit from this constraint. In recent years, the market has seen the return of small corporate groups and retreats as the success of high technology firms in and around the Bay Area increases demand for meetings in Northern California Wine Country. The calendar of festivals and annual events also continues to grow. As such, we expect meeting and group demand to continue to improve, although limited by the amount of meeting space in the market and operator's expectations of yielding revenue during peak periods.

## Latent Demand

Because the local market demand estimate is based on hotel occupancies, it considers only those hotel rooms that were utilized by guests. Latent demand accounts for guests who could not be accommodated by the existing competitive supply for a variety of reasons. Latent demand can be divided into displaced demand and induced demand.

## Induced Demand

Induced demand is additional demand created by the existence of a new demand generator or the addition to the competitive supply of new lodging properties that feature specialized facilities designed to cater to a particular segment and attract demand that previously did not exist in the area, or increase the attraction of that demand.

A significant portion of the new supply will be affiliated with established global brands such as Four Seasons, Rosewood, Marriott, Hilton, and Choice. These projects launch reservation and marketing efforts well before construction is complete and the branded hotels are expected to open with significant occupied room nights already reserved. Members of the brands' reward programs are also attracted to the destination for point redemptions. The

marketing strength of these affiliations supports the expectation that these properties will be more readily absorbed in the market. For each segment, we have estimated that a portion of the demand for the proposed supply will be induced.

As most of the unaccommodated room nights are estimated to occur in the peak season, developers of new hotels would likely have to induce additional room nights during the slower demand periods to generate occupancy levels that support feasibility of new hotel construction.

### **Displaced Demand**

Displaced demand refers to individuals who are unable to secure accommodations in the market because all the local hotels are full. These travelers must defer their trips, settle for less desirable accommodations, or stay in properties located outside of the market area. Because this demand did not yield occupied room nights, it is not included in the historical accommodated room night demand estimate.

Displaced demand is actually a form of excess demand, which results from the cyclical nature of the hotel business. For example, in commercial markets where demand is not equally spaced throughout the week, hotels often exhibit peaks and valleys in their daily occupancies. In general, commercial hotels enjoy strong occupancies Monday through Thursday (when business travel is most frequent) and significantly lower occupancies on Friday and Saturday. When hotels operating under these conditions realize annual occupancies of between 70 and 75 percent, or when day of the week demand patterns fill area hotels to capacity one or more nights per week, it can generally be assumed that excess demand exists, and a certain amount of patronage must be turned away. If additional lodging facilities are expected to enter the market, it is reasonable to assume that this displaced demand will be accommodated, and thus an estimate of the amount of displaced demand should be made. Displaced demand is generally estimated as a percentage of accommodated demand.

Displaced demand is included in the estimate of potential demand for each of the product segments. The amount of displaced demand is calculated by multiplying the number of annual high occupancy nights per year by the number of new available hotel rooms.

The methodology is illustrated in the following charts for B&B and Small Inns and was used for all the segments.

Because the overall occupancy of this segment in the subject's competitive is consistently strong during the summer and many weekends throughout the year, we believe that a certain amount of displaced demand exists in the market. It is understood that this demand typically is displaced. We have utilized an occupancy threshold of 75 percent to estimate the market's fill nights per month, as presented in the following chart. In 2017, the fires in the Napa and Sonoma Valleys significantly disrupted hotel performance in the fourth quarter. October and the beginning of November are typically periods that achieve occupancy levels in the mid-70 percent range and the displaced demand for these months has been estimated considering normal occupancy patterns.

Displaced Hotel Demand: B&Bs and Small Inns Napa Valley									
Occupancy (%)	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total Month	Fill Nights
Jan - 17	49.9	41.8	41.6	44.4	53.5	63.9	74.9	52.0	0
Feb - 17	55.4	53.3	57.8	54.5	63.8	74.3	81.6	62.9	3
Mar - 17	63.6	62.9	62.7	62.8	72.7	81.0	88.3	70.7	8
Apr - 17	55.1	54.6	56.9	63.8	73.5	82.8	84.4	67.5	8
May - 17	73.1	66.0	67.9	73.4	82.3	89.2	94.2	77.2	12
Jun - 17	66.0	67.1	67.5	69.8	77.9	84.9	90.4	75.2	12
Jul - 17	75.7	78.0	79.1	77.3	77.5	84.5	91.1	80.6	28
Aug - 17	77.0	77.4	77.0	78.9	79.6	89.1	93.4	81.4	28
Sep - 17	82.8	74.8	76.4	83.1	88.0	89.2	95.6	84.8	28
Oct - 17	49.4	29.8	31.0	34.9	40.6	48.2	51.3	40.4	28
Nov - 17	48.5	47.3	48.9	50.8	63.3	71.8	73.3	57.6	12
Dec - 17	56.1	47.1	52.0	53.7	57.6	63.9	75.1	58.6	4
<b>Total Year</b>	<b>62.3</b>	<b>58.1</b>	<b>59.6</b>	<b>62.7</b>	<b>69.6</b>	<b>77.2</b>	<b>83.2</b>	<b>67.5</b>	<b>171</b>

As calculated below, the potential displaced, or unaccommodated, demand was equal to 17,201 room nights over the past twelve months based on the utilized occupancy threshold of 75 percent

Current Displaced Demand Calculation	
New Competitive Supply:	103
Fill Nights:	x 171
<b>Displaced Demand</b>	<b>17,613</b>

Based on our calculation, there are roughly 107 fill nights and 103 new room inventory proposed for this segment, calculating to an estimated 17,613 unaccommodated room nights in 2017. During the course of our fieldwork and interviewing market participants at the competitive hotels, however, we understand that not all calculated displaced demand will actually be accommodated with the new supply. For this product type, all of the displaced demand is assumed to be driven by transient users. The displaced demand for the other product types is allocated to transient and meeting and group demand as currently accommodated by the existing properties.

Based on our market analysis with primary reliance on the fieldwork interviews and with secondary support from the data presented above, we have included 75% of the calculated displaced demand in the analysis for B&B and Small Inns as follows.

Displaced Demand Estimate - B&Bs and Small Inns Napa Valley						
2017 Market Segmentation	2017 Accommodated Demand	Estimated Displaced Room Nights	Displaced Percentage	Conversion Percent	Room Nights	Percentage Accommodated
Transient	58,714	17,613	30.0%	75%	13,210	22.5%
<b>Percent Accommodated</b>	<b>58,714</b>	<b>17,613</b>			<b>13,210</b>	<b>22.5%</b>

## Bed and Breakfasts and Small Inns Occupancy Forecast

Developing projections for this subset of the market's lodging is the most difficult of all the market segments. The majority of the properties are owner-operated and most have three rooms or fewer. The availability of guestrooms at any particular time is at the owner's discretion. The owner-operators may or may not track occupancy with any regularity. To represent the performance of this segment, we have researched the number of available rooms in the category and used the data from a custom STR trend report as a proxy for the rate and occupancy levels. We also considered TOT reports from some of the cities in the Valley as general guides and reviewed publicly posted rates on numerous websites. Below is the data from the STR trend.

Market Supply, Demand, Occupancy, ADR and RevPAR											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2010	164	59,860	-----	35,766	-----	59.7%	-----	\$246.08	-----	\$147.03	-----
2011	164	59,738	-0.2%	39,108	9.3%	65.5%	9.6%	\$265.09	7.7%	\$173.54	18.0%
2012	163	59,495	-0.4%	40,495	3.5%	68.1%	4.0%	\$264.19	-0.3%	\$179.82	3.6%
2013	163	59,495	0.0%	42,154	4.1%	70.9%	4.1%	\$286.15	8.3%	\$202.74	12.7%
2014	164	59,709	0.4%	42,774	1.5%	71.6%	1.1%	\$303.61	6.1%	\$217.50	7.3%
2015	164	59,860	0.3%	45,132	5.5%	75.4%	5.2%	\$303.51	0.0%	\$228.83	5.2%
2016	164	59,860	0.0%	43,747	-3.1%	73.1%	-3.1%	\$314.70	3.7%	\$229.99	0.5%
2017	164	59,860	0.0%	41,356	-5.5%	69.1%	-5.5%	\$338.00	7.4%	\$233.52	1.5%
Avg Annual Percent Change			0.0%		2.1%		2.1%		4.6%		6.8%
Average 2010 to 2017	164	59,735		41,317		69.2%					
Average 2015 to 2017	164	59,860		44,440		74.2%					

Source: STR

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From 2010 to 2017 occupancy levels increased dramatically. Rate growth was more erratic but overall revenue shows very strong growth. Our research indicates that the success of B&Bs generally tracks with the performance trends of the limited- and full-service hotels. The data from the TOT collections indicates, however, that the occupancy levels of this product type are higher in the county than in the city of Napa. This may be a function of the inconsistent data from these types of properties or other factors, such as the smaller size of properties in the Valley locations or the preference of visitors staying at B&Bs for more remote locations. While we have reasonably attempted to analyze and project the overall trends for this segment, the data for this segment is less reliable than for the other three lodging product types.

Our research indicates the following proposed new supply in this segment. As with all the proposed lodging projects, the opening was estimated based on available information and considering reasonable construction periods. Demand in this segment is anticipated to grow with the proposed hotels shown in the following chart.

Bed and Breakfasts and Small Inn - Proposed Hotel Supply Napa Valley					
Name	City	Type	Number of Rooms	Status	Estimated Opening Date
Mendez Bed and Breakfast	Napa	B&B	3	Projects Under Construction	June 1, 2018
Finch House Annex, Blackbird Inn	Napa	B&B	4	Projects Under Construction	June 1, 2018
Coombs B&B	Napa	B&B	10	Projects Under Construction	June 1, 2018
Black Elk Inn	Napa	B&B	27	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	June 1, 2019
Milliken Creek Inn Expansion	Napa	B&B	16	Projects Approved/Construction Pending	January 1, 2020
1929 Bed & Breakfast Inn	Napa	B&B	7	Projects Approved/Construction Pending	January 1, 2020
Hodge Hotel	Napa	B&B	10	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Eliza Yount Mansion Inn	Napa	B&B	25	Projects Approved/Construction Pending	January 1, 2021

Source: Cushman & Wakefield

The forecast of occupancy was developed considering the new supply and the estimates of base and latent demand for this product type and location as shown in the following chart.

<b>B&amp;Bs - Napa Valley - Projection of Base Room Night Demand and Annual Growth</b>						
<b>Segment</b>	<b>Historical</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b><i>Transient</i></b>						
Annual Growth		1.0%	1.0%	1.0%	1.0%	1.0%
Base Demand	170,215	171,917	173,636	175,372	177,126	178,897
Displaced Demand	-----	1,075	3,961	8,775	13,425	13,559
Total Market Demand	170,215	172,992	177,597	184,147	190,551	192,456
% Change	----	1.6%	2.7%	3.7%	3.5%	1.0%
<b><i>Market Statistics</i></b>						
Total Rooms Supply	675	684	706	743	778	778
Total Available Room Nights	246,375	249,478	257,690	271,195	283,970	283,970
% Change	----	1.3%	3.3%	5.2%	4.7%	0.0%
<b>Market-wide Occupancy</b>	<b>69.1%</b>	<b>69.3%</b>	<b>68.9%</b>	<b>67.9%</b>	<b>67.1%</b>	<b>67.8%</b>

## Potential Demand

Using the methodology described earlier, the estimated potential demand for this segment is shown in the following chart.

Bed & Breakfast and Small Inns - Estimate of Additional Capacity - Napa County											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	675	684	706	743	778	778	778	778	778	778	778
Estimated Available Annual Room Nights	246,375	249,478	257,690	271,195	283,970	283,970	283,970	283,970	283,970	283,970	283,970
Total Projected Potential Demand	170,215	172,992	177,597	184,147	190,551	192,456	194,381	196,325	198,288	200,271	202,274
Estimated Sustainable Annual Occupancy	69%	68%	68%	68%	68%	68%	68%	68%	68%	68%	68%
Estimated Sustainable Annual Demand		169,645	175,229	184,413	193,100	193,100	193,100	193,100	193,100	193,100	193,100
Total Projected Potential Demand		172,992	177,597	184,147	190,551	192,456	194,381	196,325	198,288	200,271	202,274
less Est. Sustainable Annual Demand		169,645	175,229	184,413	193,100	193,100	193,100	193,100	193,100	193,100	193,100
Unsatisfied Annual Demand		3,348	2,368	(265)	(2,549)	(644)	1,281	3,225	5,188	7,171	9,174
<b>Cumulative Potential Supply Expansion</b>		<b>9</b>	<b>6</b>	<b>(1)</b>	<b>(7)</b>	<b>(2)</b>	<b>4</b>	<b>9</b>	<b>14</b>	<b>20</b>	<b>25</b>

## Forecast of Average Rate

One of the most important considerations in developing an estimate of the value of a lodging facility is a supportable projection of its attainable average rate, which is more formally defined as the average rate per occupied room. Average rate can be calculated by dividing the total rooms revenue achieved during a specified period by the number of rooms sold during the same period. The average rate and the anticipated occupancy percentage are used to project rooms revenue, which in turn provides the basis for developing an opinion of most other income and expense categories.

Although the average rate analysis presented here follows the occupancy projections, these two statistics are highly correlated; in reality, one cannot project occupancy without making specific assumptions regarding average rate. This relationship is best illustrated by RevPAR, which reflects a property's ability to maximize rooms revenue.

Our projections incorporate an opinion of general price inflation based upon economic projections from various sources (including the U.S. Congressional Budget Office), tempered by our observations and expectations derived from historical perspectives both locally and nationally. Accordingly, to portray price level changes, we have assumed an average CPI inflation rate of 3.0 percent per year throughout the 10-year projection period. This assumption is intended only to portray an expected long-term trend in price movements, rather than for a specific interval in time.

### Bed & Breakfasts and Small Inns - Forecast of Average Rate

We have examined the rate structure and achieved average room rates and RevPARs of this product segment of the market, in forecasting marketwide average rate. The average rate data from the STR trend shows a compound average annual growth rate of 4.6 percent. The new supply is anticipated to be absorbed in the city of Napa while the majority of existing inventory is located in Up Valley. Based on the foregoing, the projection of the subject's average daily rate is illustrated in the following table.

<b>B&amp;B and Small Inns - Projected Base ADR Growth</b>		
<b>Year</b>	<b>Projected ADR Growth</b>	<b>Projected ADR</b>
Positioned ADR	---	\$338.00
2018	4.0%	\$351.52
2019	4.0%	\$365.58
2020	4.0%	\$380.21
2021	3.0%	\$391.61
2022	3.0%	\$403.36
2023	3.0%	\$415.46
2024	3.0%	\$427.93
2025	3.0%	\$440.77
2026	3.0%	\$453.99
2027	3.0%	\$467.61

The operating performance of the subject hotel is projected in terms of annual guestroom occupancy and average daily room rate. Based on the previously concluded occupancy and average room rate, the subject's room revenue

is projected as illustrated below. The performance is forecast through a stabilized year, after which the stabilized occupancy is assumed for the remaining years and the average rate increases are inflationary

B&Bs and Small Inns - Napa County -Room Revenue Contribution from New Supply										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	9	31	68	103	103	103	103	103	103	103
Occupancy	69%	69%	68%	67%	68%	68%	68%	68%	68%	68%
Occupied Rooms	2,151	7,798	16,853	25,227	25,479	25,565	25,565	25,565	25,565	25,565
Existing Rooms Average Rate	\$351.52	\$365.58	\$380.21	\$391.61	\$403.36	\$415.46	\$427.93	\$440.77	\$453.99	\$467.61
Additional Rooms Rate Penetration	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Additional Rooms Rate	\$351.52	\$365.58	\$380.21	\$391.61	\$403.36	\$415.46	\$427.93	\$440.77	\$453.99	\$467.61
RevPAR	\$243.75	\$251.96	\$258.17	\$262.78	\$273.37	\$282.52	\$290.99	\$299.72	\$308.71	\$317.97
Rooms Revenue	\$756,244	\$2,850,887	\$6,407,767	\$9,879,327	\$10,277,437	\$10,621,160	\$10,939,795	\$11,267,989	\$11,606,029	\$11,954,209

B&Bs and Small Inns - Napa County -Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	684	706	743	778	778	778	778	778	778	778
Occupancy	69%	69%	68%	67%	68%	68%	68%	68%	68%	68%
Occupied Rooms	172,992	177,597	184,147	190,551	192,456	193,100	193,100	193,100	193,100	193,100
Average Room Rate	\$351.53	\$365.59	\$380.21	\$391.61	\$403.36	\$415.47	\$427.93	\$440.77	\$453.99	\$467.61
RevPAR	\$243.75	\$251.96	\$258.17	\$262.78	\$273.37	\$282.52	\$290.99	\$299.72	\$308.71	\$317.97
Rooms Revenue	\$60,811,244	\$64,926,887	\$70,014,767	\$74,622,327	\$77,629,437	\$80,226,160	\$82,632,795	\$85,111,989	\$87,665,029	\$90,295,209

## City of Napa Bed and Breakfasts and Small Inns – Forecasts of Rate and Occupancy

The methodology was used to forecast the performance of this segment for the properties located in the city of Napa. In developing this forecast, we have considered TOT data for the city and the findings from our research. The data indicates that the occupancy level of this product category is lower than for Up Valley properties and has an annual occupancy level of 64 percent compared to the county B&B level of 68 percent. The average rate is also estimated to be lower than the county. The new supply is anticipated to be able to garner higher rates than the existing supply, elevating the rates for the market.

The charts showing forecasts for the city of Napa are set forth below.

City of Napa Bed & Breakfast and Small Inns Projection of Base Room Night Demand and Annual Growth								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	58,714	60,476	62,290	64,159	66,084	68,067	70,109	72,212
Displaced Demand	-----	1,189	4,218	9,529	14,867	15,313	15,772	16,245
Total Segment Demand	58,714	61,665	66,508	73,688	80,951	83,380	85,881	88,457
<b>Market Statistics</b>								
Total Rooms Supply	251	260	282	319	354	354	354	354
Total Available Room Nights	91,615	94,900	102,930	116,435	129,210	129,210	129,210	129,210
% Change	----	3.6%	8.5%	13.1%	11.0%	0.0%	0.0%	0.0%
Market-wide Occupancy	64.1%	65.0%	64.6%	63.3%	62.7%	64.5%	66.5%	68.5%

B&Bs and Small Inns - Projected Base ADR Growth		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$285.00
2018	4.0%	\$296.40
2019	4.0%	\$308.26
2020	4.0%	\$320.59
2021	3.0%	\$330.20
2022	3.0%	\$340.11
2023	3.0%	\$350.31
2024	3.0%	\$360.82
2025	3.0%	\$371.65
2026	3.0%	\$382.80
2027	3.0%	\$394.28

The estimate of potential demand for this segment is forecast below followed by the estimated revenue contribution from the new supply and the overall room revenue projection for this segment within the city of Napa.

B&B Estimate of Additional Capacity - City of Napa											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	251	260	282	319	354	354	354	354	354	354	354
Estimated Available Annual Room Nights	91,615	94,900	102,930	116,435	129,210	129,210	129,210	129,210	129,210	129,210	129,210
Total Projected Potential Demand	58,714	61,665	66,508	73,688	80,951	83,380	85,881	88,457	91,110	93,843	96,658
Estimated Sustainable Annual Occupancy		64%	64%	64%	64%	64%	64%	64%	64%	64%	64%
Estimated Sustainable Annual Demand		60,736	65,875	74,518	82,694	82,694	82,694	82,694	82,694	82,694	82,694
Total Projected Potential Demand		61,665	66,508	73,688	80,951	83,380	85,881	88,457	91,110	93,843	96,658
less Est. Sustainable Annual Demand		60,736	65,875	74,518	82,694	82,694	82,694	82,694	82,694	82,694	82,694
Unsatisfied Annual Demand		929	633	(830)	(1,743)	686	3,187	5,763	8,416	11,149	13,964
<b>Cumulative Potential Supply Expansion</b>		<b>3</b>	<b>2</b>	<b>(2)</b>	<b>(5)</b>	<b>2</b>	<b>9</b>	<b>16</b>	<b>23</b>	<b>31</b>	<b>38</b>

B&Bs and Small Inns - City of Napa - Room Revenue Contribution from New Supply										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	9	31	68	103	103	103	103	103	103	103
Occupancy	65%	65%	63%	63%	65%	64%	64%	64%	64%	64%
Occupied Rooms	2,135	7,311	15,708	23,554	24,260	24,061	24,061	24,061	24,061	24,061
Existing Rooms Average Rate	\$296.40	\$308.26	\$320.59	\$330.20	\$340.11	\$350.31	\$360.82	\$371.65	\$382.80	\$394.28
Additional Rooms Rate Penetration	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Additional Rooms Rate	\$326.04	\$339.08	\$352.64	\$363.22	\$374.12	\$385.34	\$396.90	\$408.81	\$421.08	\$433.71
RevPAR	\$211.86	\$219.10	\$223.18	\$227.56	\$241.42	\$246.62	\$254.02	\$261.64	\$269.49	\$277.57
Rooms Revenue	\$695,950	\$2,479,074	\$5,539,289	\$8,555,216	\$9,076,280	\$9,271,698	\$9,549,849	\$9,836,345	\$10,131,435	\$10,435,378

B&Bs and Small Inns - City of Napa -Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	260	282	319	354	354	354	354	354	354	354
Occupancy	65%	65%	63%	63%	65%	64%	64%	64%	64%	64%
Occupied Rooms	61,665	66,508	73,688	80,951	83,380	82,694	82,694	82,694	82,694	82,694
Averate Room Rate	\$297.43	\$311.65	\$327.42	\$339.81	\$350.00	\$360.50	\$371.32	\$382.46	\$393.94	\$405.75
RevPAR	\$193.27	\$201.37	\$207.22	\$212.90	\$225.86	\$230.72	\$237.64	\$244.77	\$252.12	\$259.68
Rooms Revenue	\$18,340,950	\$20,727,074	\$24,127,289	\$27,508,216	\$29,183,280	\$29,811,698	\$30,705,849	\$31,627,345	\$32,576,435	\$33,553,378

## Limited Service Hotel Properties

### Limited-service Occupancy Forecast

Limited-service hotels include a wide range of properties in age and location. The hotels include older 30 room exterior corridor independent properties and new branded hotels with some meeting space. The high occupancy levels indicate some capacity constraint and supports the development of new supply in this segment. The limited-service segment represents the price-value product type in the market. Below is the data from the STR trend.

Market Supply, Demand, Occupancy, ADR and RevPAR - Limited Service Hotels											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2000	512	186,789	-----	141,720	-----	75.9%	-----	\$124.77	-----	\$94.66	-----
2001	579	211,335	11.6%	139,511	-1.6%	66.0%	-14.9%	\$123.16	-1.3%	\$81.30	-14.1%
2002	579	211,335	0.0%	145,052	3.8%	68.6%	3.8%	\$124.64	1.2%	\$85.55	5.2%
2003	579	211,335	0.0%	147,173	1.4%	69.6%	1.4%	\$123.99	-0.5%	\$86.35	0.9%
2004	633	230,935	8.5%	157,926	6.8%	68.4%	-1.8%	\$125.16	0.9%	\$85.59	-0.9%
2005	659	240,535	4.0%	158,935	0.6%	66.1%	-3.5%	\$121.53	-3.0%	\$80.30	-6.2%
2006	659	240,535	0.0%	167,884	5.3%	69.8%	5.3%	\$130.74	7.0%	\$91.25	13.6%
2007	659	240,535	0.0%	167,884	0.0%	69.8%	0.0%	\$143.37	8.8%	\$100.07	9.7%
2008	659	240,535	0.0%	160,842	-4.4%	66.9%	-4.4%	\$155.85	8.0%	\$104.22	4.1%
2009	844	307,941	21.9%	170,914	5.9%	55.5%	-20.5%	\$144.16	-8.1%	\$80.01	-23.2%
2010	860	313,900	1.9%	192,240	11.1%	61.2%	9.4%	\$150.82	4.4%	\$92.36	15.4%
2011	860	313,900	0.0%	199,600	3.7%	63.6%	3.7%	\$148.01	-1.9%	\$94.12	1.9%
2012	861	314,206	0.1%	207,091	3.6%	65.9%	3.5%	\$151.19	2.1%	\$99.65	5.9%
2013	860	313,900	-0.1%	221,047	6.3%	70.4%	6.4%	\$163.98	7.8%	\$115.48	15.9%
2014	861	314,265	0.1%	233,226	5.2%	74.2%	5.1%	\$171.94	4.6%	\$127.60	10.5%
2015	861	314,265	0.0%	238,308	2.1%	75.8%	2.1%	\$182.13	5.6%	\$138.11	8.2%
2016	957	349,455	10.1%	256,535	7.1%	73.4%	-3.3%	\$192.15	5.2%	\$141.06	2.1%
2017	976	356,240	1.9%	270,238	5.1%	75.9%	3.2%	\$192.33	0.1%	\$145.90	3.4%
Avg Annual Percent Change			0.7%		2.0%		1.3%		1.4%		2.6%
Average 2010 to 2017	887	323,766		227,286		70.2%			3.5%		
Average 2015 to 2017	931	339,987		255,027		75.0%			2.8%		

Source: STR

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From 2010 to 2017 occupancy levels increased dramatically, even as new supply entered the market. The increased occupancy concurrent with the addition of new hotels shows the strength of the market. Rate growth was more erratic but overall revenue shows very strong growth. Limited-service hotels generate the highest occupancy levels in the area due to the price-value offering and affiliation of many of the properties with well-recognized brands. Demand in this segment is anticipated to grow with the proposed hotels shown in the following chart.

Proposed Hotel Supply Napa Valley - Limited-Service Hotels						
Name	City	Type	Number of Rooms	Meeting Space (SF)	Status	Estimated Opening Date
Cambria Hotel	Napa	Limited-Service	98	2,012	Projects Approved/Construction Pending	January 1, 2020
Napa River Inn Expansion	Napa	Limited-Service	26	3,000	Projects Approved/Construction Pending	January 1, 2021
Trinitas Planned Development	Napa	Limited-Service	250	1,500	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Dwares Hotel Mixed Use Project	Napa	Limited-Service	108		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2022
First & Oxbow Pre-Application	Napa	Limited-Service	74		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2023
Silverado Trail Hotel	Napa	Limited-Service	98		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	Speculative
Napa Pipe Hotel	Napa	Limited-Service	150		Proposed - Speculative	Speculative

Source: Cushman & Wakefield

The forecast of occupancy was developed considering the new supply and the estimates of base and latent demand for this product type and location as shown in the following chart.

Projection of Base Room Night Demand and Annual Growth - Limited Service Hotels - Napa Valley								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Base Demand	379,025	382,816	386,644	390,510	394,415	398,359	402,343	406,366
Displaced Demand	-----	0	0	12,677	48,732	63,601	74,100	74,841
Induced Demand	-----	0	0	5,233	19,917	25,737	29,688	29,688
Total Segment Demand	379,025	382,816	386,644	408,420	463,064	487,697	506,131	510,895
<b>Meeting and Group</b>								
Annual Growth		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Base Demand	42,114	42,535	42,960	43,390	43,824	44,262	44,705	45,152
Displaced Demand	-----	0	0	1,408	8,071	8,152	8,234	8,316
Induced Demand	-----	0	0	0	0	0	0	0
Total Segment Demand	42,114	42,535	42,960	44,798	51,895	52,414	52,939	53,468
<b>Totals</b>								
Transient	379,025	382,816	386,644	408,420	463,064	487,697	506,131	510,895
Meeting and Group	42,114	42,535	42,960	44,798	51,895	52,414	52,939	53,468
Total Market Demand	421,139	425,351	429,604	453,218	514,959	540,111	559,070	564,363
% Change	----	1.0%	1.0%	5.5%	13.6%	4.9%	3.5%	0.9%
<b>Market Statistics</b>								
Total Rooms Supply	1,521	1,521	1,521	1,619	1,894	2,003	2,077	2,077
Total Available Room Nights	555,165	555,165	555,165	590,935	691,310	731,095	758,105	758,105
% Change	----	0.0%	0.0%	6.4%	17.0%	5.8%	3.7%	0.0%
Market-wide Occupancy	75.9%	76.6%	77.4%	76.7%	74.5%	73.9%	73.7%	74.4%

## Potential Demand

Using the methodology described earlier, the estimated potential demand for this segment is shown in the following chart.

Limited Service Hotels Estimate of Additional Capacity - Napa Valley											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1521	1,521	1,521	1,619	1,894	2,003	2,077	2,077	2,077	2,077	2,077
Estimated Available Annual Room Nights	555,165	555,165	555,165	590,935	691,310	731,095	758,105	758,105	758,105	758,105	758,105
Total Projected Potential Demand	421,139	425,351	429,604	453,218	514,959	540,111	559,070	564,363	569,710	575,110	580,564
Estimated Sustainable Annual Occupancy		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Estimated Sustainable Annual Demand		416,374	416,374	443,201	518,483	548,321	568,579	568,579	568,579	568,579	568,579
Total Projected Potential Demand		425,351	429,604	453,218	514,959	540,111	559,070	564,363	569,710	575,110	580,564
less Est. Sustainable Annual Demand		416,374	416,374	443,201	518,483	548,321	568,579	568,579	568,579	568,579	568,579
Unsatisfied Annual Demand		8,977	13,230	10,017	(3,524)	(8,210)	(9,509)	(4,216)	1,131	6,531	11,985
Cumulative Potential Supply Expansion		25	36	27	(10)	(22)	(26)	(12)	3	18	33

## Limited-service Hotels - Forecast of Average Rate

We have examined the rate structure and achieved average room rates and RevPARs of this product segment of the market, in forecasting marketwide average rate. The average rate data from the STR trend since 2010 shows a compound average annual growth rate of 3.5 percent which has slowed to 2.8 percent in the last three years. New hotels are expected to support a moderately higher average rate than the existing supply in this segment. Based on the foregoing, the projection of the subject's average daily rate is illustrated in the following table.

Limited Service Hotels - Napa Valley - Projected Base ADR Growth		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$192.33
2018	4.0%	\$200.03
2019	4.0%	\$208.03
2020	4.0%	\$216.35
2021	3.0%	\$222.84
2022	3.0%	\$229.53
2023	3.0%	\$236.41
2024	3.0%	\$243.50
2025	3.0%	\$250.81
2026	3.0%	\$258.33
2027	3.0%	\$266.08

The operating performance of the subject hotel is projected in terms of annual guestroom occupancy and average daily room rate. Based on the previously concluded occupancy and average room rate, the subject's room revenue is projected as illustrated below. The performance is forecast through a stabilized year, after which the stabilized occupancy is assumed for the remaining years and the average rate increases are inflationary.

**Limited Service Hotels - Napa Valley - Room Revenue Contribution from New Supply**

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	-	-	98	373	482	556	556	556	556	556
Occupancy	77%	77%	77%	74%	74%	74%	75%	75%	75%	75%
Occupied Rooms	-	-	27,434	101,415	129,972	149,660	152,205	152,205	152,205	152,205
Existing Rooms Average Rate	\$200.03	\$208.03	\$216.35	\$222.84	\$229.53	\$236.41	\$243.50	\$250.81	\$258.33	\$266.08
Additional Rooms Rate Penetration	105%	105%	105%	105%	105%	105%	105%	105%	105%	105%
Additional Rooms Rate	\$210.03	\$218.43	\$227.17	\$233.98	\$241.00	\$248.23	\$255.68	\$263.35	\$271.25	\$279.39
RevPAR	\$160.92	\$169.03	\$174.23	\$174.29	\$178.05	\$183.06	\$191.76	\$197.51	\$203.44	\$209.54
Rooms Revenue	\$0	\$0	\$6,232,090	\$23,729,331	\$31,323,559	\$37,150,385	\$38,915,712	\$40,083,184	\$41,285,679	\$42,524,249

**Limited Service Hotels - Napa Valley - Forecast of Room Revenue**

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	1,521	1,521	1,619	1,894	2,003	2,077	2,077	2,077	2,077	2,077
Occupancy	77%	77%	77%	74%	74%	74%	75%	75%	75%	75%
Occupied Rooms	425,351	429,604	453,218	514,959	540,111	559,070	568,579	568,579	568,579	568,579
Average Room Rate	\$200.03	\$208.03	\$217.01	\$225.04	\$232.29	\$239.58	\$246.76	\$254.17	\$261.79	\$269.64
RevPAR	\$153.26	\$160.98	\$166.43	\$167.63	\$171.61	\$176.68	\$185.07	\$190.62	\$196.34	\$202.23
Rooms Revenue	\$85,082,000	\$89,370,000	\$98,351,090	\$115,884,331	\$125,461,559	\$133,940,385	\$140,304,712	\$144,513,184	\$148,848,679	\$153,314,249

## City of Napa Limited-service Hotels – Forecasts of Rate and Occupancy

The methodology was used to forecast the performance of this segment for the properties located in the city of Napa. In developing this forecast, we have considered Transient Occupancy Tax data and the findings from our research. The new supply is anticipated to be able to garner higher rates than the existing supply elevating the rates for the market.

The charts showing forecasts for the city of Napa are set forth below.

Projection of Base Room Night Demand and Annual Growth - Limited Service Hotels - City of Napa								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Demand	182,161	185,805	189,521	193,311	197,177	201,121	205,143	209,246
Displaced Demand	----	0	0	13,057	50,690	66,813	78,612	80,184
Induced Demand	----	0	0	5,233	19,917	25,737	29,688	29,688
Total Segment Demand	182,161	185,805	189,521	211,601	267,784	293,671	313,443	319,118
<b>Meeting and Group</b>								
Annual Growth		1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Base Demand	20,240	20,443	20,647	20,853	21,062	21,273	21,486	21,701
Displaced Demand	----	0	0	1,408	8,071	8,152	8,234	8,316
Induced Demand	----	0	0	0	0	0	0	0
Total Segment Demand	20,240	20,443	20,647	22,261	29,133	29,425	29,720	30,017
<b>Totals</b>								
Transient	182,161	185,805	189,521	211,601	267,784	293,671	313,443	319,118
Meeting and Group	20,240	20,443	20,647	22,261	29,133	29,425	29,720	30,017
Total Market Demand	202,402	206,248	210,168	233,862	296,917	323,096	343,163	349,135
% Change	----	1.9%	1.9%	11.3%	27.0%	8.8%	6.2%	1.7%
<b>Market Statistics</b>								
Total Rooms Supply	731	731	731	829	1,104	1,213	1,287	1,287
Total Available Room Nights	266,815	266,815	266,815	302,585	402,960	442,745	469,755	469,755
% Change	----	0.0%	0.0%	13.4%	33.2%	9.9%	6.1%	0.0%
Market-wide Occupancy	75.9%	77.3%	78.8%	77.3%	73.7%	73.0%	73.1%	74.3%

Limited-Service Hotels City of Napa - Projected Base ADR Growth		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$192.33
2018	4.0%	\$200.03
2019	4.0%	\$208.03
2020	4.0%	\$216.35
2021	3.0%	\$222.84
2022	3.0%	\$229.53
2023	3.0%	\$236.41
2024	3.0%	\$243.50
2025	3.0%	\$250.81
2026	3.0%	\$258.33
2027	3.0%	\$266.08

In the following charts, we have applied a stabilized occupancy level of 75 percent. This occupancy could be higher as the new supply includes a number of branded properties; however in this market, overall occupancy levels in the mid- to high-70 percent range would likely encourage new projects from hotel developers.

Limited Service Estimate of Additional Capacity - City of Napa											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	731	731	731	829	1,104	1,213	1,287	1,287	1,287	1,287	1,287
Estimated Available Annual Room Nights	266,815	266,815	266,815	302,585	402,960	442,745	469,755	469,755	469,755	469,755	469,755
Total Projected Potential Demand	202,402	206,248	210,168	233,862	296,917	323,096	343,163	349,135	355,224	359,796	364,456
Estimated Sustainable Annual Occupancy		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%
Estimated Sustainable Annual Demand		200,111	200,111	226,939	302,220	332,059	352,316	352,316	352,316	352,316	352,316
Total Projected Potential Demand		206,248	210,168	233,862	296,917	323,096	343,163	349,135	355,224	359,796	364,456
less Est. Sustainable Annual Demand		200,111	200,111	226,939	302,220	332,059	352,316	352,316	352,316	352,316	352,316
Unsatisfied Annual Demand		6,137	10,057	6,924	(5,303)	(8,962)	(9,153)	(3,181)	2,908	7,480	12,140
Cumulative Potential Supply Expansion		17	28	19	(15)	(25)	(25)	(9)	8	20	33

Limited Service Hotels - City of Napa - Room Revenue Contribution from New Supply										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	-	-	98	373	482	556	556	556	556	556
Occupancy	77%	79%	77%	74%	73%	73%	75%	75%	75%	75%
Occupied Rooms	-	-	27,646	100,317	128,386	148,251	152,205	152,205	152,205	152,205
Existing Rooms Average Rate	\$200.03	\$208.03	\$216.35	\$222.84	\$229.53	\$236.41	\$243.50	\$250.81	\$258.33	\$266.08
Additional Rooms Rate Penetration	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Additional Rooms Rate	\$220.03	\$228.83	\$237.99	\$245.13	\$252.48	\$260.05	\$267.85	\$275.89	\$284.17	\$292.69
RevPAR	\$170.08	\$180.25	\$183.93	\$180.62	\$184.25	\$189.97	\$200.89	\$206.92	\$213.13	\$219.52
Rooms Revenue	\$0	\$0	\$6,579,343	\$24,590,266	\$32,414,796	\$38,553,066	\$40,768,841	\$41,991,907	\$43,251,664	\$44,549,214

Limited Service Hotels - City of Napa - Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	731	731	829	1,104	1,213	1,287	1,287	1,287	1,287	1,287
Occupancy	77%	79%	77%	74%	73%	73%	75%	75%	75%	75%
Occupied Rooms	206,248	210,168	233,862	296,917	323,096	343,163	352,316	352,316	352,316	352,316
Average Room Rate	\$200.03	\$208.03	\$218.91	\$230.37	\$238.65	\$246.53	\$254.02	\$261.65	\$269.49	\$277.58
RevPAR	\$154.62	\$163.86	\$169.19	\$169.75	\$174.15	\$180.09	\$190.52	\$196.23	\$202.12	\$208.18
Rooms Revenue	\$41,255,000	\$43,721,000	\$51,194,343	\$68,401,266	\$77,105,796	\$84,600,066	\$89,496,841	\$92,181,907	\$94,946,664	\$97,795,214

## Full-Service Hotels

### Full-service Occupancy Forecast

The full-service lodging segment has seen large increases over the past 13 years. With the strong post-recessionary economy, the new supply was steadily absorbed, supporting strong average rate growth. The full-service hotels were impacted in 2016 with renovations to some of the properties and in 2017 from the fires. The segment is expected to continue to show a strong performance in 2018 with the absorption of The Archer hotel and the continued expansion of retail and food and beverage offerings in downtown Napa. With the larger room counts per property, the segment has generated occupancy level in the low 70 percent range. We have used a stabilized occupancy level of 72 percent in the analysis. The following chart shows the STR trend data.

Market Supply, Demand, Occupancy, ADR and RevPAR - Full Service Hotels											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2003	1,013	369,641	-----	257,100	-----	69.6%	-----	\$163.11	-----	\$113.45	-----
2004	1,236	451,140	18.1%	287,945	10.7%	63.8%	-9.0%	\$161.33	-1.1%	\$102.97	-9.2%
2005	1,236	451,140	0.0%	306,615	6.1%	68.0%	6.1%	\$162.61	0.8%	\$110.52	7.3%
2006	1,336	487,712	7.5%	323,253	5.1%	66.3%	-2.5%	\$168.82	3.7%	\$111.89	1.2%
2007	1,523	555,895	12.3%	368,419	12.3%	66.3%	0.0%	\$173.07	2.5%	\$114.70	2.5%
2008	1,583	577,855	3.8%	362,824	-1.5%	62.8%	-5.6%	\$178.36	3.0%	\$111.99	-2.4%
2009	1,774	647,539	10.8%	357,128	-1.6%	55.2%	-13.8%	\$159.78	-11.6%	\$88.12	-21.3%
2010	1,844	673,060	3.8%	407,363	12.3%	60.5%	8.9%	\$163.96	2.6%	\$99.24	12.6%
2011	1,844	673,060	0.0%	437,392	6.9%	65.0%	6.9%	\$179.36	8.6%	\$116.56	17.5%
2012	1,955	713,485	5.7%	474,594	7.8%	66.5%	2.3%	\$192.78	7.0%	\$128.23	10.0%
2013	1,987	725,258	1.6%	497,301	4.6%	68.6%	3.0%	\$210.11	8.2%	\$144.07	12.4%
2014	1,950	711,699	-1.9%	487,955	-1.9%	68.6%	0.0%	\$221.70	5.2%	\$152.00	5.5%
2015	1,976	721,240	1.3%	522,744	6.7%	72.5%	5.4%	\$240.75	7.9%	\$174.49	14.8%
2016	1,976	721,240	0.0%	517,422	-1.0%	71.7%	-1.0%	\$254.91	5.6%	\$182.87	4.8%
2017	2,009	733,139	1.6%	518,362	0.2%	70.7%	-1.5%	\$254.42	-0.2%	\$179.88	-1.6%
Avg Annual Percent Change			0.5%		1.4%		0.9%		2.6%		#NUM!
Average 2010 to 2017	1,943	709,023		482,892		68.1%			5.7%		
Average 2015 to 2017	1,987	725,206		519,509		71.6%			2.8%		

Source: STR

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From 2010 to 2017 occupancy levels increased steadily. The full-service hotel occupancy has been relatively stable in recent years as seasonal patterns of demand constrain some growth. Rate growth has been very strong since 2010, moderating in 2017. Full-service hotels have the greatest complement of meeting space and many are branded. Demand in this segment is anticipated to grow with the proposed hotels shown in the following chart.

Proposed Hotel Supply Napa Valley - Full Service Hotels						
Name	City	Type	Number of Rooms	Meeting Space (SF)	Status	Estimated Opening Date
Meritage Expansion	Napa	Full Service	145	10,000	Projects Under Construction	August 1, 2018
Archer Hotel	Napa	Full Service	137		Remaining Rooms	January 1, 2018
Westin Expansion	Napa	Full Service	32		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2020
Embassy Suites Addition	Napa	Full Service	54	4,045	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Franklin Station Post Office	Napa	Full Service	180	N/A	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
NV Wine Train Hotel	Napa	Full Service	148		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2021
Plenary Hotel Project	Napa	Full Service	275	10,000	In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	January 1, 2022
Widewaters Hotel	Napa	Full Service	140		In Completeness Review Phase, Pre-Application Phase, or Conceptual Design State	Speculative
Adams Street RFP	St. Helena	Full Service	N/A		Proposed - Speculative	Speculative
Downtown Main Street RFP	St. Helena	Full Service	N/A		Proposed - Speculative	Speculative
Watson Ranch Hotel	American Canyon	Full Service	200		Seeking Entitlements - Speculative	Speculative

Source: Cushman & Wakefield

The forecast of occupancy was developed considering the new supply and the estimates of base and latent demand for this product type and location as shown in the following chart.

Projection of Base Room Night Demand and Annual Growth - Full Service Hotels								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	393,662	405,472	417,636	430,165	443,070	456,362	470,053	484,155
Displaced Demand	----	14,989	24,139	27,674	62,982	90,503	93,314	96,113
Induced Demand	----	7,662	11,979	13,334	29,461	41,102	41,144	41,144
Total Segment Demand	393,662	428,123	453,754	471,173	535,513	587,967	604,511	621,412
<b>Meeting and Group</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	98,415	101,368	104,409	107,541	110,767	114,090	117,513	121,038
Displaced Demand	----	3,747	6,035	6,919	21,989	22,649	23,328	24,028
Induced Demand	----	2,694	4,213	4,689	10,361	14,454	14,469	14,469
Total Segment Demand	98,415	107,809	114,657	119,149	143,117	151,193	155,310	159,535
<b>Totals</b>								
Transient	393,662	428,123	453,754	471,173	535,513	587,967	604,511	621,412
Meeting and Group	98,415	107,809	114,657	119,149	143,117	151,193	155,310	159,535
Total Market Demand	492,077	535,932	568,411	590,322	678,630	739,160	759,821	780,947
% Change	----	8.9%	6.1%	3.9%	15.0%	8.9%	2.8%	2.8%
<b>Market Statistics</b>								
Total Rooms Supply	1,907	2,088	2,190	2,222	2,603	2,878	2,879	2,879
Total Available Room Nights	695,964	762,029	799,259	810,939	950,004	1,050,379	1,050,744	1,050,744
% Change	----	9.5%	4.9%	1.5%	17.1%	10.6%	0.0%	0.0%
Market-wide Occupancy	70.7%	70.3%	71.1%	72.8%	71.4%	70.4%	72.3%	74.3%

## Potential Demand

Using the methodology described earlier, the estimated potential demand for this segment is shown in the following chart.

Full Service Hotels Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1907	2,088	2,190	2,222	2,603	2,878	2,879	2,879	2,879	2,879	2,879
Estimated Available Annual Room Nights	695,964	762,029	799,259	810,939	950,004	1,050,379	1,050,744	1,050,744	1,050,744	1,050,744	1,050,744
Total Projected Potential Demand	492,077	535,932	568,411	590,322	678,630	739,160	759,821	780,947	802,707	825,119	848,204
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		545,887	572,558	580,925	680,545	752,450	752,712	752,712	752,712	752,712	752,712
Total Projected Potential Demand		535,932	568,411	590,322	678,630	739,160	759,821	780,947	802,707	825,119	848,204
less Est. Sustainable Annual Demand		545,887	572,558	580,925	680,545	752,450	752,712	752,712	752,712	752,712	752,712
Unsatisfied Annual Demand		(9,955)	(4,147)	9,397	(1,916)	(13,290)	7,109	28,235	49,995	72,407	95,492
<b>Cumulative Potential Supply Expansion</b>		<b>(27)</b>	<b>(11)</b>	<b>26</b>	<b>(5)</b>	<b>(36)</b>	<b>19</b>	<b>77</b>	<b>137</b>	<b>198</b>	<b>262</b>

## Full-service Hotels - Forecast of Average Rate

We have examined the rate structure and achieved average room rates and RevPARs of this product segment of the market, in forecasting marketwide average rate. The average rate data from the STR trend since 2010 shows a compound average annual growth rate of 5.7 percent which has slowed to 2.8 percent in the last three years. New hotels are expected to support a moderately higher average rate than the existing supply in this segment. Based on the foregoing, the projection of the subject's average daily rate is illustrated in the following table.

Full Service Hotels - Napa County - Projected ADR - Fiscal Year		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$254.42
2018	3.0%	\$262.05
2019	4.0%	\$272.53
2020	5.0%	\$286.16
2021	3.0%	\$294.74
2022	3.0%	\$303.58
2023	3.0%	\$312.69
2024	3.0%	\$322.07
2025	3.0%	\$331.73
2026	3.0%	\$341.69
2027	3.0%	\$351.94

The operating performance of the subject hotel is projected in terms of annual guestroom occupancy and average daily room rate. Based on the previously concluded occupancy and average room rate, the subject's room revenue is projected as illustrated below. The performance is forecast through a stabilized year, after which the stabilized occupancy is assumed for the remaining years and the average rate increases are inflationary.

**Full Service Hotels - Napa Valley - Room Revenue Contribution from New Supply**

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	181	283	315	696	971	972	972	972	972	972
Occupancy	70%	71%	73%	71%	70%	72%	72%	72%	72%	72%
Occupied Rooms	46,463	73,461	83,696	181,472	249,405	256,551	254,150	254,150	254,150	254,150
Existing Rooms Average Rate	\$262.05	\$272.53	\$286.16	\$294.74	\$303.58	\$312.69	\$322.07	\$331.73	\$341.69	\$351.94
Additional Rooms Rate Penetration	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Additional Rooms Rate	\$288.25	\$299.78	\$314.77	\$324.22	\$333.94	\$343.96	\$354.28	\$364.91	\$375.86	\$387.13
RevPAR	\$202.73	\$213.20	\$229.14	\$231.60	\$235.00	\$248.73	\$253.79	\$261.41	\$269.25	\$277.33
Rooms Revenue	\$13,393,215	\$22,022,284	\$26,345,226	\$58,836,171	\$83,286,877	\$88,243,537	\$90,040,401	\$92,741,613	\$95,523,861	\$98,389,577

**Full Service Hotels - Napa Valley -Forecast of Room Revenue**

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	2,088	2,190	2,222	2,603	2,878	2,879	2,879	2,879	2,879	2,879
Occupancy	70%	71%	73%	71%	70%	72%	72%	72%	72%	72%
Occupied Rooms	535,932	568,411	590,322	678,630	739,160	759,821	752,712	752,712	752,712	752,712
Average Room Rate	\$264.32	\$276.05	\$290.21	\$302.62	\$313.83	\$323.25	\$332.95	\$342.94	\$353.22	\$363.82
RevPAR	\$185.90	\$196.32	\$211.26	\$216.18	\$220.84	\$233.75	\$238.51	\$245.67	\$253.04	\$260.63
Rooms Revenue	\$141,658,215	\$156,911,284	\$171,320,226	\$205,369,171	\$231,968,877	\$245,611,537	\$250,613,401	\$258,131,613	\$265,875,861	\$273,851,577

## City of Napa Full-service Hotels – Forecasts of Rate and Occupancy

The methodology was used to forecast the performance of this segment for the properties located in the city of Napa. In developing this forecast, we have considered TOT data for the city and the findings from our research. The new supply is anticipated to be able to garner higher rates than the existing supply elevating the rates for the market. We have used 72 percent as the stabilized occupancy, consistent with the occupancy used for the county analysis as most of the supply is located in the City of Napa.

The charts showing forecasts for the City of Napa are set forth below.

Projection of Base Room Night Demand and Annual Growth - Full Service Hotels - City of Napa								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	296,214	305,101	314,254	323,682	333,392	343,394	353,696	364,307
Displaced Demand	----	14,989	24,139	27,674	62,982	90,503	93,314	96,113
Induced Demand	----	7,662	11,979	13,334	29,461	41,102	41,144	41,144
Total Segment Demand	296,214	327,752	350,372	364,690	425,835	474,999	488,154	501,564
<b>Meeting and Group</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	74,054	76,275	78,563	80,920	83,348	85,848	88,423	91,076
Displaced Demand	----	3,747	6,035	6,919	21,989	22,649	23,328	24,028
Induced Demand	----	2,694	4,213	4,689	10,361	14,454	14,469	14,469
Total Segment Demand	74,054	82,716	88,811	92,528	115,698	122,951	126,220	129,573
<b>Totals</b>								
Transient	296,214	327,752	350,372	364,690	425,835	474,999	488,154	501,564
Meeting and Group	74,054	82,716	88,811	92,528	115,698	122,951	126,220	129,573
Total Market Demand	370,268	410,468	439,183	457,218	541,533	597,950	614,374	631,137
% Change	----	10.9%	7.0%	4.1%	18.4%	10.4%	2.7%	2.7%
<b>Market Statistics</b>								
Total Rooms Supply	1,435	1,616	1,718	1,750	2,131	2,406	2,407	2,407
Total Available Room Nights	523,684	589,749	626,979	638,659	777,724	878,099	878,464	878,464
% Change	----	12.6%	6.3%	1.9%	21.8%	12.9%	0.0%	0.0%
Market-wide Occupancy	70.7%	69.6%	70.0%	71.6%	69.6%	68.1%	69.9%	71.8%

Full Service Hotels - City of Napa - Projected ADR - Fiscal Year		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$254.42
2018	3.0%	\$262.05
2019	4.0%	\$272.53
2020	5.0%	\$286.16
2021	3.0%	\$294.74
2022	3.0%	\$303.58
2023	3.0%	\$312.69
2024	3.0%	\$322.07
2025	3.0%	\$331.73
2026	3.0%	\$341.69
2027	3.0%	\$351.94

### Full Service Estimate of Additional Capacity - City of Napa

	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	1435	1,616	1,718	1,750	2,131	2,406	2,407	2,407	2,407	2,407	2,407
Estimated Available Annual Room Nights	523,684	589,749	626,979	638,659	777,724	878,099	878,464	878,464	878,464	878,464	878,464
Total Projected Potential Demand	370,268	410,468	439,183	457,218	541,533	597,950	614,374	631,137	648,402	666,185	684,503
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		424,619	451,425	459,834	559,961	632,231	632,494	632,494	632,494	632,494	632,494
Total Projected Potential Demand		410,468	439,183	457,218	541,533	597,950	614,374	631,137	648,402	666,185	684,503
less Est. Sustainable Annual Demand		424,619	451,425	459,834	559,961	632,231	632,494	632,494	632,494	632,494	632,494
Unsatisfied Annual Demand		(14,151)	(12,242)	(2,616)	(18,429)	(34,281)	(18,120)	(1,357)	15,908	33,691	52,009
<b>Cumulative Potential Supply Expansion</b>		<b>(39)</b>	<b>(34)</b>	<b>(7)</b>	<b>(50)</b>	<b>(94)</b>	<b>(50)</b>	<b>(4)</b>	<b>44</b>	<b>92</b>	<b>142</b>

### Full Service - City of Napa - Room Revenue Contribution from New Supply

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	181	283	315	696	971	972	972	972	972	972
Occupancy	70%	70%	72%	70%	68%	70%	72%	72%	72%	72%
Occupied Rooms	45,982	72,356	82,311	176,889	241,342	248,124	255,442	255,442	255,442	255,442
Existing Rooms Average Rate	\$262.05	\$272.53	\$286.16	\$294.74	\$303.58	\$312.69	\$322.07	\$331.73	\$341.69	\$351.94
Additional Rooms Rate Penetration	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Additional Rooms Rate	\$288.25	\$299.78	\$314.77	\$324.22	\$333.94	\$343.96	\$354.28	\$364.91	\$375.86	\$387.13
RevPAR	\$200.63	\$209.99	\$225.35	\$225.75	\$227.40	\$240.56	\$255.08	\$262.73	\$270.62	\$278.73
Rooms Revenue	\$13,254,362	\$21,691,016	\$25,909,287	\$57,350,362	\$80,594,523	\$85,344,868	\$90,497,827	\$93,212,762	\$96,009,144	\$98,889,419

### Full Service - City of Napa -Forecast of Room Revenue

Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	1,616	1,718	1,750	2,131	2,406	2,407	2,407	2,407	2,407	2,407
Occupancy	70%	70%	72%	70%	68%	70%	72%	72%	72%	72%
Occupied Rooms	410,468	439,183	457,218	541,533	597,950	614,374	632,494	632,494	632,494	632,494
Average Room Rate	\$264.98	\$277.02	\$291.31	\$304.37	\$315.84	\$325.32	\$335.08	\$345.13	\$355.49	\$366.15
RevPAR	\$184.43	\$194.05	\$208.55	\$211.93	\$215.07	\$227.52	\$241.26	\$248.49	\$255.95	\$263.63
Rooms Revenue	\$108,767,362	\$121,663,016	\$133,191,287	\$164,826,362	\$188,854,523	\$199,868,868	\$211,935,827	\$218,293,762	\$224,843,144	\$231,588,419

## Luxury Hotels & Resort Occupancy Forecast

The luxury hotels & resort segment has seen notable additions to supply in the last 11 years. With the exception of the recessionary years, demand for this segment has been strong, supporting steady average rate growth. This segment represents a wide variety of lodging properties with rates that can exceed \$2,000 on peak nights. New supply is planned for the segment throughout the valley. Below is the data from the STR trend.

Market Supply, Demand, Occupancy, ADR and RevPAR - Luxury Hotels and Resorts Napa Valley											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2008	752	274,360	-----	180,183	-----	65.7%	-----	\$356.32	-----	\$234.01	-----
2009	809	295,188	7.1%	166,626	-8.1%	56.4%	-16.3%	\$377.30	5.6%	\$212.97	-9.0%
2010	830	302,950	2.6%	183,603	9.2%	60.6%	6.9%	\$440.59	14.4%	\$267.02	25.4%
2011	857	312,636	3.1%	205,094	10.5%	65.6%	7.6%	\$461.97	4.6%	\$303.06	13.5%
2012	859	313,535	0.3%	215,461	4.8%	68.7%	4.5%	\$490.30	5.8%	\$336.93	11.2%
2013	857	312,731	-0.3%	225,536	4.5%	72.1%	4.7%	\$523.52	6.3%	\$377.55	12.1%
2014	866	316,253	1.1%	219,601	-2.7%	69.4%	-3.9%	\$561.39	6.7%	\$389.82	3.3%
2015	955	348,703	9.3%	242,710	9.5%	69.6%	0.2%	\$575.66	2.5%	\$400.68	2.8%
2016	955	348,636	0.0%	257,507	5.7%	73.9%	5.8%	\$598.30	3.8%	\$441.91	10.3%
2017	1,013	369,748	5.7%	249,681	-3.1%	67.5%	-9.4%	\$603.82	0.9%	\$407.74	-7.7%
Avg Annual Percent Change			1.2%		1.8%		0.6%		1.9%		3.3%
Average 2010 to 2017	899	328,149		224,899		68.5%			4.6%		
Average 2015 to 2017	975	355,696		249,966		70.3%			2.4%		

Source: STR

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From 2010 to 2017 occupancy levels for this segment increased steadily. The Luxury Hotel & Resort occupancy has fluctuated in recent years with economic influences and the absorption of new supply. Rate growth has been strong since 2010, moderating in 2017. The annual occupancy levels of this segment are lower than the Full-service hotels due to higher rates and seasonal trends. Demand in this segment is anticipated to grow substantially with the increases in supply. The proposed Luxury lodging is mostly branded and is expected to bring new demand to the market. The proposed hotels are shown in the following chart.

Proposed Hotel Supply Napa Valley						
Name	City	Type	Number of Rooms	Meeting Space (SF)	Status	Estimated Opening Date
Los Alcobas	St. Helena	Luxury	11		Remaining Rooms	January 1, 2018
Villagio Expansion	Yountville	Luxury	1	4,000	Projects Under Construction	June 1, 2018
Bardessono Expansion	Yountville	Luxury	3		Projects Under Construction	June 1, 2018
Farmstead at Long Meadow Ranch	St. Helena	Luxury	50		Proposed - Speculative	Speculative
Four Seasons Calistoga	Calistoga	Luxury	83	7,540	Projects Under Construction	June 1, 2019
Rosewood Calistoga Hills	Calistoga	Luxury	110	4,464	Projects Under Construction	January 1, 2020
Ritz-Carlton Napa Valley	Napa	Luxury	351	21,100	Projects Approved/Construction Pending	January 1, 2022
Stanly Ranch	Napa	Luxury	132	15,500	Projects Approved/Construction Pending	January 1, 2022
Montalino Resort	Unincorporated	Luxury	379	34,000	Projects Approved/Construction Pending	Speculative
Hotel Condo Project	Napa	Luxury	84 to 124		Proposed - Speculative	Speculative
The Veranda	Calistoga	Luxury	170		Seeking Entitlements	Speculative
French Laundry Inn	Yountville	Luxury	12		Proposed - Speculative	Speculative

Source: Cushman & Wakefield

A number of the properties in this chart have been proposed for many years and some are still considered speculative. We have considered projects in Napa and in Calistoga in the models. As the city of Napa inventory did not include any luxury properties in the existing supply, this market is only considered with the county geography.

The forecast of occupancy was developed considering the new supply and the estimates of base and latent demand for this product type and location as shown in the following chart.

Projection of Base Room Night Demand and Annual Growth - Luxury Hotels and Resorts Napa Valley								
Segment	Historical	2018	2019	2020	2021	2022	2023	2024
<b>Transient</b>								
Annual Growth		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Base Demand	203,568	209,675	215,965	222,444	229,117	235,991	243,071	250,363
Displaced Demand	-----	1,391	6,284	23,731	24,443	83,240	85,861	88,437
Induced Demand	-----	577	2,528	9,269	9,269	30,646	30,690	30,690
Total Segment Demand	203,568	211,643	224,777	255,444	262,829	349,877	359,622	369,490
<b>Meeting and Group</b>								
Annual Growth		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Base Demand	35,924	36,642	37,375	38,123	38,885	39,663	40,456	41,265
Displaced Demand	-----	243	1,088	4,067	13,736	14,011	14,291	14,577
Induced Demand	-----	153	669	2,454	2,454	8,112	8,124	8,124
Total Segment Demand	35,924	37,038	39,132	44,644	55,075	61,786	62,871	63,966
<b>Totals</b>								
Transient	203,568	211,643	224,777	255,444	262,829	349,877	359,622	369,490
Meeting and Group	35,924	37,038	39,132	44,644	55,075	61,786	62,871	63,966
Total Market Demand	239,491	248,682	263,908	300,089	317,904	411,663	422,493	433,456
% Change	----	3.8%	6.1%	13.7%	5.9%	29.5%	2.6%	2.6%
<b>Market Statistics</b>								
Total Rooms Supply	972	985	1,029	1,181	1,181	1,663	1,664	1,664
Total Available Room Nights	354,658	359,403	375,463	430,943	430,943	606,873	607,238	607,238
% Change	----	1.3%	4.5%	14.8%	0.0%	40.8%	0.1%	0.0%
Market-wide Occupancy	67.5%	69.2%	70.3%	69.6%	73.8%	67.8%	69.6%	71.4%

## Potential Demand

Using the methodology described earlier, the estimated potential demand for this segment is shown in the following chart.

Luxury Hotels and Resorts - Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	972	985	1,029	1,181	1,181	1,663	1,664	1,664	1,664	1,664	1,664
Estimated Available Annual Room Nights	354,658	359,403	375,463	430,943	430,943	606,873	607,238	607,238	607,238	607,238	607,238
Total Projected Potential Demand	239,491	248,682	263,908	300,089	317,904	411,663	422,493	433,456	444,737	456,345	468,290
Estimated Sustainable Annual Occupancy		70%	70%	70%	70%	70%	70%	70%	70%	70%	70%
Estimated Sustainable Annual Demand		251,582	262,824	301,660	301,660	424,811	425,067	425,067	425,067	425,067	425,067
Total Projected Potential Demand		248,682	263,908	300,089	317,904	411,663	422,493	433,456	444,737	456,345	468,290
less Est. Sustainable Annual Demand		251,582	262,824	301,660	301,660	424,811	425,067	425,067	425,067	425,067	425,067
Unsatisfied Annual Demand		(2,901)	1,084	(1,572)	16,244	(13,149)	(2,574)	8,389	19,670	31,278	43,223
<b>Cumulative Potential Supply Expansion</b>		<b>(8)</b>	<b>3</b>	<b>(4)</b>	<b>45</b>	<b>(36)</b>	<b>(7)</b>	<b>23</b>	<b>54</b>	<b>86</b>	<b>118</b>

## Luxury Hotels and Resorts- Forecast of Average Rate

We have examined the rate structure and achieved average room rates and RevPARs of this product segment of the market, in forecasting marketwide average rate. The average rate data from the STR trend since 2010 shows a compound average annual growth rate of 4.6 percent which has slowed to 2.4 percent in the last three years. New hotels are expected to support a moderately higher average rate than the existing supply in this segment. Based on the foregoing, the projection of the subject's average daily rate is illustrated in the following table.

Luxury Hotels & Resorts - Projected Base ADR - Fiscal Year		
Year	Projected ADR Growth	Projected ADR
Positioned ADR	---	\$603.82
2018	4.0%	\$627.97
2019	4.0%	\$653.09
2020	3.0%	\$672.68
2021	3.0%	\$692.86
2022	3.0%	\$713.65
2023	3.0%	\$735.06
2024	3.0%	\$757.11
2025	3.0%	\$779.82
2026	3.0%	\$803.21
2027	3.0%	\$827.31

The operating performance of the subject hotel is projected in terms of annual guestroom occupancy and average daily room rate. Based on the previously concluded occupancy and average room rate, the subject's room revenue is projected as illustrated below. The performance is forecast through a stabilized year, after which the stabilized occupancy is assumed for the remaining years and the average rate increases are inflationary.

Luxury Hotels and Resorts - Napa Valley - Room Revenue Contribution from New Supply										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	13	57	209	209	691	692	692	692	692	692
Occupancy	69%	70%	70%	74%	68%	70%	70%	70%	70%	70%
Occupied Rooms	3,283	14,624	53,121	56,275	171,086	176,806	176,806	176,806	176,806	176,806
Existing Rooms Average Rate	\$627.97	\$653.09	\$672.68	\$692.86	\$713.65	\$735.06	\$757.11	\$779.82	\$803.21	\$827.31
Additional Rooms Rate Penetration	150%	150%	150%	135%	135%	135%	135%	135%	135%	135%
Additional Rooms Rate	\$941.95	\$979.63	\$1,009.02	\$935.36	\$963.42	\$992.32	\$1,022.09	\$1,052.76	\$1,084.34	\$1,116.87
RevPAR	\$651.76	\$688.57	\$702.63	\$690.01	\$653.52	\$694.63	\$715.47	\$736.93	\$759.04	\$781.81
Rooms Revenue	\$3,092,622	\$14,325,689	\$53,600,453	\$52,637,449	\$164,827,940	\$175,448,981	\$180,712,450	\$186,133,824	\$191,717,839	\$197,469,374

Luxury Hotels and Resorts - Napa Valley -Forecast of Room Revenue										
Projection Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Number of Days	365	365	365	365	365	365	365	365	365	365
Number of Rooms	985	1,029	1,181	1,181	1,663	1,664	1,664	1,664	1,664	1,664
Occupancy	69%	70%	70%	74%	68%	70%	70%	70%	70%	70%
Occupied Rooms	248,682	263,908	300,089	317,904	411,663	425,067	425,067	425,067	425,067	425,067
Average Room Rate	\$632.11	\$671.18	\$732.22	\$735.79	\$817.45	\$854.33	\$879.96	\$906.36	\$933.55	\$961.56
RevPAR	\$437.38	\$471.77	\$509.88	\$542.79	\$554.51	\$598.03	\$615.97	\$634.45	\$653.49	\$673.09
Rooms Revenue	\$157,194,622	\$177,130,689	\$219,730,453	\$233,910,449	\$336,514,940	\$363,147,981	\$374,042,450	\$385,263,824	\$396,821,839	\$408,726,374

## Combined County Analysis

The data and projections for the four product types were combined to represent the county-wide historical and estimated hotel industry performance. Using the same methodology discussed early, the following charts set forth the findings.

Market Supply, Demand, Occupancy, ADR and RevPAR - Napa Valley											
Year	Rooms	Supply	% Change	Demand	% Change	Occ	% Change	ADR	% Change	RevPAR	% Change
2010	3,698	1,349,770	-----	818,972	-----	60.7%	-----	\$226.48	-----	\$137.42	-----
2011	3,724	1,359,334	0.7%	881,194	7.6%	64.8%	6.8%	\$241.84	6.8%	\$156.77	14.1%
2012	3,838	1,400,721	3.0%	937,641	6.4%	66.9%	3.3%	\$255.04	5.5%	\$170.73	8.9%
2013	3,867	1,411,384	0.8%	986,038	5.2%	69.9%	4.4%	\$274.71	7.7%	\$191.92	12.4%
2014	3,841	1,401,926	-0.7%	983,556	-0.3%	70.2%	0.4%	\$289.31	5.3%	\$202.97	5.8%
2015	3,956	1,444,068	3.0%	1,048,894	6.6%	72.6%	3.5%	\$307.63	6.3%	\$223.45	10.1%
2016	4,053	1,479,191	2.4%	1,075,211	2.5%	72.7%	0.1%	\$324.61	5.5%	\$235.95	5.6%
2017	4,162	1,518,987	2.7%	1,079,637	0.4%	71.1%	-2.2%	\$322.88	-0.5%	\$229.49	-2.7%
Avg Annual Percent Change			1.7%		4.0%		2.3%		5.2%		7.6%
Average 2010 to 2017	3,892	1,420,673		976,393		68.7%					
Average 2015 to 2017	4,057	1,480,749		1,067,914		72.1%					

Source: STR

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Projection of Base Room Night Demand and Annual Growth - County of Napa									
Segment	Historical	2018	2019	2020	2021	2022	2023	2024	
<b>Transient</b>									
Annual Growth		1.8%	1.7%	5.8%	12.2%	9.1%	8.6%	2.5%	
Base Demand	1,192,996	1,192,264	1,197,344	1,228,763	1,261,111	1,294,416	1,328,710	1,364,023	
Displaced Demand	-----	14,741	25,561	54,849	145,886	218,436	295,811	304,642	
Induced Demand	-----	7,492	11,920	22,396	58,042	85,958	111,537	111,582	
Total Segment Demand	1,192,996	1,214,497	1,234,825	1,306,008	1,465,039	1,598,810	1,736,058	1,780,247	
<b>Meeting and Group</b>									
Annual Growth		4.8%	3.7%	4.4%	18.8%	8.7%	3.8%	1.6%	
Base Demand	184,094	186,630	189,969	193,371	196,837	200,369	203,967	207,633	
Displaced Demand	-----	3,649	5,855	9,723	38,426	48,701	49,594	50,503	
Induced Demand	-----	2,671	4,172	5,684	12,706	20,585	26,314	26,325	
Total Segment Demand	184,094	192,950	199,996	208,778	247,969	269,655	279,875	284,461	
<b>Totals</b>									
Transient	1,192,996	1,214,497	1,234,825	1,306,008	1,465,039	1,598,810	1,736,058	1,780,247	
Meeting and Group	184,094	192,950	199,996	208,778	247,969	269,655	279,875	284,461	
Total Market Demand	1,377,091	1,407,446	1,434,822	1,514,786	1,713,008	1,868,465	2,015,933	2,064,708	
% Change	----	2.2%	1.9%	5.6%	13.1%	9.1%	7.9%	2.4%	
<b>Market Statistics</b>									
Total Rooms Supply	5,115	5,321	5,515	5,792	6,483	7,599	7,675	7,675	
Total Available Room Nights	1,866,975	1,941,983	2,012,975	2,114,080	2,366,295	2,773,635	2,801,375	2,801,375	
% Change	----	4.0%	3.7%	5.0%	11.9%	17.2%	1.0%	0.0%	
Market-wide Occupancy	71.7%	71.8%	72.4%	72.6%	72.3%	70.5%	71.7%	73.2%	

Napa Valley Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	5074.417	5,277	5,444	5,762	6,453	7,319	7,395	7,395	7,395	7,395	7,395
Estimated Available Annual Room Nights	1,852,162	1,926,257	1,987,212	2,103,282	2,355,497	2,671,587	2,699,327	2,699,327	2,699,327	2,699,327	2,699,327
Total Projected Potential Demand	1,327,822	1,382,957	1,439,520	1,527,776	1,702,043	1,883,390	1,935,765	1,975,091	2,015,442	2,056,845	2,099,332
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		1,386,905	1,430,793	1,514,363	1,695,958	1,923,543	1,943,516	1,943,516	1,943,516	1,943,516	1,943,516
Total Projected Potential Demand		1,382,957	1,439,520	1,527,776	1,702,043	1,883,390	1,935,765	1,975,091	2,015,442	2,056,845	2,099,332
less Est. Sustainable Annual Demand		1,386,905	1,430,793	1,514,363	1,695,958	1,923,543	1,943,516	1,943,516	1,943,516	1,943,516	1,943,516
Unsatisfied Annual Demand		(3,948)	8,727	13,413	6,086	(40,153)	(7,751)	31,576	71,927	113,330	155,817
<b>Cumulative Potential Supply Expansion</b>		<b>(11)</b>	<b>24</b>	<b>37</b>	<b>17</b>	<b>(110)</b>	<b>(21)</b>	<b>87</b>	<b>197</b>	<b>310</b>	<b>427</b>

Projected Rooms Revenue - Napa Valley Lodging - Napa Valley CA						
Projection Year	2018	2019	2020	2021	2022	2023
Number of Days	365	365	365	365	365	365
Number of Rooms	5,505	5,630	5,792	6,483	7,599	7,675
Occupancy	69%	70%	72%	72%	68%	69%
Occupied Rooms	1,382,957	1,439,520	1,527,776	1,702,043	1,883,390	1,937,057
Average Rate	\$321.59	\$339.24	\$366.16	\$370.02	\$409.67	\$424.83
RevPAR	\$221.36	\$237.64	\$264.61	\$266.15	\$278.18	\$293.76
Rooms Revenue	\$444,746,080	\$488,338,861	\$559,416,537	\$629,786,279	\$771,574,812	\$822,926,063

## Revenue and Expense Analysis

Based on the market for transient accommodations in the subject's area, we have forecast future rooms revenue for the four property types, which was detailed in a previous section of this report. Composite of actual operating statements from comparable properties in the area were used to estimate base levels of revenues and expenses.

The following charts show the composite statements followed by the representative revenue and expense statements for each property type.

## Representative Revenue and Expense Performance by Lodging Category

Representative Year - Revenues and Expenses - Napa Valley Hotels												
	<i>B&amp;B/Small Inns</i>			<i>Limited Service</i>			<i>Full Service</i>			<i>Luxury</i>		
	Ratio to Sales	PAR	POR	Ratio to Sales	PAR	POR	Ratio to Sales	PAR	POR	Ratio to Sales	PAR	POR
Occupancy	69%			76%			71%			68%		
Average Size (Rooms)		675			1,521			1,907			972	
Average Rate			\$338			\$192			\$254			\$604
REVENUE												
Rooms	98.0%	\$85,235	\$338.00	98.3%	\$53,254	\$192.33	75.9%	\$65,658	\$254.42	66.9%	\$148,825	\$603.82
Food & Beverage	0.0%	\$0	\$0.00	0.0%	\$0	\$0.00	16.7%	\$14,445	\$55.97	26.8%	\$59,530	\$241.53
Minor Operated Departments	2.0%	\$1,705	\$6.76	1.7%	\$929	\$3.35	4.0%	\$3,447	\$13.36	5.4%	\$11,906	\$48.31
Other Income	0.0%	\$0	\$0.00	0.0%	\$0	\$0.00	3.4%	\$2,955	\$11.45	1.0%	\$2,232	\$9.06
TOTAL REVENUE	100.0%	\$86,939	\$344.76	100.0%	\$54,183	\$195.69	100.0%	\$86,504	\$335.19	100.1%	\$222,494	\$902.70
DEPARTMENTAL EXPENSES												
Rooms	26.0%	\$22,161	\$87.88	20.0%	\$10,651	\$38.47	22.0%	\$14,445	\$55.97	24.0%	\$35,718	\$144.92
Food & Beverage	0.0%	\$0	\$0.00	0.0%	\$0	\$0.00	65.0%	\$9,389	\$36.38	90.0%	\$53,577	\$217.37
Minor Operated Departments	50.0%	\$852	\$3.38	25.0%	\$232	\$0.84	95.0%	\$3,275	\$12.69	75.0%	\$8,930	\$36.23
TOTAL DEPARTMENTAL EXPENSES	26.5%	\$23,013	\$91.26	20.1%	\$10,883	\$39.31	31.3%	\$27,108	\$105.04	44.1%	\$98,225	\$398.52
DEPARTMENTAL INCOME	73.5%	\$63,926	\$253.50	79.9%	\$43,300	\$156.38	68.7%	\$59,395	\$230.15	55.9%	\$124,269	\$504.19
UNDISTRIBUTED OPERATING EXPENSES												
Administrative & General	9.0%	\$7,825	\$31.03	8.5%	\$4,606	\$16.63	7.0%	\$6,055	\$23.46	9.5%	\$21,137	\$85.76
Marketing	2.0%	\$1,739	\$6.90	7.0%	\$3,793	\$13.70	5.5%	\$4,758	\$18.44	3.5%	\$7,787	\$31.59
Franchise Fees	0.0%	\$0	\$0.00	5.4%	\$2,929	\$10.58	4.2%	\$3,611	\$13.99	0.0%	\$0	\$0.00
Utility Costs	4.0%	\$3,478	\$13.79	3.0%	\$1,625	\$5.87	2.0%	\$1,730	\$6.70	2.5%	\$5,562	\$22.57
Property Operations & Maintenance	3.5%	\$3,043	\$12.07	3.0%	\$1,625	\$5.87	3.0%	\$2,595	\$10.06	4.5%	\$10,012	\$40.62
TOTAL UNDISTRIBUTED OPERATING EXPENSES	18.5%	\$16,084	\$63.78	26.9%	\$14,578	\$52.65	21.7%	\$18,749	\$72.65	20.0%	\$44,499	\$180.54
Management Fees	2.0%	\$1,739	\$6.90	3.0%	\$1,625	\$5.87	3.0%	\$2,595	\$10.06	3.0%	\$6,675	\$27.08
GROSS OPERATING PROFIT	53.0%	\$46,103	\$182.82	50.0%	\$27,097	\$97.86	44.5%	\$38,519	\$149.25	32.9%	\$73,095	\$296.57
FIXED CHARGES												
Taxes	5.0%	\$4,347	\$17.24	5.0%	\$2,709	\$9.78	3.0%	\$2,595	\$10.06	3.0%	\$6,675	\$27.08
Insurance	1.4%	\$1,217	\$4.83	1.4%	\$759	\$2.74	0.8%	\$692	\$2.68	0.8%	\$1,780	\$7.22
Reserve for Replacement	2.0%	\$1,739	\$6.90	4.0%	\$2,167	\$7.83	4.0%	\$3,460	\$13.41	4.0%	\$8,900	\$36.11
NET OPERATING INCOME	44.6%	\$38,800	\$153.86	39.6%	\$21,462	\$77.51	36.2%	\$31,304	\$121.29	25.1%	\$55,740	\$226.16

## Alternative Accommodations in the City of Napa

As part of the scope of this study, we were asked provide a broad assessment of the impact of alternative accommodation units on demand for traditional hotel rooms in the Napa lodging market. We evaluated this issue based upon our knowledge of the Napa lodging market as well as recently compiled survey data with respect to consumer utilization of alternative accommodation units other U.S. markets. The impact of alternative accommodations is difficult to validate due to the decentralized and private nature of this business. The findings incorporate available historical data on transient occupancy tax collections and the number of alternative accommodation units presently available in the Napa market into its analysis to the extent such data are available from the City of Napa.

Alternative accommodations includes a variety of lodging options for guests but primarily includes short-term and nightly rentals ranging from a room in a residence to homes, cabins, condos, castles, villas, barns, farm houses, and estates. Vacation rental options are not new to resort destinations and services such as VRBO (Vacation Rental by Owner) have been operating for over a decade. The booking of these rental options accelerated in the past 10 years with the launch of Airbnb, headquartered in San Francisco. Airbnb, launched in 2008, offers a booking platform for owners and tenants seeking to rent a room, a suite, or a house at their convenience. According to the Airbnb website, the service currently has 4 million listings in 65,000 cities in 191 countries and has booked over 260 million guests. In addition to private residents offering space in their homes, some hotel operators offer traditional hotel rooms on the service.

Homeaway based in Austin, Texas, is a booking site representing more 2 million short-term rental options in 190 countries, and is a part of the Expedia, Inc. family of brands. Homeaway was founded in 2005 has grown through the acquisition of over 20 booking website associated with short-term rentals including VRBO (Vacation Rental by Owner) and Bedandbreakfast.com.

These and other comparable booking services, are primarily used by leisure travelers but are aggressively seeking to expand their marketplace to commercial and group travelers. According to a 2017 study by Morgan Stanley Research, some 25 percent of leisure travelers and 23 percent of business travelers are expected to book a stay on Airbnb at least once during the year. Morgan Stanley reports that half of Airbnb guests used the service to replace a traditional hotel stay.

Since the explosion of short-term rentals from these services, affected businesses and government jurisdictions are instituting a variety of marketing and regulatory responses. Industry and government entities are pursuing legal measure to address concerns about the health and safety of the units, the collection of transient occupancy taxes, and the displacement and impact on rental rates of long-term residential rental housing. Many jurisdictions have or are considering implementing rules to limit the number of units, impose transient occupancy taxes, and require minimum life-safety standards for the venues. Even those jurisdictions with regulations addressing the services struggle with monitoring and compliance as “ghost” or illegally listed units continue to accommodate guests.

The city of Napa actively addressed the issue of short-term vacation rentals in 2009 with the establishment of a vacation-rental ordinance. The ordinance requires an annual registration fee and limits the number of units that can be rented for less than 30 days. The city restricts the number of units to 60 hosted properties (properties that can be rented when the owner is on site, these are typically rooms in someone’s house) and 41 non-hosted properties.

Data on transient occupancy tax (TOT) collected for these units, provided by the city of Napa, is presented in the chart below for the fiscal years in which a full 12 months of data is available.

**Transient Occupancy Tax Collection - Licensed short-term rentals**

<b>Fiscal Year Ending</b>	<b>Vacation Rentals</b>		<b>Hosted Accommodations</b>		<b>Short-term rental TOT collected</b>	<b>% of total TOT</b>
	<b>Number of Units</b>	<b>TOT collected</b>	<b>Number of Units</b>	<b>TOT collected</b>		
2010	44	\$237,289			\$237,289	2.9%
2011	44	254,035			\$254,035	2.6%
2012	47	291,614			\$291,614	2.5%
2013	43	316,383			\$316,383	2.3%
2014	41	323,405			\$323,405	2.1%
2015	43	346,868			\$346,868	2.2%
2016	43	350,623			\$350,623	1.9%
2017	40	373,155	55	\$89,493	\$462,648	2.4%

*Source: City of Napa*

Within the last five years, the TOT collected from the licensed short-term rentals has been within a relatively narrow range of 1.9 to 2.4 percent of the total TOT received by the city.

Compared to the city of Napa, the cities of Yountville and Calistoga bar any short-term rental defined as less than 30 days, St. Helena only permits 25 units, and the city of American Canyon doesn't currently allow for home-based vacation rentals. The county of Napa does not allow rentals under 30 days. A search of available units in the Napa Valley on Airbnb and Homeaway shows about 300 available units for short-term rental on each site. These units, however, include more than just private facilities, including rooms in established bed and breakfasts, units in the Silverado Resort, and time-share units.

According to our understanding of the ordinance, non-traditional unit availability should be limited to those permitted units in the cities of St. Helena and Napa totaling 126 units. Relative to the over 5,000 established rooms in the county of Napa, the permitted short-term rentals represent an additional two percent of inventory. Given the strong market performance of Napa Valley lodging in recent years and the number of peak occupancy days, these units do not appear to be significantly impactful.

## Meeting Space Analysis

A critical component of the lodging market in Napa Valley is the availability of adequate meeting space. Various referred to as meeting space, function space, banquet space, or convention space, these facilities range from stand-alone banquet halls to large complexes within hotels. As described earlier in this market study, meeting space is an important component for the future development of Napa Valley's lodging market. Generally, meeting space in hotels consists of large multi-purpose rooms (ballrooms) and a number of smaller meeting rooms. Many ballrooms and meeting rooms are designed to be separated into smaller spaces as needed. Hotel demand at certain times of the year, particularly for the larger full-service properties, relies on the market's ability to accommodate large blocks of guestrooms booked to groups. Concurrently, these groups require a specific amount of meeting space to host functions.

Meeting space facilities can generally be categorized by the type and size of space as well as the type of usage. The meeting industry includes a variety of meeting types, ranging from large trade and exhibition events to corporate meetings and conferences. Each type of event has unique facility needs, with some requiring large amounts of contiguous space and others requiring many smaller meeting rooms. Often a single meeting will use many different types of space, including large exhibit halls, banquet facilities, breakout meeting rooms, and theater seating.

According to IBIS World, over the five years from 2012 to 2017, a slow economic recovery resulted in sluggish progress for the Trade Show and Conference Planning industry. During this period, business conditions improved, benefiting industry operators. Progress in the broader economy facilitated an expansion in marketing budgets, as large and small business, trade groups and even nonprofits turned to trade show and conference planners to increase sales and awareness. As a result, revenue for the Trade Show and Conference Planning industry is expected to grow at an annualized rate of 1.6% to \$14.0 billion over the five years to 2017. Continued growth in corporate profit and a rise in business spending on marketing should further buoy industry revenue, which is expected to increase 2.4% in 2017.

The recent rise in conference and trade show attendance is a turnaround from recessionary years, when poor business conditions resulted in decreased demand from the industry's primary downstream markets and a drop in the average number of attendees. The Trade Show and Conference Planning industry experienced improvements in three of the past five years, largely due to modest growth in corporate profit, which grew at an annualized 0.8% over the five years to 2017. Often, conventions, conferences or trade shows are used as marketing tools to draw attention to specific products or services. As corporate profit margins have increased, companies have been more inclined to spend on all types of marketing strategies, including trade shows and conferences. In business-to-business events, such as trade association conventions, industry operators obtain a majority of revenue from booth fees, which vary depending on the type of event, the size and scale of the exhibit and the technology incorporated in the display. Industry operators also receive revenue from sponsorship fees, which are derived from the corporate underwriting of events, advertising fees and signage placement.

In addition, industry revenue growth has been aided by an increase in per capita disposable income, which bolstered consumer attendance for trade shows and conferences. Costs for conference attendance have increased with the bolstered attendance. The average cost per attendee for meetings and trade shows in the United States was ranges from \$427 to \$635 (as of mid-2017). And meeting costs continue to escalate.

The following chart summarizes the key attributes of various types of meetings, including facility requirements.

	Typical Attendance Range	Purpose	Required Facilities	Optional Facilities	Typical Facility Used
Conferences/Conventions	200 to 50,000	Engagement in a common interest	Plenary Session Venue, breakout space, banquet space	Exhibition Space, Outdoor recreational venues, nearby restaurants for dine-	Convention Center or Major Convention Hotel
Meetings/Seminars/Networking Events	50 to 2,500	Training and Marketing	Meeting Space		Hotel/Resort or Smaller Convention Center
Team Building and Appreciation Events	50 to 500	Reward, training, and Entertainment	Meeting Space, Banquet Space, Entertainment and Recreational Venues	Nearby restaurants, spa, golf courses	Resort Hotel or Hotels in Resort Destinations
Trade and Consumer Shows	1,000 to 50,000	Sales	Exhibition Space and breakout space	Plenary Session Venue	Convention Center, Trademart, Fairgrounds
Board Meetings and Executive Retreats	10 to 100	Engagement in a common interest	Meeting and Banquet Space	Nearby restaurants, recreational venue, spa, golf, attractions	Hotel/Resort with fine dining
Weddings/Social Events	Varies	Social	Banquet Space	Nearby restaurants, recreational venue, spa, golf, attractions	Hotel/Resort with fine dining or Venue with catering

Events within the exhibitions, conventions and meetings industry involve the gathering of groups of people for a common interest, such as business, industry, social/cultural, or hobbies. The American Express Global Meetings Forecast notes that meeting attendees emphasize quality of experience over length of meeting with expected rising demand for non-traditional meeting facilities rather than conventional meeting space. More scrutiny will be paid to making sure the meeting is attractive to the people that need to attend but overall meeting planners and decision makers expect that 2018 North American meeting budgets to be approximately 1.0 percent higher than 2017 with hotel group room rates to increase 3.5 percent.

Size parameters for the type of facilities and distribution of meeting space are highly influenced by the particular market demand in each location. Meeting space needs can range from 20 to 80 square per person depending on how many meeting and banquet activities are planned per meeting day in the same venue.

It is important to consider the limitations of meeting space. Typical meeting and event planners require full-service facilities that include on-site lodging facilities coupled with food and beverage services. Similar to event planners, convention planners who host events for 1,000 or more people expect a large selection of both full-service and limited-service hotels. Convention centers have large back-of-the-house areas available to accommodate food and beverage catering and audiovisual needs. Overall, for any type of large meeting conference or convention center to be successful, appropriate lodging and food and beverage facilities must be readily available.

The amount of meeting space in any particular property depends on that hotel's number of rooms, rooms size, bedding mix, location, and market orientation. Select-service and extended-stay hotels such as Hilton Garden Inns and Courtyard by Marriott typically have only one to three room bays of dedicated meeting space while full-service and resort hotels offer a much higher ratio of meeting space to number of rooms.

While the supply of existing and future meeting space in Napa Valley is readily identified, quantifying demand for the facilities is less specific. This section will begin with an inventory of the existing meeting space available. Then we will describe the new facilities that will have an impact on future meeting and conference space demand. Finally, we will examine how these additions to meeting space supply will affect the ratio of meeting space square footage to the marketwide supply of guestrooms.

## Current Inventory of Meeting Space

Using selected industry publications and on-line services, the consultants have determined the current inventory of meeting space available in Napa Valley. We have allocated this information into three categories: lodging facilities, wineries, and exposition center/other. The “other” in the latter category refers to facilities such as large venues that are multi-purposed with large areas able to accommodate meetings and banquets. As its name implies it also includes the space available at the Napa Valley Exposition.

The following charts delineate Napa Valley’s indoor meeting space by category. Note that meeting space in the wineries is an estimate only as will be explained later in this section.

Meeting Space by Venue					
	Napa County	%	City of Napa	%	City as % of Total
Wineries	60,394	18.6%	21,432	9.4%	35%
Hotels	153,335	47.2%	95,660	41.9%	62%
Expo/Other	111,000	34.2%	111,000	48.7%	100%
Total	324,729	100.0%	228,092	100.0%	70%
<i>Indoor Space Only</i>					

Currently, hotels contain the largest amount of indoor meeting space in Napa Valley, with roundly 153,000 square feet, or 47.2% of the total available space. The next largest category Expo/Other is comprised of the large venues – The Expo/Fairgrounds and Copia which will be discussed later. Wineries constitute the remaining portion of the available space, with approximately 60,000 square feet, or 19% of the total.

## Winery Meeting Space

According to the Napa Valley Vintners Association, the Napa Valley hosts approximately 475 physical wineries. The Department of Alcoholic Beverage Control (ABC) issues more than 80 different types of licenses covering producers and sellers of alcoholic beverages. For example, three such permits relate most to vintners— type 02, for brick-and-mortar wineries; type 17, for beer and wine wholesalers; and type 20, for off-sale beer and wine. Some wineries operate with modest or no tasting facilities while others offer extensive food and beverage and event space to accommodate large groups. It is difficult to fully quantify event space at wineries. Many wineries offer only limited indoor space and offer primarily outdoor venue or covered areas. Private events are often restricted by licenses. Private events typically require some wine education component and only five wineries are fully licensed to specifically host weddings. However, these facilities often accommodate corporate luncheons or weekday dinner events with wine education programs.

Please note that many of these wineries have relatively small amounts of meeting space and that outdoor venues were not considered part of the analysis. The event space used in the study does not include all winery venues but is considered representative of the availability of potential for hosting meetings and parties. The sample of wineries used to allocate meeting space are listed below.

Napa County Wineries		Total Estimated Indoor Meeting Space (SF)	Total Estimated Outdoor Meeting Space (SF)
Winery			
CADE Winery	Angwin	2,640	1,080
Clos Pegase Winery Calistoga	Calistoga	2,000	3,000
Hans Fahden Vineyards Calistoga	Calistoga	1,200	1,500
Markham Vineyards Calistoga	Calistoga	3,000	4,000
Sterling Vineyard Calistoga	Calistoga	2,000	3,500
Andretti Winery Napa	Napa	1,200	4,000
Artesa Vineyard and Winery	Napa	5,064	2,160
Bourassa Vineyards	Napa	0	0
Black Stallion Winery	Napa	2,976	2,400
Chimney Rock Winery Napa	Napa	550	2,500
Clos Du Val Wine Company Napa	Napa	750	1,000
Cuvaison Winery Calistoga	Napa	1,000	0
Domaine Cameros Napa	Napa	1,000	0
Frazier Winery Napa	Napa	1,000	0
Hess Collection, The Napa	Napa	1,000	1,000
Kenzo Estate	Napa	360	600
Newlan Vineyards & Winery (now Koves-Newlan) Napa	Napa	250	3,000
Odette Estate Winery	Napa	1,632	180
Pine Ridge Winery Napa	Napa	1,400	800
Sequoia Grove Vineyards Napa	Napa	400	1,500
Silverado Vineyards	Napa	1,200	600
Stag's Leap Wine Cellars Napa	Napa	1,000	0
Steltzner Vineyards Napa	Napa	400	450
William Hill Winery Napa	Napa	250	0
B Cellars	Oakville	900	0
Robert Mondavi Winery Oakville	Oakville	2,000	500
Silver Oak Cellars	Oakville	500	500
Cakebread Cellars St. Helena	Rutherford	600	768
Inglennook	Rutherford	2,592	1,560
Mumm Napa Valley Rutherford	Rutherford	1,000	500
Peju Province Rutherford	Rutherford	800	1,500
Round Pound Estate	Rutherford	1,080	720
Rutherford Grove Winery Rutherford	Rutherford	2,000	5,000
Rutherford Hill Winery Rutherford	Rutherford	800	1,000
Rutherford Ranch Winery	Rutherford	900	3,660
St. Supéry Wine Discovery Center & Winery Rutherford	Rutherford	1,200	3,000
Sullivan Vineyards Rutherford	Rutherford	1,000	3,000
Alpha Omega Winery	St. Helena	1,200	2,000
Charles Krug St. Helena	St. Helena	2,000	10,000
Duckhorn Wine Company Napa	St. Helena	1,000	0
Ehlers Estate St. Helena	St. Helena	0	1,000
Flora Springs Wine Company St. Helena	St. Helena	0	800
Franciscan Oakville Estate Yountville	St. Helena	750	0
Freemark Abbey St. Helena	St. Helena	500	500
Hall Wines	St. Helena	600	360
Kuleto Estate St. Helena	St. Helena	500	1,400
Merryvale Napa Valley St. Helena	St. Helena	1,200	1,200
Miner Family Vineyard St. Helena	St. Helena	500	750
Sutter Home Winery St. Helena	St. Helena	250	2,000
V. Sattui Winery Napa	St. Helena	1,000	1,300
Whitehall Lane Winery St. Helena	St. Helena	1,500	500
Domaine Chandon Napa	Yountville	1,000	500
Goosecross Cellars Rutherford	Yountville	750	750
<b>TOTAL</b>		<b>60,394</b>	<b>78,038</b>

The reader should note that restaurants and stand-alone tasting rooms were not inventoried. Although some restaurants are capable of hosting meetings, they are seldom marketed for more than social gatherings, usually lack in-house audiovisual and business services, and most often represent less-than-optimal space configurations.. Some of the wineries have dedicated banquet or meeting spaces while many of the wineries set up the events in the tasting rooms, caves, and cellars. Most wineries provide their capacity by number of guests. We have used a ratio of 12 square feet per guest to estimate the square footage.

## Hotel Meeting Facilities

Lodging facilities in Napa Valley contain a variety of meeting space options. Generally, the amount of meeting space increases proportionately to the number of guestrooms. The majority of hotels surveyed offer meeting space in the range of 1,000 to 5,000 square feet. Only four properties offer 10,000 square feet or more. Meeting space is an important component for the larger hotels and generally serves to attract meetings during softer demand periods. Operators report hotel room rates associated with groups are lower than for transient guests, dictating the selective accommodation of groups. While larger meetings can only be accommodated by a limited number of hotels, most operators actively solicit small groups, particularly in the winter months. These groups are reported dominated by corporate retreats and board meetings. Social and weddings are selectively pursued during the year by those properties with ample event facilities at times when the guestroom rates that are garnered are commensurate or above the transient guestroom rates. Hotel meeting space is detailed in the following chart.

Hotels				
Property	Location	Meeting Space	Guestrooms	Meeting Space SF to Guestroom
Doubletree Napa Valley	American Canyon	5,700	132	43
Fairfield Inn & Suites	American Canyon	650	80	8
Holiday Inn Express & Suites	American Canyon	1,740	101	17
Best Western Plus Stevenson Manor	Calistoga	240	34	7
Calistoga Motor Lodge & Spa	Calistoga	365	50	7
Calistoga Ranch	Calistoga	1,800	48	38
Calistoga Spa Hot Springs	Calistoga	1,250	57	22
Indian Springs Resort	Calistoga	3,200	116	28
Mountain View Hotel & Spa	Calistoga	330	33	10
Solage Calistoga	Calistoga	4,700	89	53
Andaz Napa	Napa	2,900	141	21
Archer Hotel	Napa	7,100	183	39
Carneros Resort & Spa	Napa	8,000	86	93
Churchill Manor	Napa	30	10	3
Embassy Suites	Napa	7,630	205	37
Hampton Inn & Suites	Napa	3,000	115	26
Hawthorn Suites	Napa	250	60	4
Hilton Garden Inn	Napa	1,200	80	15
Hotel Indigo	Napa	-	115	-
Napa River Inn	Napa	2,000	66	30
Napa Valley Marriott Hotel	Napa	10,200	275	37
Napa Winery Inn	Napa	1,500	60	25
River Terrace Inn	Napa	1,350	105	13
Senza Hotel	Napa	900	41	22
Silverado Resort and Spa	Napa	11,900	385	31
Southbridge Napa Valley	Napa	800	21	38
Springhill Suites	Napa	6,200	100	62
The Meritage Resort and Spa	Napa	25,000	322	78
The Westin Verasa Napa	Napa	5,700	180	32
Auberge du Soleil	Rutherford	3,500	50	70
Rancho Caymus Inn	Rutherford	900	26	35
Harvest Inn	St. Helena	4,000	74	54
Los Alcobas	St. Helena	4,500	68	66
Meadowood Napa Valley	St. Helena	3,600	85	42
Bardessono	Yountville	3,200	62	52
Hotel Yountville	Yountville	1,200	80	15
Napa Valley Lodge	Yountville	2,500	55	45
Vintage Estate Yountville	Yountville	14,300	192	74
<b>Total - County</b>		<b>153,335</b>	<b>3,982</b>	<b>39</b>
<b>Total - City of Napa</b>		<b>95,660</b>	<b>2,550</b>	<b>38</b>

## Other Meeting Facilities

### The CIA at Copia

The brainchild of Julia Child and Robert and Margrit Mondavi opened in 2001. The food and wine centric facility did not find its footing and was further challenged by the great recession. Closed since 2008, the former Copia: The American Center for Wine, Food & the Arts officially reopened in 2016 with a new name, the CIA at Copia, and a new commitment to public access. The name change reflects its current owners, the Culinary Institute of America, which acquired the property in late 2015 with an eye to freeing up space for its academic programs at its Greystone campus in St. Helena. The revived center offers daily cooking and wine-themed classes, a tasting showcase of local wineries that will rotate wineries every three months, a retail shop, and a redesigned, “more welcoming” restaurant, according to CIA Provost Mark Erickson.

Also being added are two free galleries: the Chuck Williams Culinary Museum, devoted to the collection of the late founder of Williams-Sonoma, and the Wine Hall of Fame. “They’ll be exploratory experiences for visitors to learn about who shaped wine in America and about the history of food in America, and how it’s been influenced by time and immigrations of cultures and tools.”

Other renovations at the new CIA include windows on the lower level opening out to the river creating a light-filled, modern atrium in the center of the building available for evening receptions and can accommodate 800 guests in a standing reception or a 350-seat dinner. Upstairs, the former exhibit hall was turned into a teaching kitchen for hands-on cooking classes.

A mezzanine overlooking the atrium and the Napa River can host an event for up to 300. Adjacent to the mezzanine are two classrooms that can be used for breakout sessions, each seating 30. Outside, the newly terraced amphitheater seats 600 in rows or 375 at tables. Meeting spaces upstairs at CIA at Copia include the Food Business School classroom with 25 seats; the boardroom with 25 seats, reception space for 50 on the balcony and a garden balcony that will accommodate 80 seated and 120 standing. The main theater at Copia, used for movie screenings, speakers’ series, and panel presentations, seats 250.

### Napa Valley Exposition at the Fairgrounds

The only other significant amount of non-hotel conference space within the city is housed within the Napa Valley Exposition, located along the Silverado Trail between Third and Seventh streets. The Expo currently consists of four large buildings, which, in the aggregate, total approximately 31,000 square feet, located on ±34 acres.

Outdoor space consists of recreational vehicle (RV) sites, a livestock arcade, and large open fields designed to accommodate the needs of fairground activities. Currently, games of bingo are played at the Expo every day of the week, organized by non-profit organizations. Major events at the Expo include BottleRock, held on Memorial Day weekend, the Napa Town and Country Fair (the second week of August) and the Home and Garden Show in May. There are no hotel rooms available at the Expo, which hampers the facility’s attractiveness to meeting planners and event organizers. Currently owned by the State of California, plans have been proposed to redevelop the property with upgraded meeting facilities, a small amount of residential mixed use development, and a new recreational vehicle facility. The timing of the proposed redevelopment is speculative at this time.

## New Hotel Meeting Space Development

Based on our research, all of the proposed meeting space identified in Napa Valley is being constructed as part of the proposed lodging facilities. Several of the new hotels listed in the Supply of Lodging Facilities section of this study will feature meeting space that is currently unavailable in Napa Valley. We have used published and permitted space allocations and estimated as needed. The allocation of these spaces is shown in the following charts:

Proposed Meeting Space			
Name	City	Number of Rooms	Meeting Space
Four Seasons Calistoga	Calistoga	83	7,540
Rosewood Calistoga Hills	Calistoga	110	4,464
Cambria Hotel	Napa	90	2,012
Embassy Suites Addition	Napa	54	4,045
Trinitas Planned Development	Napa	250	1,500
Napa River Inn Expansion	Napa	26	3,000
Stanley Ranch	Napa	132	15,500
Plenary Hotel	Napa	275	15,000
Ritz-Carlton Napa Valley	Napa	351	21,100
Meritage Expansion	Napa	145	10,000
Montalcino Resort	Napa County	379	34,000
Villagio Expansion	Yountville	1	4,000
Total County		2814	122,161
Total City		2187	72,157

If every property listed above is built, the new space will represent an 80% increase over the current county-wide inventory of existing hotel meeting space. The amount of meeting space increase in the city is slightly lower at 75 percent. The majority of the proposed meeting space is in large full-service hotels and resorts with ample room inventories. Note that a handful of these projects have been proposed for many years and specific development timelines are not fully confirmable at this time. We have estimated that some of the larger proposed resorts are speculative at this time and their development is not likely to occur in the next five to seven years. Generally we expect that new meeting space will be built apace with adequately supporting hotel rooms.

## Conclusion

It is important to understand how meeting space relates to lodging demand. Meeting planners who plan on hosting an event lasting more than one day will require hotel rooms and most likely require food and beverage facilities; generally, this necessitates a full-service hotel. Currently the ratio of total venue space to guestrooms in the Napa Valley is approximately 64 square feet of meeting space per guestroom; that ratio is 93 square feet per guestroom for the city of Napa. Within the hotels in the market, the ratio is 39 square feet per guestroom in the county and 36 square feet per guestroom in the city.

Hotel industry benchmarks provide a framework for evaluating the appropriate amount of meeting space for proposed development. As discussed, focused-service and extended stay hotels are typically designed with only a modest complement of meeting space, often 5 to 15 square feet per guest room. Boutique, full-service, and resort hotels are frequently designed with significantly more meeting space, commonly 25 to over 50 square feet per guestroom.

Another measure of meeting space size is the ratio of meeting room capacity to guest rooms. In many markets, the size of the ballroom is important for annual civic, social, or corporate meetings. Other hotels are designed to attract corporate meetings; these hotels provide a number of smaller meeting or break-out rooms in addition to a ballroom. In general, meeting room capacity is benchmarked from 0.2 to 0.8 meeting guests to hotel rooms and ballrooms

are designed around 2 to 4 meeting guests to hotel rooms. Banquet style seating in a ballroom generally requires 10 square feet of space for each guest. The following chart illustrates estimates of meeting space for a 250- to 350-room full-service hotel.

These benchmarks are provided for informational purposes only. Actual meeting room space programming for a new hotel is dependent on numerous design, cost, market, and site issues. Effective ballroom operation requires proximate kitchen and service facilities. The meeting and ballroom space is optimal when free of columns and able to be designed with high ceiling heights. Parking for meeting space attendees needs to be considered.

Meeting space in Napa Valley has and is continuing to expand with the opening of full-service hotels in the city of Napa and the conversion of Copia to the CIA at Copia. The hotel occupancy levels of recent years indicate that the market is supported by the existing facilities. We estimate that the meeting and group guests represent approximately 13 percent of all occupied room nights.

During softer economic periods, meeting and group demand can be induced to bolster occupancy levels with the consideration of lower rates. During the period when the 2007 HVS Market Study was conducted, the hotel market in the Napa Valley was performing at a lower level than currently experienced and few full-service hotels were operating. As additional lodging facilities are built with appropriate meeting space, additional meeting and group demand can be accommodated. As a hedge for softer market cycles, we recommend that additional proposed full-service and resort hotels considered for development include an appropriate complement of meeting space.

## Findings and Recommendations

Since the 2007 HVS Study, the Napa lodging market has shown strong growth in all measures supported by the continued appeal of the wine and food and beverage based attractions and the region's growing regional, national, and international reputation. The strength of demand for the market concurrent with the marketing efforts of organizations, attractions, hotels, and other stakeholders has demonstrated that the demand for lodging is less seasonal than in prior decades. While visitation to the Napa Valley will continue to be influenced by weather and lodging availability, the number of peak occupancy nights has expanded. The new supply open since 2010 and a strong economic environment has resulted in the growth of the overall market. The opening of new hotels is anticipated to sustain this trend providing additional capacity for transient and group guests.

Our findings indicate that assuming the current growth rate of demand is sustained, the market can absorb the noted pipeline of proposed hotels and should have capacity in the long-term to continue to support new hotel rooms as shown in the following chart.

Napa Valley Estimate of Additional Capacity											
	Historical	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Estimated Available Rooms	5074,417	5,277	5,444	5,762	6,453	7,319	7,395	7,395	7,395	7,395	7,395
Estimated Available Annual Room Nights	1,852,162	1,926,257	1,987,212	2,103,282	2,355,497	2,671,587	2,699,327	2,699,327	2,699,327	2,699,327	2,699,327
Total Projected Potential Demand	1,327,822	1,382,957	1,439,520	1,527,776	1,702,043	1,883,390	1,935,765	1,975,091	2,015,442	2,056,845	2,099,332
Estimated Sustainable Annual Occupancy		72%	72%	72%	72%	72%	72%	72%	72%	72%	72%
Estimated Sustainable Annual Demand		1,386,905	1,430,793	1,514,363	1,695,958	1,923,543	1,943,516	1,943,516	1,943,516	1,943,516	1,943,516
Total Projected Potential Demand		1,382,957	1,439,520	1,527,776	1,702,043	1,883,390	1,935,765	1,975,091	2,015,442	2,056,845	2,099,332
less Est. Sustainable Annual Demand		1,386,905	1,430,793	1,514,363	1,695,958	1,923,543	1,943,516	1,943,516	1,943,516	1,943,516	1,943,516
Unsatisfied Annual Demand		(3,948)	8,727	13,413	6,086	(40,153)	(7,751)	31,576	71,927	113,330	155,817
Cumulative Potential Supply Expansion		(11)	24	37	17	(110)	(21)	87	197	310	427

As noted throughout the report, the number of potential new hotel rooms is not meant to be absolute but shows that additional lodging development should be considered. However, this study does not address the particular feasibility of the proposed lodging supply, either those projects in the pipeline or other future developments. Hotel development in the Napa Valley requires patience and capital. The following estimates of hotel development costs were compiled from budgets for comparable facilities in Northern California.

Estimated Representative Construction Costs per Room - Lodging Napa Valley					
	Land	Hard Costs	FF&E	Soft Costs/Working Capital/OS&E	Total
B&B	\$35,000	\$115,000	\$15,000	\$10,000	\$175,000
Limited Service	\$40,000	\$150,000	\$20,000	\$30,000	\$240,000
Full Service	\$100,000	\$250,000	\$25,000	\$75,000	\$450,000
Luxury	\$125,000	\$675,000	\$150,000	\$300,000	\$1,250,000

Source: Cushman & Wakefield

The issue of feasibility of hotel projects in Napa can provide an inherent monitor on hotel development. The cost of land and construction in the area may be prohibitive for certain hotel product types to be feasibly developed. Some hotels may be more feasibly built as part of mixed-use projects with for sale real estate is happening with resorts proposed in various locations in the Valley. The availability of suitable sites, the cost of construction, environmental concerns, water and sewer access, combined with the social pressures of traffic, employment, and housing can delay projects or render them infeasible.

In addition, it is important to remember that hotel markets are cyclical and Napa is not immune to down cycles. The forecasts in this market study anticipate a sustained economic and social environment to support expansion of the destination. During softer periods, it is important to have a variety of lodging options to continue to attract guests. Changing demographics and social expectations are also impacting hotel development.

The continued investment in downtown Napa is enhancing the city as its own destination. Other locations such as Yountville and Calistoga are also evolving into their own attraction, on a par with already established reputation of St. Helena. As the individual destinations and the overall appeal of the valley has grown, challenges have continued to be felt, particularly concerning traffic, employees, and housing. The tensions between resources for residence and the appeal and financial benefits of tourism will require balanced consideration over the long-term while the area continues its evolution as a visitor destination.

Since 2010, a number of lodging facilities at various price points have opened in the City and County of Napa. These facilities offer a range of options for overnight visitors to the areas. It is our opinion that it remains important to continue to offer lodging units at all price points. Due to continually increasing construction costs, the feasibility of new hotel development can influence the types of hotels that are actually developed. Some products can offer brands and facilities that will attract guests to non-traditional or secondary locations. Hotel designs, brands, and offerings are now more expansive than ever and options for new hotel products that appeal to the changing demographics in the area should be considered to support the long-term health of the lodging market.

- Many of the new hotels that are proposed for the city of Napa are anticipated to be branded with major hotel brands. The benefits of brands include reservations systems, familiarity, loyalty programs, and well-designed facilities that can often support occupancy and rate levels that are quicker to ramp up and higher than independent properties. Hotel companies are supportive of incorporating local design and cultural themes into their branded hotels. While brands have to comply with certain corporate standards, they do not have to be cookie cutter. We recommend that whenever possible, the design of new hotels be built that reflect the wine country destination of Napa.
- Hotel products are changing with the shifts in demographics of visitors. Upscale hostels, wellness retreats, and lodging with communal public spaces and orientation to group activities are successfully being developed in other resort destinations. We also recommend that a wide variety of lodging products be considered for the market beyond the conventional categories considered in this study.
- Parking remains important for hotel use as a majority of users drive to Napa, however, the increase in ride-sharing services may change the behavior. The typical parking ratios to room is 1 parking space per room. Generally, parking can be somewhat reduced to account for annual occupancy levels in the 70 percent range. In addition, parking is often most used by hotel guests overnight and can be shared with other uses that are more daytime oriented. It is important that hotel projects have adequate parking to accommodate hotel guests and restaurant and meeting space users. Additional research on the impact of ride sharing and public transportation may be needed in the future.
- Meeting space in hotels is important to attracting demand for guest rooms, particularly during non-peak periods.
  - Limited-service hotels with meeting room space and close proximity to surrounding support services would be considered desirable. Bed and breakfasts and small inns as in-fill projects would be encouraged as indicated in the General Plan;
  - New hotel projects should provide a minimum of 15-50 square feet of contiguous meeting room space per guest room depending on the type of hotel and location to support group meeting demand.

## Conclusion

The Napa Valley has seen a strong period of growth in the lodging market since 2010 and with the expectation that these trends continue, the market is expected to continue to support long-term growth. With a range of lodging products that target the evolving demographics of visitors to the destination, the lodging market is anticipated to continue to grow over the long-term. The existing pipeline of proposed lodging is estimated to be able to be absorbed over the next few years as market conditions allow. As new projects are considered for the longer term, we recommend a variety of lodging products be considered.

## Assumptions and Limiting Conditions

"Report" means the appraisal or consulting report and conclusions stated therein, to which these Assumptions and Limiting Conditions are annexed.

"Property" means the subject of the Report.

"C&W" means Cushman & Wakefield, Inc. or its subsidiary that issued the Report.

"Consultant(s)" means the employee(s) of C&W who prepared and signed the Report.

The Report has been made subject to the following assumptions and limiting conditions:

- No opinion is intended to be expressed and no responsibility is assumed for the legal description or for any matters that are legal in nature or require legal expertise or specialized knowledge beyond that of a real estate appraiser.
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- The forecasts of income and expenses are not predictions of the future. Rather, they are the Consultant's best opinions of current market thinking on future income and expenses. The Consultant and C&W make no warranty or representation that these forecasts will materialize. The real estate market is constantly fluctuating and changing. It is not the Consultant's task to predict or in any way warrant the conditions of a future real estate market; the Consultant can only reflect what the investment community, as of the date of the Report, envisages for the future in terms of rental rates, expenses, and supply and demand.
- If the Report is submitted to a lender or investor with the prior approval of C&W, such party should consider this Report as only one factor together with its independent investment considerations and underwriting criteria, in its overall investment decision. Such lender or investor is specifically cautioned to understand all Extraordinary Assumptions and Hypothetical Conditions and the Assumptions and Limiting Conditions incorporated in this Report.

- In the event of a claim against C&W or its affiliates or their respective officers or employees or the Consultants in connection with or in any way relating to this Report or this engagement, the maximum damages recoverable shall be the amount of the monies actually collected by C&W or its affiliates for this Report and under no circumstances shall any claim for consequential damages be made.
- If the Report is referred to or included in any offering material or prospectus, the Report shall be deemed referred to or included for informational purposes only and C&W, its employees and the Consultant have no liability to such recipients. C&W disclaims any and all liability to any party other than the party that retained C&W to prepare the Report.
- By use of this Report each party that uses this Report agrees to be bound by all of the Assumptions and Limiting Conditions, Hypothetical Conditions and Extraordinary Assumptions stated herein.
- The estimated operating results presented in this report are based on an evaluation of the overall economy, and neither take into account nor make provision for the effect of any sharp rise or decline in local or national economic conditions. To the extent that wages and other operating expenses may advance during the economic life of the property, we expect that the prices of rooms, food, beverages, and services will be adjusted to at least offset these advances. We do not warrant that the estimates will be attained, but they have been prepared on the basis of information obtained during the course of this study and are intended to reflect the expectations of typical investors.
- Forecasting for hotels is both a science and an art. Although this analysis employs various mathematical calculations to provide value indications, the final estimates are subjective and may be influenced by our experience and other factors not specifically set forth in this report.
- Our financial analyses are based on estimates and assumptions which were developed in connection with this appraisal engagement. It is, however, inevitable that some assumptions will not materialize and that unanticipated events may occur which will cause actual achieved operating results to differ from the financial analyses contained in this report, and these differences may be material. It should be further noted that we are not responsible for the effectiveness of future management and marketing efforts upon which the projected results contained in this report may depend.
- By use of this Report each party that uses this Report agrees to be bound by all of the Assumptions and Limiting Conditions, Hypothetical Conditions and Extraordinary Assumptions stated herein.

## Certification of Appraisal

I certify that, to the best of our my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and is my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in any of the property that is the subject of this report, and no personal interest with respect to the parties involved.
- I have no bias with respect to any of the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
- No one provided significant real property appraisal assistance to the persons signing this report.
- I have provided services regarding some of the properties in the county of Napa within the prior three years.
- These services include appraisals within the three-year period immediately preceding the acceptance of the assignment. No other services have been provided in the past three years.
- As of the date of this report, Elaine Sahlins, MAI, CRE, has completed the continuing education program for Designated Members of the Appraisal Institute.

**DRAFT**

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## Addenda Contents

- Addendum A: Qualifications of The Appraisers
- Addendum B: Letter of Engagement
- Addendum C: Lodging Facilities by Category

## Addendum A: Qualifications of The Appraisers

## Addendum B: Letter of Engagement

## Addendum C: Lodging Facilities by Category

Lodging Inventory Napa Valley			
Property Type	Property Name	Location	Number of Rooms
B&B	Aurora Park Cottages	Calistoga	6
B&B	Bear Flag Inn	Calistoga	5
B&B	Brannan Cottage Inn	Calistoga	6
B&B	Calistoga Arbors	Calistoga	4
B&B	Calistoga Inn	Calistoga	17
B&B	Calistoga Wayside Inn	Calistoga	4
B&B	Calistoga Wine Way Inn	Calistoga	8
B&B	Carlin Country Cottages	Calistoga	15
B&B	CasaLana Bed & Breakfast	Calistoga	2
B&B	Chateau de Vie	Calistoga	5
B&B	Chelsea Garden Inn	Calistoga	5
B&B	Chien Blanc Bungalows	Calistoga	3
B&B	Churchill Manor B&B	Calistoga	10
B&B	Cottage Grove Inn	Calistoga	16
B&B	Craftsman Inn	Calistoga	5
B&B	Embrace Calistoga	Calistoga	5
B&B	Enchanted Cottage B&B	Calistoga	2
B&B	Eurospa & Inn	Calistoga	13
B&B	Fanny's	Calistoga	2
B&B	Hillcrest Country Inn	Calistoga	3
B&B	Hotel dAmici	Calistoga	4
B&B	Larkmead Country Inn	Calistoga	4
B&B	Mountain Home Ranch	Calistoga	20
B&B	The Bergson	Calistoga	21
B&B	The Pink Mansion	Calistoga	8
B&B	Trailside Inn	Calistoga	3
B&B	Villa Mimosa	Calistoga	3
B&B	Washington Street Lodging	Calistoga	5
B&B	Zinfandel House	Calistoga	2
B&B	Mount View Hotel & Spa	Calistoga	31
B&B	Ink House Inn	St. Helena	5
B&B	Adagio Inn	St. Helena	2
B&B	Bartel's Ranch & B&B	St. Helena	4
B&B	Black Rock Inn	St. Helena	5
B&B	Hotel St. Helena	St. Helena	18
B&B	Inn at Salvestrin	St. Helena	3
B&B	Inn St. Helena	St. Helena	8
B&B	Inn at Southbridge	St. Helena	21
B&B	Judy's Bed and Breakfast	St. Helena	1
B&B	Napa Farmhouse Inn	St. Helena	3
B&B	Rustridge Ranch & Winery	St. Helena	4
B&B	Shady Oaks Country Inn	St. Helena	3
B&B	Wydown Hotel	St. Helena	12
B&B	Spanish Villa Inn	St. Helena	3
B&B	Raycho Caymus	Rutherford	26
B&B	Poetry Inn	Unincorporated	5

## Lodging Inventory Napa Valley

Property Type	Property Name	Location	Number of Rooms
B&B	Lavendar, a Four Sisters Inn	Yountville	5
B&B	Mason Fleurie, Four Sisters Inn	Yountville	13
B&B	North Block Hotel	Yountville	20
B&B	Napa Valley Railway Inn	Yountville	8
B&B	Vaya former Oleander House	Yountville	5
B&B	Petis Logis Inn	Yountville	5
B&B	The Cottages of Napa Valley	Yountville	8
B&B	1801 Inn	Napa	8
B&B	Arbor Guest House	Napa	5
B&B	Beazley House B&B Inn	Napa	11
B&B	Bel Abri	Napa	15
B&B	Blackbird Inn	Napa	8
B&B	Candlelight Inn	Napa	11
B&B	Cedar Gables Inn	Napa	9
B&B	Churchill Manor B&B	Napa	10
B&B	Hennessey House B&B	Napa	10
B&B	Inn on First	Napa	10
B&B	Inn on Randolph	Napa	10
B&B	La Belle Epoque	Napa	6
B&B	La Petite Maison	Napa	4
B&B	Main Street Farmhouse B&B	Napa	4
B&B	McClelland-Priest B&B	Napa	6
B&B	Milliken Creek Inn & Spa	Napa	12
B&B	Napa Inn B&B	Napa	14
B&B	Old World Original B&B; Merlot & Cabernet Houses	Napa	14
B&B	Old World Inn: Cottages & Hotel Napa Valley	Napa	21
B&B	White House	Napa	17
B&B	Senza Hotel	Napa	41
B&B	Stahlecker House	Napa	5

## Lodging Inventory Napa Valley

Property Type	Property Name	Location	Number of Rooms
LS	Fairfield Inn & Suites Napa American Canyon	American Canyon	80
LS	Holiday Inn Express & Suites Napa Valley American C	American Canyon	101
LS	Comfort Inn Calistoga Hot Springs Of The West	Calistoga	55
LS	Calistoga Spa Hotel Springs	Calistoga	57
LS	Dr Wilkinson's Hot Springs	Calistoga	42
LS	Golden Haven Spa Hot Springs	Calistoga	28
LS	Roman Spa	Calistoga	60
LS	Best Western Plus Stevenson Manor	Calistoga	34
LS	Wine Country Inn	St. Helena	29
LS	Vineyard Country Inn	St. Helena	21
LS	El Bonia Motel	St. Helena	48
LS	Napa Valley Lodge	Yountville	55
LS	3 Palms Napa Valley Hotel & Suites	Napa	45
LS	Motel 6 Napa	Napa	58
LS	Ascend Collection Hotel Napa Winery Inn	Napa	59
LS	Best Western Plus Inn @ The Vines	Napa	69
LS	Best Western Plus Elm House Inn	Napa	22
LS	Chablis Inn	Napa	34
LS	Hawthorn Suites by Wyndham Napa Valley	Napa	60
LS	Napa River Inn	Napa	66
LS	Chardonnay Lodge	Napa	19
LS	Discovery Inn	Napa	15
LS	Wine Valley Lodge	Napa	54
LS	Hampton Inn & Suites Napa	Napa	115
LS	Hotel Indigo	Napa	115
LS	Springhill Suites Napa Valley	Unincorporated	100
Full	Hilton Garden Inn Napa	Napa	80
Full	Doubletree Hotel & Spa Napa Valley American Canyo	American Canyon	132
Full	Dolce Silverado Resort	Unincorporated	370
Full	Marriott Napa Valley Hotel & Spa	Napa	275
Full	Hilton Garden Inn Napa	Napa	80
Full	Embassy Suites Napa Valley	Napa	205
Full	River Terrace Inn	Napa	106
Full	The Meritage Resort & Spa	Napa	322
Full	Calistoga Motor Lodge & Spa	Calistoga	50
Full	Westin Verasa Napa	Napa	180
Full	Andaz Napa	Napa	141
Full	Archer Hotel Napa	Napa	183

Lodging Inventory Napa Valley			
Property Type	Property Name	Location	Number of Rooms
Luxury	Indian Springs Resort & Spa	Calistoga	115
Luxury	Calistoga Ranch Resort	Calistoga	50
Luxury	Solage Calistoga	Calistoga	89
Luxury	Auberge Du Soleil	Rutherford	50
Luxury	Harvest Inn	St. Helena	78
Luxury	Meadowood Resort	St. Helena	99
Luxury	Luxury Collection Las Alcobas Napa Valley	St. Helena	68
Luxury	Carneros Resort & Spa	Unincorporated	100
Luxury	Vintage Inn	Yountville	80
Luxury	Hotel Yountville	Yountville	80
Luxury	Villagio Inn & Spa	Yountville	112
Luxury	Bardessono Hotel	Yountville	62

## Memorandum

**To:** Rick Tooker, Community Development Director, City of Napa

**From:** Sherry Okun-Rudnak, Principal, BAE Urban Economics  
 Raymond Kennedy, Director of Research, BAE Urban Economics  
 Stephanie Hagar, Vice President, BAE Urban Economics

**CC:** Robin Schabes, Economic Development Manager, City of Napa  
 Robin Klingbeil, Senior Project Coordinator, Economic Development Division, City of Napa

**Date:** March 28, 2018

**Re:** Economic Impacts of New Lodging Facilities in Napa County

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## Introduction

The economies of the City of Napa and surrounding communities are heavily reliant on tourism. As the overall regional and national economy has grown in recent years, the City has seen significant growth in visitation and in the accommodation sector, and there are a number of lodging facility projects proposed for development over the next several years. Additional overnight visitors will generate new tax revenues for the City, including transient occupancy taxes and sales taxes, and will also generate and support numerous jobs, both directly and as these new facilities and their workers make purchases in the local economy. The following analysis assesses the general economic impacts of these proposed developments. In tandem with this analysis, BAE Urban Economics is undertaking a fiscal impact analysis and labor availability and housing affordability analysis.

## Methodology and Assumptions

The analysis here used IMPLAN, a computer software package that automates the process of developing regional input-output models, in order to estimate the impacts in Napa County of proposed new lodging facilities in Napa City. Economic impacts include both jobs and economic activity arising from the new lodging facilities' **direct** spending for workers and goods/services, the **indirect** jobs and economic activity of local suppliers, and the **induced** spending on goods and services by worker households. Additional general information on the IMPLAN model is provided at the end of this memorandum.

For the analysis of the economic impacts of proposed new lodging facilities in Napa County using the IMPLAN model, BAE relied on source data on the Napa hotel market found in Cushman & Wakefield's *Draft Napa Valley Lodging Market Study*, completed in February 2018

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## Los Angeles

448 South Hill St., Suite 701  
 Los Angeles, CA 90013  
 213.471.2666

## Washington DC

1400 I St. NW, Suite 350  
 Washington, DC 20005  
 202.588.8945

## New York City

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for the City of Napa's Community Development Department. This report included relevant information on existing lodging conditions, including occupancy, revenues, employment per room, and the current inventory by type of facility, as well as projections of future trends in supply and demand in the City and County's lodging industry. In addition, to model other overnight visitor expenditures, this analysis relied in large part on the *2016 Visitor Profile Final Report of Findings*, completed by Destination Analysts, Inc. for Visit Napa Valley. Based on an extensive visitor survey, this report provides a wealth of information on tourism in the County, including daily expenditures of persons patronizing local lodging facilities.

## Impact from Operations

This analysis describes the impacts related to lodging facility operations, as well as those linked to other expenditures by overnight visitors to Napa County. The analysis is based on a single point in time at the assumed buildout in 2023 per Cushman & Wakefield, albeit with dollar amounts in 2017/2018 dollars. As noted above, the hotel revenue and employment estimates are derived from Cushman & Wakefield, while other overnight visitor expenditures are estimated based on the visitor study completed for Visit Napa Valley, the official tourism marketing agency for the Napa Valley.

Table 1 presents estimates of the revenues to be generated by the new rooms added to the supply for the City of Napa from 2018 through 2023. Cushman & Wakefield estimate that a total of 2,112 units could be built from 2018 through 2023; these additional rooms are assumed to generate over \$230 million annually in revenues.

**Table 1: Annual Lodging Facility Revenues by Facility Type**

<b>Hotel Type/Revenue per Year per Available Room</b>	<b>B&amp;Bs/ Small Inns</b>	<b>Limited/ Select Service</b>	<b>Full Service</b>	<b>Luxury Hotels/ Resorts</b>
Rooms & Misc Revenue	\$86,939	\$53,254	\$72,059	\$162,964
Food and Beverage	\$0	\$0	\$14,445	\$59,530
<i>Number of New Rooms, 2018-2023</i>	<i>102</i>	<i>556</i>	<i>971</i>	<i>483</i>
<b>Total New Hotel Revenues</b>	<b>B&amp;Bs/ Small Inns</b>	<b>Limited/ Select Service</b>	<b>Full Service</b>	<b>Luxury Hotels/ Resorts</b>
Rooms & Misc Revenue	\$8,867,808	\$29,609,375	\$69,987,477	\$78,711,517
Food and Beverage	\$0	\$0	\$14,029,380	\$28,753,065
Total	\$8,867,808	\$29,609,375	\$84,016,857	\$107,464,582

Sources: Cushman & Wakefield, *Napa Valley Lodging Market Study*, 2018; Visit Napa Valley, *2016 Visitor Profile Final Report of Findings*, completed by Destination Analysts, Inc.; U.S. Dept. of Labor, Bureau of Labor Statistics; BAE Urban Economics, 2018.

As shown in Table 2, the overnight guests in these new rooms are estimated to spend an additional \$354 million annually in Napa County in addition to their hotel bookings, across a

broad range of expenditure categories including restaurants, wine purchases from stand-alone tasting rooms, wineries, and retail stores, transportation, apparel, and other retail purchases.<sup>1</sup>

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<sup>1</sup> This table also provides taxable sales estimates for use in the fiscal analysis.

**Table 2: Other Visitor Expenditures Generated by New Lodging Facilities**

<u>Expenditure Category</u>	<u>Daily Expenditures Per Person</u>		<u>New Lodging Visitor Expenditures (c)</u>	<u>Taxable Percent of Sales (d)</u>	<u>Taxable Sales in County (e)</u>	<u>Percent of Taxable Sales in City (f)</u>	<u>Taxable Sales in City</u>
	<u>2016 \$ (a)</u>	<u>2017 \$ (b)</u>					
Restaurants	\$93.10	\$96.10	\$120,100,000	100%	\$120,100,000	75%	\$90,075,000
Wine (bottles purchased at wineries)	\$70.89	\$73.17	\$91,400,000	100%	\$91,400,000	0%	\$0
Tasting room fees	\$21.51	\$22.20	\$27,700,000	0%	\$0	0%	\$0
Entertainment & sightseeing	\$13.32	\$13.75	\$17,200,000	0%	\$0	0%	\$0
Clothing & jewelry	\$21.45	\$22.14	\$27,700,000	100%	\$27,700,000	75%	\$20,775,000
Other retail purchases	\$16.48	\$17.01	\$21,300,000	100%	\$21,300,000	75%	\$15,975,000
Wine (bottles purchased at stand-alone tasting rooms)	\$12.94	\$13.36	\$16,700,000	100%	\$16,700,000	50%	\$8,350,000
Gas, parking & local transportation	\$7.89	\$8.14	\$10,200,000	80%	\$8,160,000	75%	\$6,120,000
Car rental (if rented in Napa only)	\$4.67	\$4.82	\$6,000,000	100%	\$6,000,000	100%	\$6,000,000
Wine (bottles purchased at retail stores)	\$3.18	\$3.28	\$4,100,000	100%	\$4,100,000	75%	\$3,075,000
All other	\$9.26	\$9.56	\$11,900,000	0%	\$0	75%	\$0
<b>Totals</b>	<b>\$274.69</b>	<b>\$283.53</b>	<b>\$354,300,000</b>		<b>\$295,460,000</b>		<b>\$150,370,000</b>
<b><u>Assumptions</u></b>							
Number of Estimated New Rooms (2018-2023)	2,112	from Cushman & Wakefield					
Visitors per Room	2.3	from Visit Napa Valley					
Number of Visitor Days	365						
Occupancy Factor	70.5%	estimate weighted by facility type, based on Cushman & Wakefield					
Total Visitor Days	1,249,743	calculation					
Days Spent in Napa Valley	3.0	from Visit Napa Valley					
Number of Visitors	416,581	calculation					
Annual Average CPI, 2016	266.344	U.S. Bureau of Labor Statistics					
Annual Average CPI, 2017	274.924	U.S. Bureau of Labor Statistics					
Inflation Factor, 2016-2017	1.032214	calculation					

(a) From Cushman &amp; Wakefield.

(b) Adjusted using the Consumer Price Index for the San Francisco Bay Area.

(c) Daily expenditures times total visitor days.

(d) Based on BAE estimate of type of items/services purchased.

(e) Per source of estimate (Cushman &amp; Wakefield), assumes all expenditures are in Napa County.

(f) BAE estimate, based on location of facilities and visit patterns per Visit Napa Valley survey.

Sources: Cushman & Wakefield, *Napa Valley Lodging Market Study*, 2018; Visit Napa Valley, *2016 Visitor Profile Final Report of Findings*, completed by Destination Analysts, Inc.; U.S. Dept. of Labor, Bureau of Labor Statistics; BAE Urban Economics, 2018.

These direct revenues and expenditures then lead to additional purchases from local suppliers (indirect impacts) and by local households (induced impacts) as expenditures circulate through the local economy of Napa County, in an iterative fashion.<sup>2</sup> These purchases then support additional jobs in the City and County. As shown below, at buildout, new lodging facilities projected to be built in the City of Napa through 2023 are projected to generate more than 6,200 total jobs, over \$318 million in worker compensation, and \$761 million in total output. As might be expected, the most impacted sectors are related to the tourism economy in Napa, including restaurants, hotels and motels, and other food and drinking places, as well as wineries and various types of personal services and retail establishments.

**Table 3: Impacts of Ongoing Operations of New Hotels at Buildout in Napa County**

**Summary Results**

<b><u>Impact Type</u></b>	<b><u>Employment (a)</u></b>	<b><u>Labor Income</u></b>	<b><u>Output</u></b>
Direct Effect	4,556	\$235,850,691	\$534,461,615
Indirect Effect	747	\$37,278,521	\$96,528,180
Induced Effect	945	\$45,307,772	\$129,687,165
<b>Total</b>	<b>6,247</b>	<b>\$318,436,984</b>	<b>\$760,676,960</b>

**Top Ten IMPLAN Sectors by Employment**

<b><u>Top Ten IMPLAN Sectors by Employment</u></b>	<b><u>Employment (a)</u></b>	<b><u>Labor Income</u></b>	<b><u>Output</u></b>
Full-service restaurants	1,837	\$75,920,684	\$124,623,388
Hotels and motels, including casino hotels	1,028	\$80,581,085	\$222,179,404
All other food and drinking places	609	\$23,718,745	\$31,799,628
Personal care services	329	\$9,462,642	\$12,996,422
Other amusement and recreation industries	248	\$8,180,834	\$17,577,934
Wineries	227	\$24,612,561	\$92,519,502
Retail - Miscellaneous store retailers	214	\$7,023,955	\$11,346,789
Retail - Clothing and clothing accessories stores	166	\$4,468,318	\$14,770,777
Real estate	148	\$4,728,151	\$30,005,819
Retail - Food and beverage stores	92	\$4,596,811	\$8,772,844
<b>Total for Top Ten Sectors</b>	<b>4,899</b>	<b>\$243,293,786</b>	<b>\$566,592,506</b>

**Notes:**

Based on assumed "buildout" of 2,112 rooms per Cushman & Wakefield estimates. Direct lodging industry revenue, occupancy, employment estimates also from Cushman & Wakefield. Estimates of revenue for other sectors derived as shown in Table 2. All figures in 2018 dollars.

(a) All worker estimates by annual average workers, which may include both full and part-time jobs.

Sources: IMPLAN; Cushman & Wakefield, *Napa Valley Lodging Market Study*, 2018; Visit Napa Valley, *2016 Visitor Profile Final Report of Findings*, completed by Destination Analysts, Inc.; U.S. Dept. of Labor, Bureau of Labor Statistics; BAE Urban Economics, 2018.

## Impact from Construction of New Lodging Facilities

In addition to the impacts from ongoing operations, the construction of new lodging facilities will support direct jobs and revenues during construction, as well as indirect jobs and sales at

<sup>2</sup> It should be noted that not all indirect revenues and expenditures will be local to Napa County. The IMPLAN model takes this into account. The numbers presented here are for the impacts within the County only.

local suppliers (e.g., building materials) and induced jobs and sales as worker households make purchases locally.

While there will be annual variations for these construction expenditures, the estimated economic impacts shown below are based on average expenditures derived from Cushman & Wakefield estimates for total hard costs. It is also assumed that on average, the construction of a lodging facility will take 12 months, and to be conservative, it is assumed that furniture, fixtures, and equipment (FF&E) and operating supplies and equipment (OS&E) are specialized items purchased outside Napa County. The results of the IMPLAN analysis are shown in Table 4 below. Based on annual average construction costs of approximately \$136 million, the hotels assumed to be constructed from 2018 through 2023 will support 1,223 jobs and \$185 million in total output annually. Most of these jobs will be the direct construction-related jobs.

**Table 4: Annual Average Impacts of Construction of New Hotels in Napa County, 2018-2023**

**Summary Results**

<b><u>Impact Type</u></b>	<b><u>Employment (a)</u></b>	<b><u>Labor Income</u></b>	<b><u>Output</u></b>
Direct Effect	890	\$65,859,947	\$135,965,673
Indirect Effect	86	\$5,537,716	\$15,053,935
Induced Effect	247	\$11,836,649	\$33,881,831
<b>Total</b>	<b>1,223</b>	<b>\$83,234,311</b>	<b>\$184,901,439</b>

<b><u>Top Ten IMPLAN Sectors by Employment</u></b>	<b><u>Employment (a)</u></b>	<b><u>Labor Income</u></b>	<b><u>Output</u></b>
Construction of new commercial structures	890	\$65,859,947	\$135,965,673
Real estate	20	\$637,810	\$4,047,672
Full-service restaurants	16	\$676,273	\$1,110,098
Limited-service restaurants	16	\$461,126	\$1,631,441
Architectural, engineering, & related services	15	\$1,266,709	\$2,470,526
Wholesale trade	14	\$1,168,722	\$3,463,113
Individual and family services	12	\$253,326	\$371,914
Other concrete product manufacturing	9	\$576,505	\$2,032,417
Employment services	8	\$283,912	\$565,968
Retail - General merchandise stores	8	\$247,947	\$656,297
<b>Total for Top Ten Sectors</b>	<b>1,009</b>	<b>\$71,432,276</b>	<b>\$152,315,118</b>

**Notes:**

Based on average annual costs over the 2018-2023 period per Cushman & Wakefield estimates. Soft costs assumed to be approximately 23% of hard costs. Excludes FF&E and OS&E. All figures in 2018 dollars.

(a) All worker estimates by annual average workers, which may include both full and part-time jobs. These are jobs supported during construction period only. Assumes 12-month construction period.

Sources: IMPLAN; Cushman & Wakefield, *Napa Valley Lodging Market Study*, 2018; BAE Urban Economics, 2018.

## Summary of Economic Impacts

Based on the analysis above using the IMPLAN input-output model, new lodging facilities slated for construction in the City of Napa prior to 2024 will generate over 6,200 jobs and \$761 million in annual ongoing economic output across all sectors of the Napa County economy. These permanent benefits will be focused in sectors related to the tourism economy, including restaurants and bars, lodging facilities, and wineries, and represent a six percent increase in employment and a five percent increase in Gross Regional Product over IMPLAN's 2016 baseline estimates for Napa County.

For these same lodging facilities, on average over the 2018 through 2023 period, construction activity will support 1,223 jobs and \$185 million in output annually. Most of these short-term benefits will be in the construction sector.

## Potential Outcomes from Reduced Buildout

The analysis presented in this memorandum is based on full buildout of the 2,112 hotel rooms in the development pipeline identified in the 2018 *Draft Lodging Market Study* prepared by Cushman & Wakefield, and therefore could overstate future economic impacts if this hotel pipeline is not fully built out by 2023. The City of Napa estimates that actual buildout by 2023 could total as few as 1,291 to 1,498 rooms, or approximately 60 to 70 percent of the possible 2,112-room buildout.

If actual buildout by 2023 is equal to approximately 60 to 70 percent of the projected 2,112-room buildout analyzed in this memo, the new hotels could generate an estimated 3,748 to 4,373 jobs and \$456 million and \$532 million in annual ongoing economic output. For these same lodging facilities, on average over the 2018 through 2023 period, construction activity could support an estimated 734 to 856 jobs and \$111 to \$129 million in output annually. These estimates assume that the mix of new hotels mirrors the mix of property types in the full buildout scenario provided by Cushman & Wakefield. To the extent that the mix of property types among hotels constructed by 2023 differs from the mix in the full buildout scenario, the economic impact could differ from these figures. For instance, if luxury hotels constitute a smaller share of the future hotel construction in Napa than anticipated in the Cushman & Wakefield full buildout scenario, the decline in economic impact could be more significant than estimated here. As shown in Table 1, luxury hotels generate more than twice the revenue per room generated by full service and limited/select service hotels, and nearly double the per-room revenue from B&Bs/small inns.

**Table 5: Potential Economic Impact Based on City Buildout Estimates**

<b>Estimated Economic Impact</b>	<b>60 Percent Scenario</b>	<b>70 Percent Scenario</b>
<b>Ongoing Operations</b>		
Employment (a)	3,748	4,373
Labor Income	\$191,062,190	\$222,905,889
Output	\$456,406,176	\$532,473,872
<b>Construction</b>		
Employment (b)	734	856
Labor Income	\$49,940,587	\$58,264,018
Output	\$110,940,864	\$129,431,007

**Notes:**

(a) All worker estimates by annual average workers, which may include both full and part-time jobs.

(b) All worker estimates by annual average workers, which may include both full and part-time jobs. These are jobs supported during the construction period only. Assumes 12-month construction period.

Sources: IMPLAN; Cushman & Wakefield, Napa Valley Lodging Market Study, 2018; Visit Napa Valley, 2016 Visitor Profile Final Report of Findings, completed by Destination Analysts, Inc.; U.S. Dept. of Labor, Bureau of Labor Statistics; City of Napa; BAE Urban Economics, 2018.

## About the IMPLAN Input-Output Model

Economists use regional and national input-output models as a tool to understand the complex interactions among the various parts of an economy. The economic model used in this analysis, IMPLAN (“IMPact analysis for PLANning”), is a PC-based computer software package that automates the process of developing input-output models for regions within the United States. The IMPLAN model is well respected as an industry standard for projecting economic impacts resulting from current or future economic activities often called “events.” In this study, the construction and operations of new lodging facilities make up the “events” that the analysis uses as the IMPLAN model’s inputs.

At the heart of the IMPLAN model is a county-level trade flow called the Social Accounting Matrix (SAM) constructed from the production functions of 536 industries, using data from a variety of sources including the Bureau of Economic Analysis, Bureau of Labor Statistics, and US Census. The SAM uses each county’s observed economic relationships between government, industry, and household sectors, allowing IMPLAN to model payments between industries, between households and industries, between government and industries, and between government and households. Thus, for the specified region of this analysis (Napa County), the input-output table accounts for all of the dollar flows between the different sectors within the economy. IMPLAN then applies county-level price and wage data, as well as considering the availability of goods within Napa County, to estimate the specific impacts to these areas.

Once the economic events have been entered into the model, IMPLAN reports the following types of impacts:

- **Direct Impacts.** Direct impacts refer to the set of producer or consumer expenditures applied to the predictive model for impact analysis. It is the amount of spending available to flow through the local economy. IMPLAN then displays how the local economy will then respond to these initial changes. The direct impacts may equal up to the amount of spending input into the model, depending on a variety of factors.
- **Indirect Impacts.** The indirect impacts refer to the impact of local industries buying goods and services from other local industries. The cycle of spending works its way backward through the supply chain until all money leaks from the local economy, either through imports or by payments to income and taxes. For capital projects this would include payments for construction inputs such as wood, steel, office supplies, and any other non-labor payments that a construction firm would purchase in the building process.
- **Induced Impacts.** The induced impacts refer to an economy's response to an initial change (direct impact) that occurs through re-spending of income according to household spending patterns. When households earn income, they spend part of that income on goods and services, such as food and healthcare. IMPLAN models households' disposable income spending patterns and distributes them through the local economy.

Once the model is applied, IMPLAN generates a series of output tables to show the direct, indirect, and induced impacts within each of the model's 536 sectors. For each of the direct, indirect, and induced impacts, IMPLAN generates values for three primary indicators of economic activity: output, employment, and labor income, defined as follows:

- *Employment* shows the number of workers needed to support the economic activity in the local economy. It should be noted that for annual impacts of ongoing operations, the employment figure shown represents the amount of employment needed to support that activity for a year. Thus, IMPLAN reports the total number of workers required to support the economic activity over the course of a year. In the case of a construction project, IMPLAN reports the number of workers needed to support the economic activity over the life of the project and, thus, it is necessary to divide the total number of employees who would be required to support the project by the estimated duration in years that the project would last. Furthermore, IMPLAN reports the number of jobs based on average output per worker for a given industry within the geography. This is not the same as the number of full-time positions.
- *Labor income* consists of employee compensation including wages, salaries, and additional benefits, as well as proprietor income (i.e., the profits earned by self-employed persons).
- *Output* refers to the total economic value of the project in the local economy.

## Memorandum

**To:** Rick Tooker, Community Development Director, City of Napa

**From:** Sherry Okun-Rudnak, Principal, BAE Urban Economics  
Stephanie Hagar, Vice President, BAE Urban Economics  
Chelsea Guerrero, Associate, BAE Urban Economics

**CC:** Robin Schabes, Economic Development Manager, City of Napa  
Robin Klingbeil, Senior Project Coordinator, Economic Development Division, City of Napa

**Date:** March 28, 2018

**Re:** Napa hotel fiscal impact analysis

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The City of Napa has a significant number of planned and proposed hotels in the development pipeline, which could add an estimated 2,112 hotel rooms to the City's inventory, thereby generating revenue for the City, supporting employment growth, and creating multiplier effects in the local economy, among other impacts. This memo presents the findings of an analysis conducted by BAE Urban Economics (BAE) to estimate fiscal revenue impacts resulting from the future development of the hotels in the known development pipeline. The analysis focuses on revenues to the City's General Fund, as this represents the portion of the City's budget that finances key public services. To pay for these services, the City's General Fund is dependent on discretionary revenue sources such as property taxes, transient occupancy taxes, sales taxes, and business license taxes. In addition to these annual ongoing revenues, this analysis estimates the one-time sales and use tax revenues that would accrue to the City's General Fund during construction of the proposed hotels each year between 2018 and 2023. In tandem with this analysis, BAE is undertaking an economic impact analysis and a labor availability and housing affordability analysis.

### **Methodology and Assumptions**

This analysis is based on the known pipeline of new hotel rooms in the City of Napa at the time of this writing. Although the analysis assumes that all the hotel rooms in the known pipeline will come to fruition, the reality is that the specific timing and development details of individual projects are subject to change and extremely uncertain. It is possible that some projects in the known pipeline may not end up getting built at all.

This analysis relies in large part on information provided in the *Draft Lodging Market Study* that was prepared by Cushman & Wakefield in February 2018. BAE made use of Cushman &

Wakefield's revenue and occupancy forecasts, development cost estimates, and assumptions regarding the anticipated operating performance of the future hotels to estimate the fiscal revenue impacts of the proposed hotels. More information on the methodology that Cushman & Wakefield used to develop these assumptions and estimates can be found in the *Draft Lodging Market Study* report.

To show how General Fund revenues would be impacted over time, this analysis projects the General Fund revenues that would be generated by the proposed hotels in years 2018, 2020, and 2023. All revenue projections are expressed in constant 2018 dollars. Additional methodological details and assumptions are provided in the discussions of individual revenue sources below.

## Hotel Development Pipeline

The current hotel development pipeline and known future application forecast includes 22 lodging properties that could add 2,112 new hotel rooms to the existing lodging supply in the City of Napa if fully built. The Cushman & Wakefield *Draft Lodging Market Study* provides estimates of the timing of development of these new rooms, which is reflected in Table 1 below. Table 1 shows the projected increase in new rooms in Napa by years 2018, 2020 and 2023 compared to the 2017 baseline inventory. As reported in the table, 189 rooms in the pipeline are expected to come to fruition in 2018. That number is anticipated to increase to 479 rooms by 2020, with possible build-out of the 2,112 rooms by 2023.

**Table 1: Projected New Lodging Rooms by Hotel Type, City of Napa**

Hotel Type	Projected Additional Hotel Rooms (a)		
	2018	2020	2023
B&Bs/Small Inns	9	67	102
Limited/Select Service	0	98	556
Full Service	181	314	971
Luxury Hotels and Resorts	0	0	483
<b>Total New Hotel Rooms</b>	<b>189</b>	<b>479</b>	<b>2,112</b>

Note:

(a) Additional hotel rooms compared to 2017 baseline inventory.

Sources: Cushman & Wakefield; BAE, 2018.

## Annually Recurring General Fund Revenues

This section details the methodology for calculating the fiscal revenue impacts of new hotels in the development pipeline and describes their General Fund impacts in years 2018, 2020 and 2023.

### Property Tax

The property tax revenues that accrue to a City are a function of assessed value of property subject to property tax and the City's share of the property tax collected for each parcel. Property in California is subject to a base 1.0 percent property tax rate, which is shared among

various local jurisdictions and special districts. Most properties are also subject to supplemental property taxes to pay for school district bonds or other restricted uses. This analysis evaluates impacts to the City's General Fund, which receives a share of the base 1.0 percent property tax but does not receive revenue from any supplemental taxes.

Table 2 shows the average estimated improvement and land valuation per room for each hotel segment, based on hard construction cost and land value estimates provided in the February 2018 *Draft Lodging Market Study*. As shown, the assessed value for the proposed hotel rooms is expected to range from an estimated \$150,000 per room for bed and breakfasts and small inns to \$800,000 per room for luxury hotels and resorts.

**Table 2: Estimated Assessed Value per Room by Hotel Type, City of Napa**

Hotel Type	Average Assessed Value per Room (a)		
	Improvements (b)	Land	Total
B&Bs/Small Inns	\$115,000	\$35,000	\$150,000
Limited/Select Service	\$150,000	\$40,000	\$190,000
Full Service	\$250,000	\$100,000	\$350,000
Luxury Hotels and Resorts	\$675,000	\$125,000	\$800,000

Note:

(a) Based on development cost estimates provided by Cushman & Wakefield, 2018.

(b) Projected assessed improvement value is based on hard construction costs.

Sources: Cushman & Wakefield; BAE, 2018.

Property tax revenue to the City from the proposed hotels will total an estimated \$110,600 in 2018, \$237,700 in 2020, and approximately \$1.5 million in 2023, as shown in Table 3. These figures are based on the per-room assessed values shown in Table 2 and the projected buildout in each year, resulting in an estimated assessed value for the proposed hotels totaling \$64.5 million in 2018, \$138.7 million in 2020, and \$847.3 million in 2023. Based on information provided by the Napa County Auditor-Controller, BAE estimates that the City of Napa will receive approximately 17.1 percent of the base 1.0 percent property tax revenue generated by the proposed hotels.<sup>1</sup>

<sup>1</sup> The share of property tax allocated to the City of Napa will depend on the Tax Rate Area (TRA) in which each hotel property is located. BAE's estimate of the City's share of property tax represents the average City share of the base 1% property tax in each of the TRAs where planned and proposed hotels would be located, weighted by the number of rooms, after accounting for ERAF.

**Table 3: Projected Property Tax Revenue from Proposed Hotels, City of Napa**

<b>Assessed Value of Proposed Hotels</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
B&Bs/Small Inns	\$1,275,000	\$10,050,000	\$15,300,000
Limited/Select Service	\$0	\$18,620,000	\$105,640,000
Full Service	\$63,262,500	\$109,987,500	\$339,937,500
Luxury Hotels and Resorts	\$0	\$0	\$386,400,000
Total Assessed Value	\$64,537,500	\$138,657,500	\$847,277,500
<b>Property Tax Revenue from Proposed Hotels</b>			
Base 1% Property Tax Revenue	\$645,375	\$1,386,575	\$8,472,775
<b>Total Change in Property Tax Revenue</b>	<b>\$110,633</b>	<b>\$237,694</b>	<b>\$1,452,446</b>

**Assumptions****Projected AV per Room**

B&Bs/Small Inns	\$150,000
Limited/Select Service	\$190,000
Full Service	\$350,000
Luxury Hotels and Resorts	\$800,000

City of Napa Share of 1% Property Tax (a)	17.1%
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**Notes:**

Figures in each year represent the impacts of all hotels added to the Citywide inventory, compared to 2017 baseline inventory.

(a) Represents the average City share of the base 1% property tax in each of the TRAs where planned and proposed hotels would be located, weighted by number of rooms, after accounting for ERAF.

Sources: Cushman & Wakefield; BAE, 2018.

**Property Tax In-Lieu of Vehicle License Fees**

Beginning in FY 2005-2006, the State ceased to provide “backfill” funds to counties and cities in the form of Motor Vehicle In-Lieu Fees (VLF) as it had through FY 2004-2005. As a result of the complicated financial restructuring enacted as part of the State’s budget balancing process, counties and cities now receive revenues from the State in the form of what is known as property tax in-lieu of vehicle license fees, or ILVLF. This State-funded revenue source is tied to a city’s total assessed valuation. In FY 2005-2006, former VLF revenues were swapped for ILVLF revenues, which set the local jurisdiction’s ILVLF “base.” The base increases each year thereafter in proportion to the increase in total assessed valuation within the jurisdiction. For example, if total assessed valuation increases by five percent from one year to the next, the ILVLF base and resulting revenues would increase by five percent.

ILVLF revenues from the proposed hotels would total approximately \$557,600 per year to the City at full buildout of the 2,112 rooms. As shown in Table 4, in FY 2015-16 (the last year for which data are available), the City of Napa received ILVLF revenues of approximately \$7.1 million. Based on the total citywide assessed value of approximately \$10.7 billion, the ILVLF revenues were approximately equal to 0.066% of assessed value. Applying that ratio to the change in assessed value from the proposed hotels results in additional ILVLF revenues of approximately \$42,500 in 2018, \$91,300 in 2020, and \$557,600 in 2023.

**Table 4: Projected Property Tax In-Lieu of Vehicle License Fee Revenue from Proposed Hotels, City of Napa**

<b>ILVLF Impacts from Proposed Hotels</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
Assessed Value of Proposed Hotels	\$64,537,500	\$138,657,500	\$847,277,500
<b>Total Change in ILVLF Revenue</b>	<b>\$42,473</b>	<b>\$91,253</b>	<b>\$557,610</b>
<b>Assumptions</b>			
ILVLF Payment, FY 2015-16			\$7,072,588
Total Secured Assessed Value, FY 2015-16			\$10,746,667,530
ILVLF as % of Total Assessed Value			0.066%

**Note:**

Figures in each year represent the impacts of all hotels added to the Citywide inventory, compared to 2017 baseline inventory.

Sources: City of Napa; BAE, 2018.

**Sales Tax**

The proposed hotels will generate sales tax to the City of Napa as hotel guests make taxable purchases in the City. Taxable transactions that occur in the City of Napa are subject to a 7.75-percent sales tax, which includes the 1.0 percent Bradley-Burns sales tax that accrues to the City of Napa General Fund.

As shown in Table 5, spending by overnight guests in new rooms would generate sales tax revenues totaling approximately \$134,700 in 2018, \$341,200 in 2020, and \$1.5 million in 2023. Overnight guests in the proposed hotels are expected to increase spending in Napa County across a broad range of expenditure categories, including restaurants; wine purchases from stand-alone tasting rooms, wineries, and retail stores; transportation; apparel; and other retail purchases. As described more fully in the 2018 Napa Hotel Study Economic Impact Analysis, BAE estimated year 2023 expenditures of overnight guests in new rooms using data from Visit Napa Valley. BAE made assumptions regarding the typical share in each expenditure category that would be subject to sales tax and the share of taxable sales in each category that would occur within the City of Napa. For a full breakdown of the expenditure estimates, as well as the assumptions regarding the typical share in each category that would be subject to sales tax and the share in each category that would be expected to occur within the City of Napa, refer to Attachment Table A-1 at the end of this document. BAE prorated the total taxable sales estimate for 2023 based on the number of rooms added in each year to estimate total taxable sales in 2018 and 2020.

**Table 5: Projected Sales Tax Revenue from Proposed Hotels, City of Napa**

<b>Sales Tax Impacts from Proposed Hotels</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
Number of Proposed New Hotel Rooms	189	479	2,112
Taxable Expenditures in Napa by Guests in Proposed Hotels (a)	\$13,472,611	\$34,117,563	\$150,370,000
<b>City of Napa Sales Tax Revenue from Guests in Proposed Hotels</b>	<b>\$134,726</b>	<b>\$341,176</b>	<b>\$1,503,700</b>
<b>Assumptions</b>			
Annual Hotel Guest Taxable Sales in Napa per Hotel Room (a)			\$71,189
City of Napa Sales Tax Revenue as a Share of Taxable Sale Price			1.0%

**Notes:**

Figures in each year represent the impacts of all hotels added to the Citywide inventory, compared to 2017 baseline inventory.

(a) Year 2023 Taxable sales estimate based on BAE analysis of data from Visit Napa Valley and the typical share of sales in each category that are subject to sales tax, as shown in the 2018 Napa Hotel Study Economic Impact Analysis. Taxable sales estimates for 2018 and 2020 are prorated based on 2023 total and number of rooms added in each year.

Sources: Visit Napa Valley; BAE, 2018.

**Transient Occupancy Tax**

As shown in Table 6, the proposed hotels would generate additional TOT revenues of approximately \$1.7 million in 2018, \$4.3 million in 2020, and \$26.4 million in 2023. The City of Napa collects a transient occupancy tax (TOT) of twelve percent of gross room revenues from lodging establishments located in the City, which would constitute the primary source of revenue to the City from the proposed hotels.<sup>2</sup> To calculate the TOT revenues that would be attributable to the proposed hotels, BAE utilized occupancy and room rate forecasts that were prepared for hotels in the known development pipeline in the *Draft Lodging Market Study*. The occupancy rates, room rates (2018 dollars), and resulting total room revenues generated by each hotel segment are shown in Table 6.

<sup>2</sup> An additional 2% assessment is collected on behalf of the Tourism Improvement District (TID) to support local tourism programs and activities. These TID funds are reserved for specific uses and do not accrue to the City's General Fund and are therefore excluded from this analysis.

**Table 6: Projected Transient Occupancy Tax Revenue from Proposed Hotels, City of Napa**

<b>Room Revenues (a)</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
<b>B&amp;Bs/Small Inns</b>			
Net New Rooms	9	67	102
Average Daily Rate	\$326.04	\$332.40	\$332.40
Occupancy	65%	63%	64%
RevPar (b)	<u>\$211.86</u>	<u>\$210.37</u>	<u>\$212.74</u>
Annual Room Revenues	\$657,286	\$5,144,527	\$7,920,200
<b>Limited/Select Service</b>			
Net New Rooms	-	98	556
Average Daily Rate	-	\$224.32	\$224.32
Occupancy	-	77%	73%
RevPar (b)	<u>\$0.00</u>	<u>\$173.38</u>	<u>\$163.87</u>
Annual Room Revenues	\$0	\$6,201,661	\$33,256,214
<b>Full Service</b>			
Net New Rooms	181	314	971
Average Daily Rate	\$288.25	\$296.70	\$296.70
Occupancy	70%	72%	70%
RevPar (b)	<u>\$200.63</u>	<u>\$212.41</u>	<u>\$207.51</u>
Annual Room Revenues	\$13,236,054	\$24,363,840	\$73,562,428
<b>Luxury Hotels and Resorts</b>			
Net New Rooms	-	-	483
Average Daily Rate	-	-	\$855.99
Occupancy	-	-	70%
RevPar (b)	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$599.19</u>
Annual Room Revenues	\$0	\$0	\$105,634,496
<b>TOT Revenue Impacts from Proposed Hotels</b>			
Total Annual Room Revenues	\$13,893,340	\$35,710,028	\$220,373,337
City of Napa TOT Rate (c)	12%	12%	12%
<b>Total Change in TOT Revenue</b>	<b>\$1,667,201</b>	<b>\$4,285,203</b>	<b>\$26,444,800</b>

**Notes:**

All figures reported in 2018 dollars. Figures in each year represent the impacts of all hotels added to the Citywide inventory, compared to 2017 baseline inventory.

(a) Average daily rate and occupancy rates are estimates from Cushman & Wakefield, 2018.

(b) Revenue per available room (RevPAR) is calculated by multiplying the average daily rate by the average occupancy. This figure represents the average daily revenue for rooms after accounting for vacancy.

(c) An additional 2% assessment is collected on behalf of the Tourism Improvement District (TID) to support local tourism activities. These TID funds are reserved for specific uses and do not accrue to the City's General Fund, and are therefore excluded from this analysis.

Sources: City of Napa; Cushman & Wakefield; BAE, 2018.

**Business License Tax**

As shown in Table 7, the proposed hotels would generate additional business license revenues of approximately \$18,100 in 2018, \$43,700 in 2020, and \$296,700 in 2023. Napa assesses business license fees on businesses that operate within City limits, with different fee rates based on the type of business. Hotels and motels are assessed business license fees annually at a rate of \$1.00 per every \$1,000 in gross annual receipts. To estimate total gross annual receipts of proposed hotels in the pipeline, BAE relied on sample operating statements

provided by Cushman & Wakefield that provided estimates of the total share of non-room revenue that would typically be generated by hotels in each segment. BAE used the ratio of rooms revenue to total operating revenue to estimate the total revenue of the proposed hotels in years 2018, 2020, and 2023.

**Table 7: Projected Business License Fee Revenue from Proposed Hotels, City of Napa**

<b>Annual Room Revenue</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
B&Bs/Small Inns	\$657,286	\$5,144,527	\$7,920,200
Limited/Select Service	\$0	\$6,201,661	\$33,256,214
Full Service	\$13,236,054	\$24,363,840	\$73,562,428
Luxury Hotels and Resorts	\$0	\$0	\$105,634,496
<b>Total Annual Hotel Revenue</b>			
B&Bs/Small Inns	\$670,700	\$5,249,517	\$8,081,836
Limited/Select Service	\$0	\$6,308,913	\$33,831,347
Full Service	\$17,438,807	\$32,099,921	\$96,920,195
Luxury Hotels and Resorts	\$0	\$0	\$157,899,097
<b>Business License Revenue from Proposed Hotels</b>			
Total Annual Hotel Revenue from Proposed Hotels	\$18,109,507	\$43,658,351	\$296,732,474
<b>Total Business License Revenue from Proposed Hotels (a)</b>	<b>\$18,110</b>	<b>\$43,658</b>	<b>\$296,732</b>
<b>Assumptions</b>			
<b>Room Revenue as a Share of Total Revenue (b)</b>			
B&Bs/Small Inns	98.0%		
Limited/Select Service	98.3%		
Full Service	75.9%		
Luxury Hotels and Resorts	66.9%		

**Notes:**

All figures in 2018 dollars. Figures in each year represent the impacts of all hotels added to the Citywide inventory, compared to 2017 baseline inventory.

(a) Hotels and motels in the City of Napa are subject to annual business license fees equal to \$1 per \$1,000 of gross annual receipts.

(b) Estimate provided by Cushman & Wakefield, 2018. Estimate reflects the general operating revenue performance of a given hotel segment.

Sources: City of Napa; Cushman & Wakefield; BAE, 2018.

**Summary of Annually Recurring General Fund Revenues**

Table 8 summarizes the projected General Fund revenue impacts in the three years covered by the preceding analysis. As shown in the table, the proposed hotels would increase General Fund revenues by approximately \$2.0 million in 2018. This number would increase to just under \$5.0 million in 2020. At full buildout of the existing hotel pipeline, the proposed hotels would generate approximately \$30.3 million annually in new revenues to the City's General Fund.

**Table 8: Summary of General Fund Revenues from Proposed Hotels, City of Napa**

<b>Revenue Source</b>	<b>2018</b>	<b>2020</b>	<b>2023</b>
Property Tax	\$110,633	\$237,694	\$1,452,446
ILVLF	\$42,473	\$91,253	\$557,610
Sales Tax	\$134,726	\$341,176	\$1,503,700
Transient Occupancy Tax	\$1,667,201	\$4,285,203	\$26,444,800
Business License Tax	\$18,110	\$43,658	\$296,732
<b>Total General Fund Revenues</b>	<b>\$1,973,143</b>	<b>\$4,998,984</b>	<b>\$30,255,288</b>
<b>General Fund Revenues per Room</b>	<b>\$10,426</b>	<b>\$10,431</b>	<b>\$14,324</b>

Source: BAE, 2018.

### One-Time General Fund Revenues from Construction

Development of the proposed hotels will generate sales and use taxes from construction materials and furniture, fixtures, and equipment (FF&E). Sales and use taxes from construction typically accrue to the county sales and use tax pool, unless the construction contractor obtains a seller's sub-permit for the project site.<sup>3</sup> For the purposes of this analysis, BAE conservatively assumed that the contractors hired to construct the proposed hotels will not obtain seller's sub-permits to designate the City of Napa as the point of sale, and therefore sales and use taxes from construction materials and FF&E will accrue to the County pool.

BAE calculated the total taxable hard construction costs and costs for FF&E for hotels in each segment using the development cost estimates provided by Cushman & Wakefield shown in Table 9. Based on BAE experience with prior projects, BAE estimated that approximately half of the total hard construction costs would be comprised of taxable materials, with the remainder comprised of construction labor not subject to sales or use tax. Soft construction costs were excluded, as these costs are typically not subject to sales or use tax.

**Table 9: Taxable Materials and FF&E Costs by Hotel Type, City of Napa**

<b>Hotel Type</b>	<b>Hard Cost per Room (a)</b>	<b>Taxable Materials Cost per Room (b)</b>	<b>FF&amp;E Cost per Room (a)</b>	<b>Total Taxable Materials &amp; FF&amp;E Costs per Room</b>
B&Bs/Small Inns	\$115,000	\$57,500	\$15,000	\$72,500
Limited/Select Service	\$150,000	\$75,000	\$20,000	\$95,000
Full Service	\$250,000	\$125,000	\$25,000	\$150,000
Luxury Hotels and Resorts	\$675,000	\$337,500	\$150,000	\$487,500

Notes:

(a) Estimates provided by Cushman &amp; Wakefield, 2018.

(b) Represents the portion of overall hard costs that would be subject to sales and use taxes. Analysis assumes 50 percent of total hard costs are paid to materials.

Sources: Cushman &amp; Wakefield; BAE, 2018.

<sup>3</sup> Contractors can obtain a seller's sub-permit only if the value of the contract totals \$5 million or more.

Based on the total taxable costs shown in Table 9, taxable materials and FF&E costs for the proposed hotels are expected to equal approximately \$441.4 million. Consequently, over the course of the buildout period, construction activity from the proposed hotels would generate approximately \$4.4 million in total construction-related sales and use taxes (one percent of \$441.4 million) to the County sales and use tax pool. The share of the \$4.4 million in use taxes that would accrue to the City of Napa would depend on the City's share of total countywide taxable sales at the time of construction. As of the third quarter of 2017, the City's share of the sales and use tax in the Countywide pool was 45.4 percent. Based on this proportion, the City of Napa could expect to receive approximately \$2.0 million of the \$4.4 million in construction-related use taxes generated by the proposed hotels over the entire course of the full buildout period (years 2018 to 2023), as shown in Table 10.

**Table 10: Construction Sales and Use Taxes from Proposed Hotels, 2018-2023**

<b>Hotel Rooms Added to Citywide Inventory</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total 2018-2023</b>
B&Bs/Small Inns	9	22	37	35	0	0	102
Limited/Select Service	0	0	98	276	108	74	556
Full Service	181	102	32	382	275	0	971
Luxury Hotels and Resorts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>483</u>	<u>0</u>	<u>483</u>
Total	189	124	167	693	866	74	2,112
<b>Taxable Materials from Construction</b>							
B&Bs/Small Inns	\$616,250	\$1,595,000	\$2,646,250	\$2,537,500	\$0	\$0	\$7,395,000
Limited/Select Service	\$0	\$0	\$9,310,000	\$26,220,000	\$10,260,000	\$7,030,000	\$52,820,000
Full Service	\$27,112,500	\$15,225,000	\$4,800,000	\$57,300,000	\$41,250,000	\$0	\$145,687,500
Luxury Hotels and Resorts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>235,462,500</u>	<u>0</u>	<u>235,462,500</u>
Total Taxable Materials & FF&E Costs	27,728,750	16,820,000	16,756,250	86,057,500	286,972,500	7,030,000	441,365,000
<b>Sales and Use Taxes from Construction</b>							
1% Bradley-Burns Sales & Use Tax to County Pool	\$277,288	\$168,200	\$167,563	\$860,575	\$2,869,725	\$70,300	\$4,413,650
<b>City of Napa Sales &amp; Use Tax Revenue</b>	<b>\$125,954</b>	<b>\$76,402</b>	<b>\$76,113</b>	<b>\$390,904</b>	<b>\$1,303,532</b>	<b>\$31,933</b>	<b>\$2,004,839</b>
<b>Assumptions</b>							
<b>Taxable Materials from Construction</b>							
B&Bs/Small Inns		\$72,500					
Limited/Select Service		\$95,000					
Full Service		\$150,000					
Luxury Hotels and Resorts		\$487,500					
City of Napa Share of County Sales and Use Tax Pool (a)		45.4%					

Note:

(a) Based on the City's share of the County pool in the third quarter of 2017.

Sources: Cushman &amp; Wakefield; BAE, 2018.

## Potential Outcomes from Reduced Buildout

The analysis presented in this memorandum is based on full buildout of the 2,112 hotel rooms in the development pipeline identified in the 2018 *Draft Lodging Market Study* prepared by Cushman & Wakefield, and therefore could overstate future revenues if this hotel pipeline is not fully built out by 2023. The City of Napa estimates that actual buildout by 2023 could total as few as 1,291 to 1,498 rooms, or approximately 60 to 70 percent of the possible 2,112-room buildout.

If actual buildout by 2023 is equal to approximately 60 to 70 percent of the projected 2,112-room buildout analyzed in this memo, the annual General Fund revenues to the City from the new hotels could total an estimated \$18.2 million to \$21.2 million. The one-time General Fund revenues to the City from construction use taxes could total an estimated \$1.2 million to \$1.4 million between 2018 and 2023. These estimates assume that the mix of new hotel property types mirrors the mix of property types in the full buildout scenario provided by Cushman & Wakefield. To the extent that the mix of property types among hotels constructed by 2023 differs from the mix in the full buildout scenario, the fiscal impact could differ from these figures. For instance, if luxury rooms constitute a smaller share of future hotel construction in Napa than anticipated in the Cushman & Wakefield full buildout scenario, the annual revenues to the City could be lower than estimated here. As shown in Table 6, luxury hotels generate almost half of the room revenues and associated transient occupancy tax from the 2,112 proposed hotels.

## Summary of Findings

The data and analysis presented in this memorandum support the following findings (all figures in 2018 dollars):

**At full buildout, the proposed hotels would generate approximately \$30.3 million per year in revenue to the City of Napa, mostly from transient occupancy tax.** Revenues to the City would include approximately \$26.4 million in transient occupancy tax, \$2.0 million in property tax and property tax in-lieu of vehicle license fees, \$1.5 million in sales tax revenues, and \$297,000 in business license fee revenue. These revenues would recur on an ongoing annual basis following full buildout and stabilization, assuming continued operation at 2023 rent and occupancy levels.

**The annual revenues to the City would increase during the buildout period as more hotels are constructed and achieve stabilized operations.** Estimated revenues from transient occupancy tax, property tax, property tax in-lieu of vehicle license fees, sales tax, and business license fees during the buildout period would total approximately \$2.0 million in 2018, \$5.0 million in 2020, and \$30.3 million in 2023.

**In addition to these ongoing annual revenues, construction of the proposed hotels would generate construction use taxes, some of which would accrue to the City.** Between 2018 and

2023, the City will receive an estimated total of \$2.0 million in sales and use taxes from construction if all proposed hotels are constructed. These one-time revenues resulting from construction activity would not recur in following years after hotels are built. Estimated use tax revenues from hotel construction in individual years between 2018 and 2023 would vary substantially, from an estimated \$32,000 in 2023 to \$1.3 million in 2022.

**Revenues to the City from a partial buildout scenario could be considerably lower than the revenues from full buildout of the hotel pipeline.** City staff estimate that approximately 60 to 70 percent of the 2,112 rooms analyzed in this memorandum will be built. This reduced buildout scenario could generate an estimated \$18.2 million to \$21.2 million in annual revenues to the City and \$1.2 million to \$1.4 million in one-time construction use taxes to the City during the buildout period. Actual revenues to the City could be further reduced from the estimated revenues from full buildout if the hotel properties that are constructed include a lower proportion of luxury properties than are included in the full buildout scenario.

## Attachment A: Visitor Expenditures

**Table A-1: Visitor Expenditures Generated by New Lodging Facilities**

<u>Expenditure Category</u>	<u>Daily Expenditures Per Person</u>		<u>New Lodging Visitor Expenditures</u> (c)	<u>Taxable Percent of Sales</u> (d)	<u>Taxable Sales in County</u> (e)	<u>Percent of Taxable Sales in City</u> (f)	<u>Taxable Sales in City</u>
	<u>2016 \$</u> (a)	<u>2017 \$</u> (b)					
Restaurants	\$93.10	\$96.10	\$120,100,000	100%	\$120,100,000	75%	\$90,075,000
Wine (bottles purchased at wineries)	\$70.89	\$73.17	\$91,400,000	100%	\$91,400,000	0%	\$0
Tasting room fees	\$21.51	\$22.20	\$27,700,000	0%	\$0	0%	\$0
Entertainment & sightseeing	\$13.32	\$13.75	\$17,200,000	0%	\$0	0%	\$0
Clothing & jewelry	\$21.45	\$22.14	\$27,700,000	100%	\$27,700,000	75%	\$20,775,000
Other retail purchases	\$16.48	\$17.01	\$21,300,000	100%	\$21,300,000	75%	\$15,975,000
Wine (bottles purchased at stand-alone tasting rooms)	\$12.94	\$13.36	\$16,700,000	100%	\$16,700,000	50%	\$8,350,000
Gas, parking & local transportation	\$7.89	\$8.14	\$10,200,000	80%	\$8,160,000	75%	\$6,120,000
Car rental (if rented in Napa only)	\$4.67	\$4.82	\$6,000,000	100%	\$6,000,000	100%	\$6,000,000
Wine (bottles purchased at retail stores)	\$3.18	\$3.28	\$4,100,000	100%	\$4,100,000	75%	\$3,075,000
All other	\$9.26	\$9.56	\$11,900,000	0%	\$0	75%	\$0
<b>Totals</b>	<b>\$274.69</b>	<b>\$283.53</b>	<b>\$354,300,000</b>		<b>\$295,460,000</b>		<b>\$150,370,000</b>
<b><u>Assumptions</u></b>							
Number of Estimated New Rooms (2018-2023)	2,112	from Cushman & Wakefield					
Visitors per Room	2.3	from Visit Napa Valley					
Number of Visitor Days	365						
Occupancy Factor	70.5%	estimate weighted by facility type, based on Cushman & Wakefield					
Total Visitor Days	1,249,743	calculation					
Days Spent in Napa Valley	3.0	from Visit Napa Valley					
Number of Visitors	416,581	calculation					
Annual Average CPI, 2016	266.344	U.S. Bureau of Labor Statistics					
Annual Average CPI, 2017	274.924	U.S. Bureau of Labor Statistics					
Inflation Factor, 2016-2017	1.032214	calculation					

(a) From Cushman &amp; Wakefield.

(b) Adjusted using the Consumer Price Index for the San Francisco Bay Area.

(c) Daily expenditures times total visitor days.

(d) Based on BAE estimate of type of items/services purchased.

(e) Per source of estimate (Cushman &amp; Wakefield), assumes all expenditures are in Napa County.

(f) BAE estimate, based on location of facilities and visit patterns per Visit Napa Valley survey.

Sources: Cushman & Wakefield, *Napa Valley Lodging Market Study*, 2018; Visit Napa Valley, *2016 Visitor Profile Final Report of Findings*, completed by Destination Analysts, Inc.; U.S. Dept. of Labor, Bureau of Labor Statistics; BAE Urban Economics, 2018.

## Memorandum

**To:** Rick Tooker, Community Development Director, City of Napa

**From:** Sherry Okun-Rudnak, Principal, BAE Urban Economics  
Stephanie Hagar, Vice President, BAE Urban Economics  
Laura Sellmansberger, Associate, BAE Urban Economics

**CC:** Robin Schabes, Economic Development Manager, City of Napa  
Robin Klingbeil, Senior Project Coordinator, Economic Development Division, City of Napa

**Date:** March 28, 2018

**Re:** Hotel Industry Labor Availability and Housing Affordability Analysis

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### Introduction

The City of Napa has a significant number of planned and proposed hotels in the development pipeline, which could add an estimated 2,112 hotel rooms to the City's inventory and support an increase in hotel employment in the City. In February 2018, Cushman & Wakefield completed the *Draft Napa Valley Lodging Market Study* for the City of Napa's Community Development Department. This report included information on existing lodging conditions, including occupancy, revenues, employment per room, and the current inventory by type of facility, as well as projections of future trends in supply and demand in the City and County's lodging industry. Among other findings, the draft study found that "The availability of employees to fill service level and managerial positions is a consistent anxiety of hotel operators and is impacted by the cost of housing in the area relative to the pay scale for hotel employees." While these trends are expected to continue, the study reported that developers have continued to pursue new hotel projects and these trends have not prevented hotels from operating successfully. The following analysis evaluates some of the challenges associated with attracting a hotel labor pool within the high-cost housing market in the Napa region and the wider Bay Area region, as well as the extent to which the housing market in Napa and the surrounding area may be able to absorb the new employee households that the new hotels will generate.

### Methodology and Assumptions

The analysis presented in this memorandum evaluates potential future hotel worker demand, the availability of hotel workers within the existing labor pool, estimated hotel worker wages

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and household incomes, and housing costs within the local commute shed. The analysis uses data from the following sources:

- The February 2018 Cushman & Wakefield Napa Valley Lodging Market Study provided the number of hotel rooms in each hotel category currently proposed in the City of Napa.
- The City of Napa provided information on the number of units in the City's market-rate residential development pipeline as well as affordable units in the pipeline for Napa and other cities in Napa County.
- The U.S. Bureau of Labor Statistics (BLS) provided statistics about the Napa County labor force, including the distribution of hotel jobs among various job categories and the average incomes earned by workers in those categories. BAE used these job category distribution percentages and mean wages to estimate the wages of hotel workers in Napa County.
- This analysis uses the BLS Consumer Price Index (CPI) Calculator to adjust the BLS May 2016 wage estimates to 2017 dollars.
- This analysis uses data from the U.S. Census Bureau American Community Survey (ACS) and Esri regarding average household sizes and unemployment rates for the City of Napa and the communities within commuting distance of the City of Napa.
- To determine the wage and area median income (AMI) distribution of hotel employee households in Napa, BAE prepared cross tabulations of Public Use Microdata Samples (PUMS) from the 2011-2015 American Community Survey.
- This analysis uses 2017 household income limits set by the California Department of Housing and Community Development (HCD) and uses housing affordability guidelines set by the U.S. Department of Housing and Urban Development (HUD).
- The Workforce Alliance of the North Bay provided information about the number of union hotel workers in Napa County via Emsi, a labor force statistics database curated from government data sources that include the BLS Quarterly Census of Employment and Wages (QCEW) program and Occupational Employment Statistics (OES) program. The Workforce Alliance also provided information about employee recruiting and retention initiatives being implemented by hotels in Napa.
- BAE utilized an ArcGIS Pro service area "drive time" analysis tool to identify geographies within a 30- and 60-minute driving commute from Downtown Napa to estimate unemployment and housing costs within communities in Napa's commute shed.
- CoStar provided average two-bedroom apartment rental rates, vacancy rates, and inventory information from the fourth quarter of 2017 in selected cities within commuting distance of the City of Napa.
- CoreLogic and DQ News provided median home sale prices in selected cities within commuting distance of the City of Napa.

This analysis is based on the hypothetical full buildout of 2,112 hotel rooms and the distribution of these hotel rooms by property type as shown in Cushman and Wakefield's *Draft*

*Napa Valley Lodging Market Study.* However, as noted in the Market Study, actual buildout may differ from the current projected buildout, potentially resulting in fewer hotel rooms, more hotel rooms, or different types of hotel rooms than described in the Market Study and in this analysis. To the extent that actual buildout differs from the current projected buildout, the findings provided in this report may overestimate or underestimate total hotel worker demand and associated housing needs.

## Hotel Worker Demand

As shown in Table 1, the City of Napa's hotel development pipeline includes a total of 2,112 hotel rooms of various types, which would create demand for an estimated 1,055 additional hotel workers in Napa at full buildout of the pipeline projects. The estimated ratio of workers per hotel room varies by property type, with the highest ratio for luxury hotels and resorts.

**Table 1: Estimated Number of Workers by Proposed Hotel Type, City of Napa, 2023**

Hotel Type	Employment-to-Room Ratio (a)			Proposed Number of Rooms	Estimated Number of Employees
	Low	High	Avg.		
B&Bs/Small Inns	0.20	0.50	0.35	102	36
Limited/Select Service	0.23	0.30	0.27	556	147
Full Service	0.30	0.75	0.53	971	510
Luxury Hotels and Resorts	0.50	1.00	0.75	483	362
<b>Total</b>				<b>2,112</b>	<b>1,055</b>

Note:

Table applies current average employment-to-room ratios in the City of Napa for each hotel type to the number of rooms proposed for each hotel type to arrive at an employment estimate. Proposed hotel data excludes speculative projects.

(a) Employment ratios provided by Cushman & Wakefield.

Sources: STR, 2017; Cushman & Wakefield, 2018; BAE, 2018.

## Hotel Worker Households

Since most households in Napa include more than one worker, the City can expect that new hotel employment will result in demand for fewer than one housing unit per worker. According to the US Census American Community Survey, as of 2016 Napa County had 71,169 workers living in households and 36,430 households with at least one worker, averaging approximately 1.95 workers per household with workers. Therefore, this analysis estimates the number of hotel worker households by dividing the total number of workers by 1.95. As shown in Table 2, full buildout of the 2,112 proposed hotel rooms would result in an estimated 540 net additional households by 2023. The estimated net increase in households is lower in years 2018 through 2022, prior to full buildout.

**Table 2: Estimated Number of Worker Households from Proposed Hotels in the City of Napa**

Hotel Type	2018	2019	2020	2021	2022	2023
<b>Proposed Number of Rooms</b>						
B&Bs/Small Inns	9	31	67	102	102	102
Limited/Select Service	0	0	98	374	482	556
Full Service	181	282	314	696	971	971
Luxury Hotels and Resorts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>483</u>	<u>483</u>
<b>Total</b>	<b>189</b>	<b>313</b>	<b>479</b>	<b>1,172</b>	<b>2,038</b>	<b>2,112</b>
<b>Estimated Number of Workers (a)</b>						
B&Bs/Small Inns	3	11	23	36	36	36
Limited/Select Service	0	0	26	99	128	147
Full Service	95	148	165	366	510	510
Luxury Hotels and Resorts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>362</u>	<u>362</u>
<b>Total</b>	<b>98</b>	<b>159</b>	<b>214</b>	<b>500</b>	<b>1,036</b>	<b>1,055</b>
<b>Estimated Number of Worker Households</b>						
B&Bs/Small Inns	2	5	12	18	18	18
Limited/Select Service	0	0	13	51	65	75
Full Service	49	76	84	187	261	261
Luxury Hotels and Resorts	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>185</u>	<u>185</u>
<b>Total</b>	<b>50</b>	<b>81</b>	<b>110</b>	<b>256</b>	<b>530</b>	<b>540</b>

**Assumptions****Estimated Number of Employees/Room (b)**

B&Bs/Small Inns	0.35
Limited/Select Service	0.27
Full Service	0.53
Luxury Hotels and Resorts	0.75

Workers per household (c)	1.95
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**Note:**

(a) Table applies current average employment-to-room ratios in the City of Napa for each hotel type to the number of rooms proposed for each hotel type to arrive at an employment estimate. Proposed hotel data excludes speculative projects.

(b) Cushman & Wakefield provided a range of ratios of employees per rooms by hotel type. This analysis uses the midpoint of each range.

(c) Workers per household assumption reflects the average number of workers in each household with at least one worker, based on 2016 ACS estimates for Napa County.

Sources: ACS, 2016; Cushman & Wakefield, 2018; BAE, 2018.

**Hotel Worker Income**

In order to understand the ability of hotel worker households to obtain housing, this analysis evaluates typical hotel worker incomes and hotel worker household incomes. Worker income data provide information on typical wages for individual hotel workers. Household income data provide information on typical household incomes for hotel workers, which includes income earned by any other members of hotel workers' households in addition to each hotel worker's individual income.

***Hotel Worker Wage Distribution***

According to the BLS May 2016 National Industry-Specific Occupational Employment Report for the Accommodation industry, the weighted average annual income for workers employed in hotels in Napa County was approximately \$42,800 in 2017. This is slightly more than half of the median annual income for a three-person household in Napa County (\$81,900) and just above the income limit for a very low-income, three-person household in the County (\$41,900), based on data from HCD. Table 3 shows the distribution of employees of Napa County hotels by job type and the average annual incomes within each job category in 2017. The annual incomes shown in Table 3 are the figures reported by BLS, which assume full-time employment, and therefore may overstate annual incomes for part-time workers.

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**Table 3: Incomes of Hotel Employees in Napa County, 2017**


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<b>Job Category</b>	<b>Percent of Hotel Industry Jobs (a)</b>	<b>Employee Annual Income (b)</b>
Building and Grounds Cleaning and Maintenance	28.2%	\$31,237
Food Preparation and Serving Related	25.0%	\$32,022
Office and Administrative Support	18.4%	\$43,325
Personal Care and Service	7.7%	\$31,939
Installation, Maintenance, and Repair	5.1%	\$54,278
Management	4.3%	\$127,034
Sales and Related	2.9%	\$44,151
Protective Service	2.3%	\$57,994
Production	2.1%	\$43,955
Other (c)	4.1%	\$62,781
<b>Total / Weighted Average</b>	<b>100.0%</b>	<b>\$42,819</b>

**Notes:**

(a) Percentages are from U.S. Bureau of Labor Statistics (BLS) May 2016 National Industry-Specific Occupational Employment Report for the Accommodation industry.

(b) Mean annual wages were from the BLS May 2016 Occupational Employment Statistics (OES) Survey for the Accommodation Industry in Napa County and adjusted for inflation to reflect 2017 wages. The annual incomes reported by BLS are based on full-time employment, and may overstate annual income for part-time workers.

(c) Includes all occupations that do not individually comprise at least 2% of total hotel industry jobs.

Sources: United States Bureau of Labor Statistics, 2016; California Department of Housing and Community Development, 2017; BAE, 2018.

***Hotel Worker Household Income Distribution***

Individual worker incomes are not necessarily indicative of worker household incomes, largely because households often have more than one employed person and employed people within a given household could earn significantly different individual annual incomes. In addition, while the individual worker incomes shown above are based on full-time employment, many workers are employed on a part-time basis.

BAE estimated the distribution of household income among for Napa hotel workers using a detailed and rich data set published by the U.S. Census known as the Public Use Microdata Sample (PUMS). Derived from a five percent sample of all households per the American Community Survey, and available for defined areas (termed Public Use Microdata Areas or PUMAs) with a population of 100,000 or more, these data allow one to cross tabulate variables such as industry of employment and household income. BAE queried the PUMS dataset to identify the household income distribution for hotel workers that live in the Napa County PUMA and the North Sonoma County PUMA. The distribution is based on the income categories defined by the California Department of Housing and Community Development (HCD), which are defined by a formula based largely on the percentage of the Area Median Income (AMI), adjusted for household size and income levels relative to housing costs.<sup>1</sup>

If the workers in the proposed hotels in Napa are similar to existing hotel workers living in the Napa County and North Sonoma County PUMAs with respect to their household incomes, the income distribution for hotel worker households shown in Table 4 below suggests that almost half of the workers anticipated to be generated by new hotels would be in extremely low-, very low-, or low-income households, while another 24 percent would be in moderate income households. The figures below indicate that full buildout of the projected hotel development may generate an estimated 152 above moderate-income households, 130 moderate-income households, 136 low-income households, 71 very low-income households, and 51 extremely low-income households.

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<sup>1</sup> The income distribution for hotel worker households that live in the Napa County and North Sonoma County PUMAs may differ somewhat from the household income distribution for people that work in the City of Napa. However, this analysis assumes that the income distribution for hotel worker households living in these areas is generally consistent with the household income distribution for hotel workers employed in the City of Napa.

**Table 4: Household Incomes of Future Workers Employed in Proposed Napa City Hotels, 2017**

<b>Income Group</b>	<b>Income as a Percentage of Area Median Income (a)</b>	<b>Estimated Percent of Hotel Workers (b)</b>	<b>Estimated Household Income Distribution for Hotel Worker Households, 2023</b>
Extremely Low	≤ 30% AMI	10%	51
Very Low	> 30 ≤ 50% AMI	13%	71
Low	> 50% ≤ 80% AMI	25%	136
Moderate	> 80% ≤ 120% AMI	24%	130
Above Moderate	> 120% AMI	<u>28%</u>	<u>152</u>
<b>Total</b>		<b>100%</b>	<b>540</b>

Note:

(a) This analysis uses area median income (AMI) estimates from the California Department of Housing and Community Development. AMI varies by household size. This analysis controls for household size to ensure that sample households are categorized into the appropriate income groups.

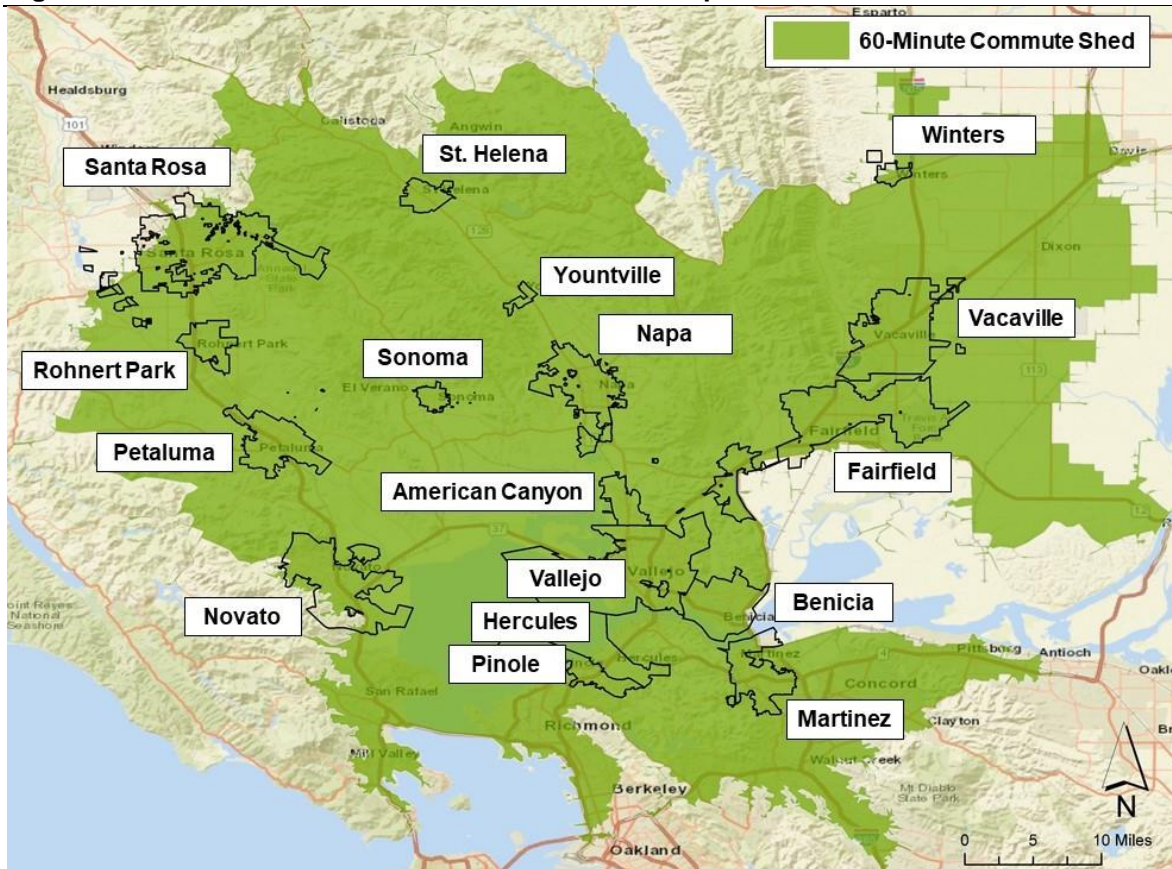
(b) Based on a cross tabulation of Public Use Microdata Samples (PUMS) from the 2011-2015 American Community Survey, using data for residents of the Napa County PUMA and North Sonoma County PUMA that work in the accommodations industry. These incomes were compared to household income limits published by the California Department of Housing and Community Development, to determine the percentage of households falling into each income category. The analysis controlled for household size, to address the varying HCD income limits for each household size.

Sources: Census, American Community Survey Public-Use Microdata Sample (PUMS) 2011-2015; CA Dept. of Housing and Community Development, 2015; BAE, 2018.

## City of Napa Commute Shed

While some people who work in hotels in the City of Napa will live in Napa, many will live elsewhere due to housing cost or availability, personal preference, proximity to family or a spouse's place of employment, or other factors. BAE conducted a geospatial analysis using the ArcGIS "drive time" analysis tool to define the geographic areas from which commuters can reach the City of Napa by car within 30 minutes and 60 minutes. As shown in Figure 1, the 30-minute drive time includes the Cities of American Canyon, Napa, St. Helena, and Yountville in Napa County; Sonoma in Sonoma County; Vallejo in Solano County; and portions of unincorporated Napa County, Sonoma County, and Solano County. In addition to these areas, the 60-minute drive time includes additional cities and unincorporated areas in Alameda, Contra Costa, Marin, Napa, Solano, Sonoma, and Yolo Counties, as shown in Figure 2. However, drive times can vary substantially based on traffic conditions, and commutes from some of these areas may take longer than indicated by the figures below during heavy traffic periods.



**Figure 2: 60 Minute Commute Shed from Downtown Napa**

### Labor Force Participation within the Commute Shed

The unemployment rate is relatively low among residents living within the 30- and 60-minute commutes sheds from Downtown Napa, suggesting that the potential to pull labor for new hotels from the existing unemployed labor force in the area is relatively limited. As shown in Table 5, the unemployment rate is 5.5 percent (representing 6,994 unemployed people) within the 30-minute commute shed and 5.1 percent (representing 54,370 people) within the 60-minute commute shed.

The current unemployment rates in the 30- and 60-minute commute sheds are comparable to the current national natural rate of unemployment,<sup>2</sup> which was estimated to be 4.74 percent<sup>3</sup> in the fourth quarter of 2017. Natural unemployment is the default unemployment level caused by mismatches in the skills of individuals looking for jobs and the skills demanded by employers aiming to fill open positions (known as structural unemployment) as well as temporarily unemployed people who are new to the job market or are searching for a better job (known as frictional unemployment). If the actual rate of unemployment closely mirrors the

<sup>2</sup> Also known as the Non-Accelerating Inflation Rate of Unemployment, or NAIRU.

<sup>3</sup> U.S. Congressional Budget Office via Federal Reserve Bank of St. Louis, August 2017.  
<https://fred.stlouisfed.org/series/NROUST>

natural rate of unemployment, it is a sign that the skills of many of the currently unemployed people do not match the open positions.

**Table 5: Unemployed Residents Within a 30- and 60-Minute Commute of Napa, 2017**

	Civilian Labor Force (a)	Unemployment Rate	Unemployed Residents (b)
<b>0-30 Minute Commute Shed (c)</b>	127,521	5.5%	6,994
<b>0-60 Minute Commute Shed (c)</b>	1,060,974	5.1%	54,370

Notes:

(a) Civilian Population Age 16+ in Labor Force

(b) Unemployed Population Age 16+

(c) BAE utilized an ArcGIS service area "drive time" analysis tool to identify the geographies within a 30- and 60-minute driving commute from Downtown Napa.

Sources: ArcGIS Pro, 2018; Esri, 2017; BAE, 2018.

The figures in Table 5 indicate that unemployed residents within Napa's 60-minute commute shed are not likely to supply enough labor for the planned and proposed hotels in Napa. Within the 30-minute commute shed, the estimated 1,055 workers needed to fill jobs at the new planned and proposed hotels is equivalent to 15 percent of the current unemployed population. While the unemployment rate and number of unemployed persons may change during the buildout period for the proposed hotels, and the actual number of workers needed could vary based on actual hotel buildout, these figures nonetheless suggest that the 30-minute commute shed does not have enough workers with the skills and the willingness to work in the hotel industry given the low unemployment rate in the area. The low unemployment rate suggests that most unemployed individuals within a 30-minute distance of Napa are unemployed because of a mismatch between their skills or professional objectives and the major industries of employment in the area, including hotels, leaving a minimal number of unemployed residents to support a net increase in hotel jobs. To the extent that the 30-minute commute shed does include workers with the skills and willingness to work in the hotel industry, hotels in the City of Napa will be competing with other nearby hotels, and potentially employers in other industries, to attract these workers.

Hotel operators may also face significant barriers in attracting workers from the 30- to 60-minute commute shed, despite the larger pool of unemployed residents in this wider area. Within the 60-minute commute shed of Napa, it is possible that there are enough unemployed residents with the skills and willingness to work in the hotel industry to fill the new hotel jobs. However, considering the relatively low salaries of many hotel workers, many people living 45, 50, or 60 minutes away from Napa may realize little to no financial gain from accepting hotel jobs in Napa. Long commutes cause wear-and-tear on vehicles, high fuel expenses, and time away from family, which can translate into higher childcare expenses. Residents that commute to Napa by bus likely face longer commute times than those that commute from the same distance by car, and a low share of people that work in Napa commute by public transportation (1.8 percent according to 2016 ACS data). The economic tradeoffs that a low-income worker within the larger commute shed would have to make in order to work in Napa

may simply be too high. The new housing in the development pipeline for the City of Napa and nearby communities (discussed in the following section) may be essential to provide unemployed workers in the 60-minute commute shed with opportunities to move closer to new hotel jobs in Napa over the course of the buildout period for the hotels and for hotel operators to attract a labor force that lives within a reasonable commute distance.

### **Housing Market Conditions within the Commute Shed**

Hotel operators in Napa have expressed concern that the region's high housing costs may limit their ability to attract workers in the future, particularly for lower-paying jobs. While housing markets in the Napa area and the greater Bay Area region are characterized by high costs and limited availability, numerous planned residential projects in the City of Napa could significantly improve hotel workers' ability to secure affordable housing near Napa hotels. The following section discusses residential rental rates and home sale prices within commuting distance of Napa to assess the affordability of the regional housing stock for hotel worker households. Most of the analysis presented in this section models housing affordability based on California Department of Housing and Community Development income limits for a three-person household, reflecting the average household size in Napa County of 2.78, according to ACS estimates.<sup>4</sup>

#### ***Planned and Proposed Residential Development***

The City of Napa anticipates that future hotel development in Napa will occur concurrently with the development of residential units in the City as well as in surrounding communities, and has significantly more residential units in the development pipeline than would be necessary to accommodate the estimated 540 worker households that the proposed hotels would generate. As shown in Table 6, there are 2,265 residential units in the development pipeline, including 1,773 market-rate units and 492 units at various levels of affordability. Of the 492 affordable units, 212 are in the current pipeline, with the remaining units in the City's longer-term pipeline.

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<sup>4</sup> The average household size of 2.78 is different from the average number of workers per household cited in a different section of this report (1.95) because the average household size includes members of each household that are not workers.

**Table 6: City of Napa Residential Development Pipeline, March 2018**

<b>Affordability Level</b>	<b>Number of Units</b>
Affordable Units	492
<i>Current Pipeline</i>	212
<i>Longer-Term Pipeline</i>	280
Market-Rate Units	1,773
<i>Current Pipeline</i>	1,018
<i>Longer-Term Pipeline</i>	755
<b>Total</b>	<b>2,265</b>

**Notes:**

Information provided by the City of Napa.

Source: City of Napa, 2018; BAE, 2018.

The figures in Table 6 suggest that future residential development in Napa could provide enough housing units to absorb the worker housing demand that the proposed hotels will create. The number of residential units in the pipeline far exceeds the estimated 540 households associated with the workforce for the new hotels (see Table 2), including the projected affordable housing need. Once built, the units in the pipeline would include some units with restricted rents or sale prices serving households with moderate or lower incomes as well as market-rate units that will likely be priced within the affordability range for moderate and above-moderate income households. New market-rate units may also indirectly increase the availability of lower-cost housing by providing housing options for moderate- and above-moderate income households to move from an existing and potentially more affordable unit to a new higher-cost unit, leaving the lower-cost unit available to a new household.

In addition to the units shown in Table 6, developers could propose additional residential projects during the buildout period for the proposed hotels, further increasing the supply of new residential units. Moreover, to the extent that hotels are able to employ existing residents or some of the proposed hotels are ultimately not be constructed, the number of net new units needed to house the proposed hotels' workforce could be somewhat lower than 540 units. Consequently, future residential construction in Napa may keep pace with or exceed housing demand from the projected increase in hotel workers.

However, continued efforts to produce affordable and market-rate housing in Napa and surrounding communities may be necessary to ensure that housing growth matches employment growth over time. Some projects that are currently in the development pipeline may never be built, though these projects could be replaced with different projects in the pipeline. Furthermore, at least some residential units in the pipeline are likely to house existing residents that are currently in need of affordable housing, leaving fewer residential units for new hotel workers. Other units will likely house new residents that do not work in Napa's hotels, including people that work outside of Napa. The wide range of potential

outcomes associated with both the residential and hotel pipeline projects results in a need for ongoing efforts to ensure construction of residential units at a range of affordability levels.

In part, Napa's ability to keep pace with housing demand will depend on whether housing construction in surrounding communities will match the need created by employment growth in those communities. The Napa County Cities of American Canyon, Calistoga, and St. Helena have a combined total of at least 172 affordable units in the development pipeline, along with market-rate units, suggesting that these cities are planning for future residential growth that will increase the region's overall housing supply.

### ***Rental Housing Affordability***

Table 7 shows the maximum amount that a three-person household within each AMI level can afford to pay for rental housing (including rent and utilities) without being considered cost-burdened. According to U.S. Department of Housing and Urban Development (HUD) standards, households paying more than 30 percent of their gross incomes for housing costs are considered "cost-burdened." The table demonstrates that an extremely low-income, three-person household can afford monthly rental costs of up to \$630 per month, while a moderate-income, three-person household can afford monthly rental costs of up to \$2,458 per month.

**Table 7: Maximum Monthly Rental Housing Costs for a Household of Three in Napa County, 2017**

<b>Household Income Group (a)</b>	<b>AMI Level</b>	<b>Max. Annual Income (a)</b>	<b>Maximum Monthly Rental Housing Costs (b)</b>
Extremely Low Income	≤ 30%	\$25,200	\$630
Very Low Income	> 30 ≤ 50%	\$41,900	\$1,048
Low Income	> 50% ≤ 80%	\$67,050	\$1,676
Moderate Income	> 80% ≤ 100%	\$81,900	\$2,048
Moderate Income	> 100% ≤ 120%	\$98,300	\$2,458
Above Moderate Income	> 120%	N/A	N/A

**Notes:**

(a) Based on 2017 HCD Income limits for a family of three.

(b) The maximum amount that a household can spend on monthly housing costs without being considered "cost burdened" is thirty percent of gross monthly income, as per HUD guidelines.

Sources: California Department of Housing and Community Development, 2017; BAE 20

Table 8 shows the average asking rents and vacancy rates from CoStar for a two-bedroom apartment in all cities within a 30-minute commuting distance of Napa and selected cities within a 60-minute commuting distance of Napa. Within a 30-minute commute, the average market-rate two-bedroom rent ranges from \$1,337 in Saint Helena to \$1,940 in Napa. Within a 60-minute commute, the average market-rate two-bedroom rent ranges from \$1,046 in Winters to \$2,248 in Hercules. Vacancy rates are relatively low across all cities within the commute shed, ranging from two percent to five percent. The low rental vacancy rates in these cities suggests a shortage of available units, even for households that can afford

market-rate rents. This housing unit shortage is indicative of trends across the Bay Area and California, and is not unique to the Napa commute shed. Nonetheless, it does illustrate the potential difficulty of hotel workers in obtaining appropriate housing.

**Table 8: Average Asking Rents and Vacancy Rates for Market-Rate Two-Bedroom Units in Selected Cities Within a 30- and 60-Minute Commute of the City of Napa, 2017**

City	Avg. Asking Rent	Total 2BR Units	Vacancy Rate	Vacant 2BR Units
<b>Within 30-Minute Commute (a)</b>				
Napa	\$1,940	1,765	3.2%	56
American Canyon	\$1,611	208	2.6%	5
Sonoma	\$1,652	365	4.1%	15
St. Helena	\$1,337	50	2.8%	1
Vallejo	\$1,603	2,023	4.2%	85
Yountville	\$1,370	16	3.1%	0
<b>Within 60-Minute Commute (a)</b>				
Benicia	\$1,728	466	2.9%	14
Fairfield	\$1,602	2,898	5.0%	145
Hercules	\$2,248	144	4.3%	6
Martinez	\$1,926	968	4.0%	39
Novato	\$2,099	1,370	3.1%	42
Petaluma	\$2,218	1,548	2.0%	31
Pinole	\$2,247	334	5.2%	17
Rohnert Park	\$1,944	1,694	3.8%	64
Santa Rosa	\$1,873	5,377	3.3%	177
Vacaville	\$1,672	3,175	4.5%	143
Winters	\$1,046	45	2.0%	1

Note:

(a) BAE utilized an ArcGIS service area "drive time" analysis tool to identify cities within a 30- and 60-minute driving commute from Downtown Napa. All cities within a 30-minute drive time are shown in the table, as well as selected cities in the 60-minute commute shed. Unincorporated areas within these commute sheds were omitted from this analysis due to unavailability of data.

Sources: ArcGIS Pro; CoStar; BAE, 2018.

Market-rate rents in most communities within Napa's commute shed exceed the rent that household with incomes equal to 80 percent of AMI or less, including many hotel worker households, can afford. Table 9 shows the difference between the average cost of a two-bedroom apartment in each of these cities and the maximum monthly rental housing budget for a household of three at each AMI level. In all cities analyzed, the average two-bedroom apartment is unaffordable to a three-person household earning less than 50 percent of AMI. For low-income households earning between 50 and 80 percent of AMI, the average two-bedroom apartment is affordable only in Sonoma, Yountville, and Winters. However, as Table 8 shows, these cities have few units available: there are only fifteen vacant two-bedroom units in Sonoma, zero in Yountville, and one in Winters.

Moderate income households are in a better position to find affordable rental housing than are lower-income households, but may still face a shortage of supply due to low vacancy rates. A household of three earning between 80 and 100 percent of AMI can afford the average two-bedroom apartment in all six of the cities analyzed within the 30-minute commute shed, and in six of the eleven cities within the 60-minute commute shed. A household of three earning between 100 and 120 percent of AMI can afford the average two-bedroom apartment in all seventeen of the cities analyzed. However, due to the low vacancy rates in these communities, many of these households may nonetheless face difficulty in securing suitable rental housing.

**Table 9: Affordability of Market-Rate Rental Housing for a Household of Three Within a 30- and 60-Minute Commute of the City of Napa, 2017**

Difference Between Affordable Rent and Avg. 2BR Rent by AMI Level (a)							
	Avg. 2 BR Rent	Utility Costs (b)	≤ 30% AMI	> 30 ≤ 50% AMI	> 50% ≤ 80% AMI	> 80% ≤100% AMI	> 100% ≤120% AMI
<b><i>Within 30-Minute Commute (c)</i></b>							
Napa	\$1,940	\$94	(\$1,404)	(\$987)	(\$358)	\$14	\$424
American Canyon	\$1,611	\$94	(\$1,075)	(\$658)	(\$29)	\$343	\$753
Sonoma	\$1,337	\$110	(\$817)	(\$400)	\$229	\$601	\$1,011
St. Helena	\$1,652	\$94	(\$1,116)	(\$699)	(\$70)	\$302	\$712
Vallejo	\$1,603	\$126	(\$1,099)	(\$682)	(\$53)	\$319	\$729
Yountville	\$1,370	\$94	(\$834)	(\$417)	\$212	\$584	\$994
<b><i>Within 60-Minute Commute (c)</i></b>							
Benicia	\$1,728	\$126	(\$1,224)	(\$807)	(\$178)	\$194	\$604
Fairfield	\$1,602	\$112	(\$1,084)	(\$667)	(\$38)	\$334	\$744
Hercules	\$2,248	\$113	(\$1,731)	(\$1,314)	(\$685)	(\$314)	\$97
Martinez	\$1,926	\$113	(\$1,409)	(\$992)	(\$363)	\$9	\$419
Novato	\$2,099	\$111	(\$1,580)	(\$1,163)	(\$534)	(\$163)	\$248
Petaluma	\$2,218	\$110	(\$1,698)	(\$1,281)	(\$652)	(\$281)	\$130
Pinole	\$2,247	\$113	(\$1,730)	(\$1,313)	(\$684)	(\$313)	\$98
Rohnert Park	\$1,944	\$110	(\$1,424)	(\$1,007)	(\$378)	(\$7)	\$404
Santa Rosa	\$1,873	\$110	(\$1,353)	(\$936)	(\$307)	\$65	\$475
Vacaville	\$1,672	\$104	(\$1,146)	(\$729)	(\$100)	\$272	\$682
Winters	\$1,046	\$151	(\$567)	(\$150)	\$479	\$851	\$1,261

Notes:

(a) Household Incomes per 2017 HCD Income Limits. Per HUD guidelines; a household that spends more than 30% of its income on rental housing costs is considered housing cost-burdened.

(b) Based on monthly utility allowances outlined by the local housing authority of each jurisdiction.

(c) BAE utilized an ArcGIS service area "drive time" analysis tool to identify cities within a 30- and 60-minute driving commute from Downtown Napa. All cities within a 30-minute drive time are shown in the table, as well as selected cities in the 60-minute commute shed. Unincorporated areas within these commute sheds were omitted from this analysis due to unavailability of data.

Sources: California Department of Housing and Community Development, 2017; ArcGIS Pro, 2018; CoStar, 2018; Housing Authority of the City of Napa, 2017; City of Vallejo Housing & Community Development Division, 2018; Solano County Housing Authority, 2018; City of Vacaville Housing Authority, 2017; Sonoma County Community Development Division, 2017; City of Fairfield Housing Authority, 2017; Housing Authority of the County of Contra Costa, 2017; Housing Authority of the County of Marin, 2017; Yolo County Housing Authority, 2017; BAE, 2018.

### Homeownership Affordability

Table 10 illustrates the maximum amount that a three-person household within each AMI level can afford to pay for a home, including financing costs, insurance, and property taxes. The following homeownership affordability analysis assumes that the maximum amount that a household can afford to spend on homeownership is 35 percent of monthly gross income.<sup>5</sup>

**Table 10: Affordable For-Sale Single Family Home Prices for a Three-Person Household in Napa County, 2017**

AMI Level	Max. Annual Income	Amount Avail. For Housing	Monthly Payments					Upfront Mortgage Insurance	Down-Payment	Max. Affordable Home Price
			Principal & Interest	Prop. Insurance	Prop. Taxes	Monthly Mortgage Insurance	Total Monthly Payment			
≤ 30% AMI	\$25,200	\$735	\$549	\$35	\$99	\$52	\$735	\$2,003	\$4,152	<b>\$118,626</b>
> 30 ≤ 50% AMI	\$41,900	\$1,222	\$912	\$58	\$164	\$87	\$1,222	\$3,331	\$6,903	<b>\$197,226</b>
> 50% ≤ 80% AMI	\$67,050	\$1,956	\$1,460	\$94	\$263	\$140	\$1,956	\$5,331	\$11,049	<b>\$315,691</b>
> 80% ≤ 100% AMI	\$81,900	\$2,389	\$1,783	\$114	\$321	\$171	\$2,389	\$6,511	\$13,495	<b>\$385,576</b>
> 100% ≤ 120% AMI	\$98,300	\$2,867	\$2,140	\$137	\$386	\$205	\$2,867	\$7,814	\$16,195	<b>\$462,724</b>

#### Ownership Cost Assumptions

% of Income for Housing Costs 35% of gross annual income

#### Mortgage Terms:

Down payment (b) 3.50% of home value  
 Annual interest rate (c) 4.03% fixed  
 Loan term 30 years  
 Upfront mortgage insurance (d) 1.75% of mortgage  
 Annual mortgage insurance (d) 0.55% of mortgage  
 Annual homeowners insurance rate (e) 0.36% of home value  
 Annual property tax rate 1.00% of home value

#### Notes:

(a) Income limits per 2017 HCD Income Limits.

(b) Based on the assumption that the mortgage is FHA-backed

(c) Based on average 30-year fixed interest rates as reported by Freddie Mac on February 23, 2018

(d) Monthly mortgage insurance premium (MIP) rate as reported by the U.S. Department of Housing and Urban Development in January 2017.

(e) Based on an average of quoted insurance premiums for homes from the Homeowners Premium Survey, published by the California Department of Insurance.

Sources: California Department of Housing and Community Development, 2017; Freddie Mac, 2018; U.S. Department of Housing and Urban Development, 2017; California Department of Insurance, Homeowners Premium Survey, 2017; BAE, 2018.

Table 11 shows the median home sale prices in December 2016 and December 2017 in selected cities within a 30- and 60-minute commute of Napa. Within the 30-minute commute shed, prices in December 2017 ranged from \$377,500 in Vallejo to \$925,000 in St. Helena; within a 30- to 60-minute commute they ranged from \$400,000 in Winters to \$777,500 in Novato.

<sup>5</sup> Due to the equity returns that homeownership can generate, this analysis sets the affordability threshold for homeownership slightly higher than for rental housing.

**Table 11: Median Home Sale Prices in Selected Cities Within a 30- and 60-Minute Commute of the City of Napa, Dec. 2016 and Dec. 2017**

City	Homes Sold	Median Sale Price Dec. 2016	Median Sale Price Dec. 2017	Y-O-Y Percent Change
<b>Within 30-Minute Commute (a)</b>				
Napa	94	\$528,250	\$650,050	23.1%
American Canyon	19	\$500,000	\$477,500	-4.5%
Sonoma	31	\$775,000	\$692,500	-10.6%
St. Helena	10	\$875,000	\$925,000	5.7%
Vallejo	160	\$360,000	\$377,500	4.9%
Yountville	4	\$1,277,500	\$796,000	-37.7%
<b>Within 60-Minute Commute (a)</b>				
Benicia	37	\$580,000	\$530,000	-8.6%
Fairfield	144	\$415,000	\$425,000	2.4%
Hercules	34	\$452,000	\$602,500	33.3%
Martinez	66	\$452,500	\$568,500	25.6%
Novato	54	\$725,000	\$777,500	7.2%
Petaluma	42	\$636,000	\$665,000	4.6%
Pinole	16	\$515,000	\$522,500	1.5%
Rohnert Park	44	\$515,000	\$525,000	1.9%
Santa Rosa	188	\$474,000	\$582,909	23.0%
Vacaville	163	\$405,000	\$439,500	8.5%
Winters	5	\$329,000	\$400,000	21.6%

Note:

(a) BAE utilized an ArcGIS service area "drive time" analysis tool to identify cities within a 30- and 60-minute driving commute from Downtown Napa. All cities within a 30-minute drive time are shown in the table, as well as selected cities in the 60-minute commute shed. Unincorporated areas within these commute sheds were omitted from this analysis due to unavailability of data.

Sources: ArcGIS Pro; CoreLogic via DQ News, 2017; BAE, 2018.

Homeownership costs in most communities within Napa's commute shed tend to be significantly higher than the affordable home sale price for the large share of hotel workers with incomes equal to 120 percent of AMI or below. Table 12 shows the difference between the December 2017 median home sale price in cities within the commute shed and the maximum affordable home sale price for a household of three at each AMI level. In all cities analyzed, the median home sale price is unaffordable to a three-person household earning less than 80 percent of AMI. A household of three earning between 80 and 100 percent of AMI can afford the median home only in Vallejo, while a household of three earning between 100 and 120 percent of AMI can afford the median home in four out of the seventeen cities analyzed: Vallejo, Fairfield, Vacaville, and Winters.

**Table 12: Affordability of Homes Sold Within a 30- and 60-Minute Commute of the City of Napa for a Household of Three, December 2017**

Difference Between Affordable Sale Price & Median Sale Price by AMI Level (a)						
City	Median Home Sale Price, Dec. 2017	≤ 30% AMI	> 30 ≤ 50% AMI	> 50% ≤ 80% AMI	> 80% ≤ 100% AMI	> 100% ≤ 120% AMI
<b>Within 30-Minute Commute (b)</b>						
Napa	\$650,050	(\$531,424)	(\$452,824)	(\$334,359)	(\$264,474)	(\$187,326)
American Canyon	\$477,500	(\$358,874)	(\$280,274)	(\$161,809)	(\$91,924)	(\$14,776)
St. Helena	\$692,500	(\$573,874)	(\$495,274)	(\$376,809)	(\$306,924)	(\$229,776)
Sonoma	\$925,000	(\$806,374)	(\$727,774)	(\$609,309)	(\$539,424)	(\$462,276)
Vallejo	\$377,500	(\$258,874)	(\$180,274)	(\$61,809)	\$8,076	\$85,224
Yountville	\$796,000	(\$677,374)	(\$598,774)	(\$480,309)	(\$410,424)	(\$333,276)
<b>Within 60-Minute Commute (b)</b>						
Benicia	\$530,000	(\$411,374)	(\$332,774)	(\$214,309)	(\$144,424)	(\$67,276)
Fairfield	\$425,000	(\$306,374)	(\$227,774)	(\$109,309)	(\$39,424)	\$37,724
Hercules	\$602,500	(\$483,874)	(\$405,274)	(\$286,809)	(\$216,924)	(\$139,776)
Martinez	\$568,500	(\$449,874)	(\$371,274)	(\$252,809)	(\$182,924)	(\$105,776)
Novato	\$777,500	(\$658,874)	(\$580,274)	(\$461,809)	(\$391,924)	(\$314,776)
Petaluma	\$665,000	(\$546,374)	(\$467,774)	(\$349,309)	(\$279,424)	(\$202,276)
Pinole	\$522,500	(\$403,874)	(\$325,274)	(\$206,809)	(\$136,924)	(\$59,776)
Rohnert Park	\$525,000	(\$406,374)	(\$327,774)	(\$209,309)	(\$139,424)	(\$62,276)
Santa Rosa	\$582,909	(\$464,283)	(\$385,683)	(\$267,218)	(\$197,333)	(\$120,185)
Vacaville	\$439,500	(\$320,874)	(\$242,274)	(\$123,809)	(\$53,924)	\$23,224
Winters	\$400,000	(\$281,374)	(\$202,774)	(\$84,309)	(\$14,424)	\$62,724

**Notes:**

(a) Per 2017 HCD Income Limits. "Affordable sale price" is defined here as a price that would enable the owner household to spend 35% or less of gross monthly income on housing costs.

(b) BAE utilized an ArcGIS service area "drive time" analysis tool to identify cities within a 30- and 60-minute driving commute from Downtown Napa. All cities within a 30-minute drive time are shown in the table, as well as selected cities in the 60-minute commute shed. Unincorporated areas within these commute sheds were omitted from this analysis due to unavailability of data.

Sources: CoreLogic via DQ News, 2017; BAE, 2018.

## Initiatives in Place to Attract and Retain Hotel Workers

In addition to the new residential development in Napa's pipeline, hotels themselves, and through workforce development groups, are investing in programs aimed at bolstering the local hotel labor force over the long term. These programs would alleviate some of the new housing demand by training existing residents to work in local hotels. Conversations with the Workforce Alliance of the North Bay revealed that three Napa hotels – including the Meritage Resort and Spa, which plans to complete a 145-room expansion project in Summer 2018 – have partnered with the Napa Valley Unified School District and the Workforce Alliance on a program aimed at increasing interest among high school students in careers in the hospitality industry. The program provides students with training and internship opportunities that can become full-time job opportunities upon graduation. The Workforce Alliance of the North Bay

is also in conversations with Napa Valley College about adding a hospitality-focused customer service class to its curriculum.

### Potential Outcomes from Reduced Buildout

The analysis presented in this memorandum is based on full buildout of the 2,112 hotel rooms in the development pipeline identified in the 2018 *Draft Lodging Market Study* prepared by Cushman & Wakefield, and therefore could overstate future increases in hotel worker employment and households if this hotel pipeline is not fully built out by 2023. The City of Napa estimates that actual buildout by 2023 could total as few as 1,291 to 1,498 rooms, or approximately 60 to 70 percent of the possible 2,112-room buildout.

If actual buildout by 2023 is equal to approximately 60 to 70 percent of the projected 2,112-room buildout analyzed in this memo, the new hotels could generate a need for an estimated 633 to 739 workers, assuming that the mix of new hotel properties mirrors the mix of property types in the full buildout scenario provided by Cushman & Wakefield. The housing need associated with these workers would total approximately 324 to 378 units, and an estimated 155 to 181 of these households would be extremely low-, very low-, or low-income households. To the extent that the mix of property types among hotels constructed by 2023 differs from the mix in the full buildout scenario, the number of workers and worker households could differ from these figures. For instance, if luxury rooms constitute a smaller share of future hotel construction in Napa than in the full buildout scenario, the employment associated with new hotel construction could total fewer than 633 employees.

### Findings

The data and analysis presented in this memorandum support the following findings:

**The anticipated development of new lodging in Napa will generate a need for new workers and new worker housing.** Napa's currently proposed hotel projects will generate demand for an estimated 1,055 additional hotel workers between 2018 and 2023, or over the course of eventual build-out. The estimated housing need for these workers totals 540 units. During this period, the estimated increase in individual years ranges from 20 additional workers with a need for 10 housing units in 2023 to 535 additional workers with a need for 274 housing units in 2022. If actual buildout by 2023 results in construction of only 60 to 70 percent of the 2,112-unit pipeline, as projected by City staff, the new hotels will generate demand for an estimated 633 to 739 workers, with a need for approximately 324 to 378 housing units.

**Napa hotels will need to draw at least a portion of the needed new workers from new members of the labor force and workers moving from outside of the area, generating demand for housing units.** The low unemployment rate in Napa's commute shed suggests that Napa hotels will not be able to fill the majority of new jobs by employing existing unemployed residents. Within Napa's 30-minute commute shed, there are relatively few unemployed residents, and therefore hotels are unlikely to find a significant number of unemployed

residents that have the right mix of skills and professional goals to fill the majority of the new hotel jobs. Although communities within the 30- to 60-minute commute shed may have enough unemployed residents that are well-suited for hotel jobs to meet the labor needs of new hotels, many potential workers in these communities may find that the cost of the long commute is too high given the relatively low wages for hotel workers.

While existing unemployed residents and residents that are shifting between jobs can be expected to fill a portion of new hotel jobs, Napa hotels will also need to draw labor from existing residents who are joining the labor force and workers that are currently living outside of the area. This will generate demand for new housing units, as some existing residents entering the workforce will want or need to form new households (for example, a recent high school graduate moving out of their parents' home) and as workers that currently live elsewhere relocate when taking jobs in the area.

**The City of Napa has a sizable residential development pipeline, which may be essential to hotel operators' ability to attract and retain workers for new hotel jobs over time.** In the absence of new residential construction, high housing costs and low rental vacancies in the Napa area could impact hotel worker attraction and retention in Napa. Current average market-rate rates and median home sale prices indicate that low-income households in the region face immense challenges in finding housing that is proportionate to their incomes. While moderate-income households are typically more able to afford rental housing, a shortage of available supply severely limits these households' ability to find suitable housing and home sale prices tend to be significantly higher than moderate-income households can afford. Because most hotel worker households have low- to moderate-incomes, hotel operators may find that the development of new housing at a range of income levels and other strategies to provide workforce housing are critical to long-term operations.

The City of Napa is making substantial progress toward increasing the City's housing supply at a range of income levels, thereby mitigating the challenges that hotel workers would otherwise face in the current housing market. The City of Napa has 1,529 housing units in the development pipeline, almost three times the number of units that would be needed to absorb the estimated number of worker households associated with the development of the proposed hotels. Moreover, the development pipeline includes 492 affordable residential units, almost twice the estimated number of extremely low-, very low-, and low-income worker households that development of the full pipeline of proposed hotels would generate and significantly more than the number of units that would be needed if fewer hotel rooms are constructed. As residential units are constructed concurrent with the development of new hotels in the City over time, these units can help to address housing availability and affordability challenges that might otherwise arise, as well as address existing housing shortfalls.

**While high housing costs and housing shortages are not unique to the hotel industry or the City of Napa, Napa does face some distinctive challenges in terms of housing affordability.**

Throughout the Bay Area, high housing costs continue to push low-income households further away from employment centers, increase vehicle congestion, and create hiring difficulties across industries. In Napa County, many of the key employment industries – including the hotel, restaurant, and agricultural sectors – rely on low-cost labor, and therefore have a particular need for housing to serve extremely low-, very low-, and low-income households in order to support the workforce. The prevalence of industries that rely on low-cost labor results in intense competition for affordable units. In addition, hotel jobs and jobs in other industries that offer relatively low wages may face additional challenges in recruiting workers that would need to commute long distances, enhancing the importance of locating affordable housing near employment locations.

Moreover, the 2014 Napa earthquake and major fires in Napa and Sonoma Counties in 2017 severely impacted the housing stock that serves Napa’s workforce. To the extent that property owners rebuild rental housing that was damaged in these natural disasters, new units will likely consist of higher-end homes that will be unaffordable to many lower-income households. These natural disasters could therefore further exacerbate the housing affordability and availability challenges faced by Napa’s hotel workers, creating a need for continued efforts to ensure future production of affordable housing.

The City’s significant residential pipeline, which is anticipated to result in a considerable number of new housing units at a range of affordability levels, concurrent with the development of new hotels, will be critical to addressing these challenges moving forward.

**Partnerships between major employers, local government, and affordable housing developers could be key to continuing to address the shortage of workforce housing.** Employers located in tight housing markets are increasingly recognizing the imperative to proactively support or provide housing opportunities for their employees. Major employers such as Google, Facebook, and others have responded by providing donations to support the development of affordable housing, investing in market-rate housing, sponsoring development applications to secure approvals for market-rate and affordable housing, and developing corporate housing, among other strategies. The growing focus on expanding housing resources by major firms underscores its utility as a “double bottom line” strategy. In addition to helping employees secure stable housing, an investment in employer-assisted housing resources also serves the employer by improving employee recruitment and retention, lowering turnover costs, and strengthening community relations.