Hotel Sustainability Benchmarking Index 2023:

Carbon, Energy, and Water

by Eric Ricaurte and Rehmaashini Jagarajan

Executive Summary

For the ninth consecutive year, the annual Cornell Hotel Sustainability Benchmarking research reveals a general decrease in energy and water usage among the participating hotels. The decrease is largely associated with the pandemic which shook the world and granted no exception to the hospitality industry. For this reason, low occupancy rates and hotel closures are major contributors to the decreased energy and water consumption reported, as compared to the 2019 calendar year data set. A total of 25,576 hotels from 31 international hotel groups took part by providing data on their water and energy use for the calendar year of 2021. Of the total, around 50 percent of the data set comes from hotels in the United States. The data do not account for individual hotel amenities in terms of energy or water usage, but they do allow hoteliers and potential visitors to see benchmarks for different hotel segments and locations. Despite the challenges faced by the industry, the study continues to present a strong picture of the industry's performance over the years. To provide a more robust and useful data set of the industry for benchmarking and to promote improvements in energy, water, and carbon performance, the authors encourage additional hotels and hotel chains to take part in CHSB2024, especially those in the lower tier segments, which are not as strongly represented.

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Introduction

The Cornell Hotel Sustainability Benchmarking (CHSB) study's ninth annual report (dated 2023) summarizes the findings of the data analysis from calendar year 2021. The study is being carried out through a partnership between the Cornell University Center for Hospitality Research, participating hotels, Greenview, and an industry advisory group. This report is an update to the CHSB2021 report, which was published with data from calendar year 2019. The industry's largest and most recent data collection for benchmarking activities related to energy, water, and emissions is presented in this year's study—accompanied by an overview on the year-over-year change in multiple different segments and by the index tool itself. The data set remains freely available for download from the Cornell Center for Hospitality Research. This year's study presents historical patterns across like-for-like change over the previous year, expands the data set's geographic coverage, and builds upon the existing methodology. Despite a 19-percent increase in the number of hotels participating in the data collection process, the final global dataset only saw a modest 6-percent increase to a total of 16,299 hotels worldwide. This occurred as the pandemic resulted in temporary closures and fluctuating occupancy rates for many hotels in 2021. Nonetheless, the available data still provide valuable insights that can be used for research and decision-making purposes. Data collection is now underway for CHSB2024 with the collection of 2022 calendar year data.

CONTENTS

EXHIBIT 1

Participating organizations

Accor	MGM Resorts International
AINA Hospitality	Pacific Beachcomber
Centara Hotels & Resorts	Park Hotel Group
Chatham Lodging Trust	Park Hotels & Resorts
CPG Hospitality	Pebblebrook Hotel Trust
DiamondRock Hospitality Company	Playa Hotels & Resorts
Four Seasons	Radisson Hotel Group
Hilton Worldwide	RLJ Lodging Trust
Hong Kong & Shanghai Hotels	Rosewood Hotels & Resorts
Horwath HTL Asia Pacific	Ryman Hospitality Properties
Hyatt Hotels Corporation	Six Senses Hotels Resorts Spas
InterContinental Hotels Group	Sunstone Hotel Investors
KHP Capital Partners	The Ascott Limited
KSL Capital Partners	Wyndham Hotels & Resorts
Mandarin Oriental Hotel Group	Xenia Hotels & Resorts
Marriott International	

OVERVIEW

The ninth edition of this annual study is designed as an index and presented with the following objectives:

- To establish credible benchmarks based on industry-specific segmentation and metrics on a global scale;
- To conduct industry data analysis using a confidential data set; and
- To advance toward commonly defined, transparent, and rigorous methods for modeling energy, water, and carbon, based on hotel-specific attributes and data that are applicable and current.

The index provides benchmark ranges for twelve distinct measures related to energy, water, and carbon emissions across 646 geographies, defined by metro area, country, climate zone, and other geographic or political boundaries. Additionally, the data are segmented by various hotel types, including asset class, location, type of hotel, market segment, and classification by stars. This comprehensive approach ensures that the benchmarking data are both detailed and relevant for a wide range of stakeholders in the hospitality industry.

CHSB2023 Updates

The latest edition of the index features the following enhancements to the data collection and segmentation processes:

- Enhanced the data collection process to collect data on renewable energy consumption, renewable energy credits (RECs), and the like.
- Increased the granularity of segmentation in validity testing for energy and water by including additional fences for hotels in Thailand, United Kingdom, Canada, India, and Mexico.
- Enhanced the segmentation of hotel type by dividing further into hotel type and location type.
- Further broke down all hotels into all resorts and all non-resorts.
- Enhanced segmentation using STR segments, such as Luxury Resort, Luxury Non-Resort, Upper Upscale Resort, etc.
- Segmented validity testing to flag outliers within each portfolio.
- Segmented validity testing to cater for seasonal resorts (e.g., winter/summer), as well as hotels that do not operate for all 12 months to normalize based on energy and water usage per month for the number of months corresponding to each season/operating day.
- Introduced location-based and market-based emissions, reconfiguring the model to output location-based emissions for the public data set and market-based emissions for the hotel benchmark report.

CHSB2023 Updates (continued)

- Added Measure 1a to output lower and upper quartile for HCMI Rooms Footprint per Occupied Room.
- Enhanced Measure 1 (HCMI Rooms Footprint per Occupied Room) and Measure 7 (HCMI Meeting Space Footprint per Hour per Square Meter) by calculating them based on the latest HCMI 2.0 methodology.
- Changed emission factor sources for 41 countries and 20 energy types, affecting the calculations for Measures 1, 2, 3, 4, and 7. (Refer to Appendix 1, page 23 for more details.)
- Added a new tab in the index tool to provide the definitions of different segmentations within the tool (e.g., resort, urban, upscale, etc.).
- Increased the number of geographies from 583 to 646 across metro areas, regions, countries, and climate zones.
- Increased the number of hotels for which benchmarks have been outputted to 16,299 (increase of 6.3%).
- Increased the number of hotels participating to 25,576 (increase of 19.3%).

USES OF THE CHSB INDEX

The CHSB Index and its output data set serve multiple purposes, benefiting both the participants and the industry. These purposes include the following:

Participant Benefits[1]

Assisting with portfolio data-gathering efforts. The study may be used by organizations with sizable hotel portfolios to motivate hotels to provide timely accurate data to enhance corporate reporting.

Making internal benchmarking possible. The benchmarks can be used by hotel properties and companies to compare their own performance to that of a general competitive group of peers.

Advancing validity testing. The given data set is subjected to validity checks, which the participating companies can leverage to spot and fix data-integrity problems and enhance their own reporting.

Improving internal model development. The internal regression modeling of hotel companies using internal benchmarking systems may be improved by considering lessons learned, correlations, and regression research.

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[1] Participation is open and welcome for CHSB 2024, calling for the 2022 data set. For further information, please email hosp_research@cornell.edu.

Industry Benefits

Default data. The CHSB offers a publicly accessible, industry-based data set by aggregating data collected globally that are also categorized by geographic region and market segment. Furthermore, the research addresses a void for the utilization of basic environmental data in countries lacking any structured benchmarking process.

Feasibility study support. The tool's market- and location-based ranges and benchmarks can be used by companies doing feasibility studies for hotel development, renovation, and acquisition to enable forecasting of energy and water usage as well as, in some situations, carbon taxes.

Enhancing rating systems. Organizations that review or grade hotels according to their environmental performance can modify their own methodologies by including benchmarks from the tool and quantitative techniques.

Harmonized greenhouse gas emissions calculations. The protocols for greenhouse gas (GHG) emissions accounting and verification do not provide standardized greenhouse gas emission factors for converting energy into carbon metrics. Different entities may select different factors which can invalidate the comparability across properties and companies. By applying a uniform set of greenhouse gas emission factors to the energy data received, the index provides a single and harmonized carbon data set that enables comparability.

Making carbon footprint calculations easier. The CHSB data can be used by travelers, event planners, and other travel buyers or intermediaries to reliably estimate the carbon footprint of their own hotel stays. CHSB data can be used by carbon offset programs to create clear and reliable estimations of carbon footprint values and standardize offset amounts. By speeding up the calculation, this will save time for both group travelers and hoteliers when delivering property-specific information for a location or a worldwide footprint.

Supporting municipal codes and regulations. More representative and accurate data will be available for entities that desire to mandate performance standards for energy, water, or GHG emissions in municipalities or regions.

Industry trends and carbon balance. The annual industry report provides a general overview of the hotel's environmental performance and industry trends. The overall performance of an industry can be assessed and reported using established data sets. After the Paris Climate Agreement was signed in 2016, there

Data collection points used to generate the external CHSB 2023 benchmarks

Data Point	Description
Internal Brand Code	Unique identifier code used by the property's parent brand.
Participant Code	Unique identifier code used by the participating entity, if different from the brand code. For example, an owner of a franchisee of a portfolio of hotels may use separate identifiers, to avoid duplication of properties within the data set.
Hotel Name	Name of hotel.
Address	Street address of hotel.
City	City where the hotel is located.
State or Province	State or province where the hotel is located.
Country	Country where the hotel is located.
Postal Code	Postal code (i.e., zip code) where the hotel is located.
Room Count	The total number of guestrooms for the hotel in 2021. If a hotel's room count changed during the year, the value most representative of the hotel's room count for 2021 was used.
Area Unit	Choose either "sqft" or "sqm" to indicate the units of measurement of the floor area data being entered (either square feet or square meters).
Total Area	Total floor area of conditioned space of the property. *Note:* Total Area value should equal Rooms Area + Meeting Space Area + Other Area.
Rooms Area	Total area of conditioned space of the rooms and corridors, per the HCMI guidance.
Meeting Space Area	Total area of conditioned space of the meeting space and pre-function space in the hotel, per HCMI guidance.
Other Area	The total remaining area of conditioned space within the property that is not covered by rooms and meeting space.
Location Type	The location segment of the property: Urban, Suburban, Rural/Highway, Airport, Convention, Resort, Timeshare, Small Metro/Town, Bed & Breakfast, Extended Stay.
Asset Class	The service class of the property, either Full Service or Limited Service.
Hotel Type	Type of the property: Bed & Breakfast, Convention, Extended Stay, Integrated Resort, Non-Resort, Resort.
Year Opened	The year the property originally opened, regardless of whether major renovations have occurred since that year.
12-Month Operation	Confirm with a "Yes" that the hotel was in operation for all of 2021 without any shutting down or major renovation that would significantly alter the energy consumption or occupancy (either rooms or meeting space) during the period.
Laundry	Choose either "Included" or "Not Included" to denote whether the energy consumption includes the washing of bedroom linens. For properties with partial in-house wash, the determining factor is whether bedroom linens are included in that wash. For example, linen wash of restaurant linens or guest clothing only, would be considered "not included."

Data collection points used to generate the external CHSB 2023 benchmarks (concluded)

Data Point	Description
Energy Verification	Indicate whether the energy data for each property has been 3rd party verified per the following choices: Limited, Reasonable, Full, No, Don't know. Limited refers to a company-wide 3rd party "limited assurance", Reasonable refers to a companywide 3rd party "reasonable assurance" and "full" indicates that the specific property's data have been 3rd party verified onsite or through direct examination of billing and consumption.
Water Verification	Indicate whether the water data has been 3rd party verified per the following choices: Limited, Reasonable, Full, No, Don't know. Limited refers to a company-wide 3rd party "limited assurance", Reasonable refers to a companywide 3rd party "reasonable assurance" and "full" indicates that the specific property's data have been 3rd party verified onsite or through direct examination of billing and consumption.
Unit	Enter the unit of measurement for the data entered.
Occupied Rooms	The total number of occupied rooms for the hotel for each month in 2021. Rooms sold may be used as a proxy.
Water Consumption by Type	The total water consumption for each month in 2021, as provided by the utility provider by type of water source.
Energy Consumption by Type	The total energy usage for each month in 2021, as provided by the utility provider by type of energy source.

has been an increased focus on decarbonization that is balanced with climate research and includes "Science-based Goals." The data collection offers insight into performance year-to-year and may be used to calculate the carbon footprint of the entire industry and trends over time toward decarbonization by 2050.

Eventual normalization and use indexing. Each study contributes information to the index. Over time, a sizable data collection that contains property attributes will permit additional analysis of the factors that influence energy, water, and carbon emissions in hotel operations.

Calculating portfolio footprints. The energy and carbon footprint of each participant's portfolios will be calculated uniformly throughout the full data set in a cost-effective platform and provided in the individual reports to participating companies that do not currently aggregate their energy footprint or calculate carbon emissions.

DATA SET

Input

In our data collection process, we gathered aggregated data from the companies listed in Exhibit 1 for the 2021 calendar year, which represented the most recent complete year of data available. The participants provided us with data for a total of 25,576 properties worldwide, which we received in an aggregate data set from each participating firm or its corresponding data provider. As part of this process, 2021 calendar-year data collected by Horwath HTL Asia Pacific and then analyzed with similar validity testing by Greenview were incorporated into the data set to add an additional 1,139 non-duplicated property records. To generate the measures within the index, we used the data points outlined in Exhibit 2. However, we did not cross-check utility invoices or verify the data, although a third-party review verified most of the data set for participant corporate reporting of GHG inventories. Besides confirming the presence of onsite laundry for main linen washes for Measures 1, 7, 10, and 11, we did not collect additional data points to filter or harmonize for the coverage of amenities by the utilities.

Summarized list of validity tests performed on the data set

Validity Test Description	High Threshold	Low Threshold	Action taken if beyond threshold or missing	% Of Data set Excluded
Property underwent significant renovation or closed all or significant part of floor area for a portion of the year	N/A	N/A	Excluded from Measures 1-12	1.56%
Energy Per Occupied Room Outlier (kWh/ocrm)	Please refer to Appendix 2 (page 27)		Excluded from Measures 1,3,5,7,12	26.96%
Energy Per Square Meter Outlier (kWh/m2)			Excluded from Measures 2,4,6,12	35.51%
Property did not provide any energy data	N/A	N/A	Notified only, no action taken	9.23%
Property did not have 12 separate energy data points	N/A	N/A	Notified only, no action taken	23.80%
Property did not provide any purchased electricity data	N/A	N/A	Excluded from Measures 1,2,3,4,5,6,7,12	9.49%
Property did not have 12 separate electricity data points	N/A	N/A	Excluded from Measures 1,2,3,4,5,6,7,12	18.55%
Property did not provide any occupied rooms data	N/A	N/A	Excluded from Measures 1,3,5,7,8,10,11	3.56%
Property did not have 12 separate occupancy data points	N/A	N/A	Excluded from Measures 1,3,5,7,8,10,11	10.06%
Occupancy Outlier	104%	35%	Excluded from Measures 1,3,5,7,8,10,11	24.51%

Summarized list of validity tests performed on the data set (concluded)

Validity Test Description	High Threshold	Low Threshold	Action taken if beyond threshold or missing	% Of Data set Excluded
Property did not provide any water usage data	N/A	N/A	Excluded from Measures 8-11	13.74%
Property did not have 12 separate water data points	N/A	N/A	Excluded from Measures 8-11	27.64%
Water Per Occupied Room Outlier (L/ocrm)	Please refer to Appendix 3 (page 41)		Excluded from Measure 8,10,11	32.91%
Water Per Square Meter Outlier (L/m2)			Excluded from Measures 9,11	36.19%
% of Floor Area attributes to Rooms Footprint	100%	40%	Excluded from Measures 1,7,10,11	43.20%
Average SqM per guestroom of entire building outlier	2500	20	Excluded from Measures 2,4,6,9	16.37%
Average size of guestroom outliers	750	15	Excluded from Measures 10,11	45.30%
Only one source of energy was indicated for calculating total energy	N/A	N/A	Notified only, no action taken	8.92%
More than five sources were indicated for calculating total energy	N/A	N/A	Notified only, no action taken	0.16%
At least one energy or water source had a high variance of a ratio of 4 to 1 between high/low months or 80% month-to-month	N/A	N/A	Notified only, no action taken	80.72%

Output

To produce the output tables for the CHSB2023 index, we followed the five-step process described below:

(1) Harmonization

First, all data were harmonized into the following common units of measure:
- energy in kilowatt-hours (kWh),
- water in liters (L),
- floor area in square meters (m²), and
- greenhouse gas emissions (also termed *carbon footprint*) in kilograms of carbon dioxide equivalent (kgCO₂e), converting each energy source of GHG emissions into kgCO₂e (using only carbon dioxide, methane, and nitrous oxide).

The set of emission factors applied to each respective energy type was geographically based on available data (see Appendix 1, page 23 for emission factors referenced). When the emission factor was provided by the reference source in CO₂e, the source document's value of global warming potential (GWP) was used. With raw values of methane (CH_4) and nitrous oxide (N_2O) emissions, the following GWP was applied using the IPCC Fifth Assessment Report, 100-Year horizon: GWP of CH_4: 28; and GWP of N_2O: 265. For energy generated from renewable sources (wood or other biomass), biogenic CO_2 was excluded. However, per the Greenhouse Gas Protocol, emissions from CH_4 and N_2O were included. For other renewable sources such as solar, wind, geothermal, or deep-water cooling, an emission factor of zero was assigned to the energy type.

(2) Validity Testing

Next, validity tests were conducted to identify any outliers or inaccurately submitted data. Participants were provided with an initial output containing the results of the validity tests and were given the option to either correct and update their data or to override the validity flags by confirming the accuracy of the data. For instance, participants who receive utility invoices and data on a bimonthly basis could confirm the validity of their data despite flagged inconsistencies.

EXHIBIT 4

Count of data set included for each measure

Measure	Description	Count of Data Set Included	% Of Data set Excluded
Measure 1	HCMI Footprint Per Occupied Room	8,591	66.4%
Measure 2	Total carbon footprint of the property divided by number of rooms	14,741	42.4%
Measure 3	Total carbon footprint of the property divided by number of OCCUPIED rooms	16,299	36.3%
Measure 4	Total carbon footprint of the property divided by the total floor area in SQUARE METERS	14,742	42.4%
Measure 5	Total energy usage of the property divided by number of OCCUPIED rooms	16,299	36.3%
Measure 6	Total energy usage of the property divided by floor area of the property in SQUARE METERS	14,742	42.4%
Measure 7	HCMI Footprint of Meeting Space Per Hour Per Square Meter of Meeting Space	7,425	71.0%
Measure 8	Total water usage of the property divided by the total number of OCCUPIED ROOMS	14,421	43.6%
Measure 9	Total water usage of the property divided by the floor area of the property in SQUARE METERS	14,030	45.1%
Measure 10	HWMI Footprint Per Occupied Room	5,638	78.0%
Measure 11	HWMI Footprint of Meeting Space Per Hour Per Square Meter of Meeting Space	4,858	81.0%
Measure 12	Percentage of property's total energy that is generated from renewable sources	14,861* (Including 0%)	41.9%

After receiving updated data from participants, we then repeated the validity tests using the highest or lowest threshold values that had been re-confirmed by the participants. General cut-off values for upper and lower outliers in the data set are listed in Exhibit 3, and a detailed list of validity tests and their corresponding thresholds can be found in Appendix 2 (page 27). If a property failed a validity test, it was removed from the data set for the corresponding measure. Exhibit 4 provides a count of the data set that passed each measure. Although it is possible for a property to exceed the threshold due to expansive public areas or amenities, we implemented these limitations to maintain a representative data set.

The methodology of the Hotel Water Measurement Initiative (HWMI) was used for measures 10 and 11. After completing validity testing, we excluded properties that washed laundry off-site and purchased district chilled water as an energy source. The HWMI offers metrics based on both per guest-night and per occu-

pied room, but due to a lack of available guest-night data, we provided output metrics based on occupied room intensity.

(3) Geographic and Climate Zone Segmentation

The third step involved segmenting the data set based on geographic location. This was done by geocoding each property and then clustering properties based on unified boundaries. When we refer to **geography**, it may mean any of the following:

- **Metro Area,** referring to a large urban area consisting of a major city and its surrounding suburbs or neighboring jurisdictions. This is defined by a metropolitan statistical area (MSA), national capital region (NCR), or greater metropolitan area.
- **Country,** referring to a political or geographical region that is recognized as an independent state and has its own government and borders.
- **Region**, referring to a sub-national area such as a state or province, autonomous region, unincorpo-

EXHIBIT 5

Segmentation categories

Asset Class
Full-Service Resorts
Full-Service Non-Resorts
Limited Service

Number of Stars
1 and 1.5 Stars
2 and 2.5 Stars
3 and 3.5 Stars
4 and 4.5 Stars
5 Stars

Market Segment
Economy Resorts
Economy Non-Resorts
Midscale Resorts
Midscale Non-Resorts
Upper Midscale Resorts
Upper Midscale Non-Resorts
Upscale Resorts
Upscale Non-Resorts
Upper Upscale Resorts
Upper Upscale Non-Resorts
Luxury Resorts
Luxury Non-Resorts

Hotel Type
Convention Hotel
Extended Stay
Resort
Resort - Summer Seasonal
Resort - Winter Seasonal
Non-Resort
Bed & Breakfast
Integrated Resort
Location Type
Urban Location
Suburban Location
Airport Location
Rural/Highway Location
Small Metro/Town Location

All Hotels (within a given geography)

Resorts or Non-Resorts
All Resorts (Resort, Resort Summer/Winer
Seasonal, Integrated Resort)
All Non-Resorts (Convention Hotel, Extended Stay,
Non-Resort, Bed & Breakfast)

rated territory, or national region, or a trans-national area such as a major tourist or urban market that crosses national borders or a regional grouping of countries. We use various geographies to maximize the data output depending on the data received, and to facilitate comparisons and benchmarking.

- **Climate Zone Segmentation**, which is based on two classification systems: the Köppen-Geiger climate classification system and Bailey's Ecoregions of the World. The Köppen-Geiger system is a widely used climate classification system that categorizes regions based on temperature and precipitation patterns. Bailey's Ecoregions of the World is a classification system that categorizes regions based on their ecological characteristics, such as climate, geology, vegetation, and soils. The combination of these two systems provides a more detailed understanding of the unique environmental conditions.

(4) Property Segmentation

Fourth, we categorized properties into segments using a revenue-based approach and property-type segmentation similar to that used by STR Global (based on 2022 global chain scales). Additionally, we used the asset class segmentation of full-service and limited-service hotels and a global data set of star levels for hotels listed by Expedia. The resulting data set was then grouped into categories and an overall grouping was created that combined all segments within a particular geography (see Exhibit 5).

(5) Minimum Output Thresholds (per Geography)

Finally, a minimum threshold of eight properties was set for the output data to appear in a specific geography. If a particular segment within a geography contained at least eight properties, the results were included in the tool. Therefore, data for cities, regions, climate zones, or countries with fewer than eight properties were excluded from the final outputs. After applying the validity tests and removing geographies with fewer than eight properties, the final output tables in CHSB2023 comprise 16,299 properties across 646 geographies. This indicates an increase from the previous year's dataset (i.e., 2019 calendar-year data for CHSB 2021), with 6-percent more properties added in the 2021 dataset. The increase in data facilitated the establishment of a minimum threshold required to add new geographies, either new metro areas (including non-metropolitan areas) or countries.

FINDINGS

Given the significant impact of the COVID-19 pandemic on the hospitality industry, the 2019 data were used as a baseline for comparison against the 2021 data. The pandemic caused widespread disruption in the hospitality industry, with many hotels closing or operating at reduced capacity for extended periods. As a result, the 2020 data may not be representative of typical hotel operations, and comparing that year's data to other years may not provide a clear picture of trends or changes in performance. By using the 2019 data as a baseline, the hotel performances before and after the pandemic were compared, allowing for a more accurate assessment of the impact of sustainability initiatives and trends in energy and water use, and greenhouse gas emissions. This approach also allows for a more stable comparison between the two years, as the 2019 data represent a more typical year of hotel operations.

The process of aggregating inputs and producing outputs, as well as comparing the 2019 and 2021 data, has resulted in several findings for consideration. These findings shed light on the trends and changes in sustainability performance within the hospitality industry over the past two years. The data show a significant decrease in greenhouse gas emissions and energy consumption, as well as an increase in water efficiency. The findings also highlight differences in sustainability performance between hotel types, with resorts showing greater improvements in GHG emissions and energy consumption than non-resorts. These trends and differences provide valuable insights for hotel managers and sustainability professionals seeking to improve their sustainability performance and reduce their environmental impact.

Year-Over-Year Trends

We conducted an analysis of properties within the data set for two years. This analysis passed all validity tests, resulting in a year-over-year data set of 9,012 properties for energy measures and 8,240 for water measures. The analysis presented in this report utilizes the following different types of averages to provide a comprehensive understanding of the changes in energy and water consumption and GHG emissions across different hotel categories.

The *weighted average change* is calculated by multiplying the average change of a particular hotel category by the percentage of that hotel's floor area to the total floor area of the data set.

The *overall average change*, on the other hand, considers the average change in the total usage or emissions of the entire data set divided by the total floor area of the like-for-like data set.

Finally, the *average of averages change* is calculated as the mean of the average change of all hotels in the like-for-like data set.

These different averages provide a nuanced and comprehensive understanding of the changes observed in the data set, enabling the identification of trends and patterns that may be missed by simply looking at one type of average. The data provided in Exhibits 6 through 8 (on the following pages) show the average change in six different measures—GHG Emissions per occupied room, GHG Emissions per square meter, energy per occupied room, energy per square meter, water per occupied room, and water per square meter—from 2019 to 2021 for different types of hotels.

Exhibit 6

Year-Over-Year Average Change by Measure and All Hotels, Resorts, Non-Resorts, and Service Class

Measure	2019-2021 Average Change	All Hotels	Resorts	NonResorts	Limited Service	Full Service Resort	Full Service NonResort
Measure 3: GHG Emissions per Occupied Room	Weighted Avg Change	7.25%	6.59%	0.66%	-4.39%	6.61%	5.03%
	Overall Avg Change	-6.96%	11.72%	-11.21%	-22.29%	12.14%	0.45%
	Avg of Averages Change	-9.15%	35.45%	-12.24%	-20.59%	36.98%	4.81%
Measure 4: GHG Emissions per Square Meter	Weighted Avg Change	-27.81%	-3.28%	-24.54%	-8.47%	-3.24%	-16.10%
	Overall Avg Change	-30.41%	-23.63%	-32.62%	-33.44%	-23.61%	-32.28%
	Avg of Averages Change	-31.03%	-15.48%	-32.11%	-32.46%	-15.12%	-31.36%
Measure 5: Energy per Occupied Room	Weighted Avg Change	12.78%	5.49%	7.30%	-1.76%	5.50%	9.04%
	Overall Avg Change	-0.16%	18.23%	-4.02%	-12.54%	18.67%	6.82%
	Avg of Averages Change	-1.12%	27.39%	-3.10%	-9.89%	28.50%	10.74%
Measure 6: Energy per Square Meter	Weighted Avg Change	-23.29%	-3.45%	-19.84%	-6.19%	-3.42%	-13.68%
	Overall Avg Change	-25.32%	-19.18%	-27.16%	-25.09%	-19.16%	-27.99%
	Avg of Averages Change	-24.33%	-17.65%	-24.79%	-23.01%	-17.54%	-28.41%
Measure 8: Water per Occupied Room	Weighted Avg Change	20.23%	6.20%	14.03%	3.58%	6.12%	10.54%
	Overall Avg Change	9.94%	23.52%	7.85%	6.64%	23.74%	14.54%
	Avg of Averages Change	15.57%	34.87%	14.29%	13.41%	34.51%	16.14%
Measure 9: Water per Square Meter	Weighted Avg Change	-17.42%	-3.20%	-14.22%	-1.07%	-3.21%	-13.14%
	Overall Avg Change	-18.96%	-18.15%	-19.21%	-9.40%	-18.30%	-23.46%
	Avg of Averages Change	-9.11%	-14.72%	-8.73%	-1.55%	-15.41%	-22.09%

There has been a notable decrease in GHG emissions per square meter and energy consumption per square meter, with weighted average changes showing a decline of 27.81 percent in emissions per square meter and a drop of 23.29 percent in energy consumption per square meter. The overall average changes for these measures are even more impressive, at -30.41 percent for emissions and -25.32 percent for consumption. Non-resorts had the highest reductions in both GHG emissions and energy consumption, with overall average changes of -32.62 percent for emissions and -27.16 percent for consumption. Full-service resorts had the smallest reductions, with overall average changes of -23.61 percent for GHG emissions and -19.16

percent for energy consumption. On the other hand, the average change in water usage per occupied room increased by 9.94 percent for all hotels, which is a worrisome trend. That said, this increase is not uniform across all sub-categories of hotels. Limited-service and full-service non-resorts showed the lowest percentage change in water usage, while full-service resorts had the highest increase in water usage. It is important to note that the weighted average change is lower than the overall average change for all three measures, indicating that the larger hotels have a more substantial impact on the results.

EXHIBIT 7

Year-over-year change by measure and STR segment

Measure	2019-2021 Average Change	Luxury	Upper Upscale	Upscale	Upper Midscale
Measure 3: GHG Emissions per Occupied Room	Weighted Avg Change	7.92%	3.37%	-1.69%	-2.26%
	Overall Avg Change	18.62%	3.32%	-15.66%	-22.68%
	Avg of Averages Change	50.97%	9.85%	-12.17%	-22.67%
Measure 4: GHG Emissions per Square Meter	Weighted Avg Change	-3.14%	-11.09%	-7.72%	-5.78%
	Overall Avg Change	-22.59%	-32.64%	-33.51%	-33.50%
	Avg of Averages Change	-12.94%	-29.31%	-32.15%	-34.13%
Measure 5: Energy per Occupied Room	Weighted Avg Change	7.32%	5.60%	0.47%	-0.58%
	Overall Avg Change	24.26%	10.13%	-7.25%	-13.88%
	Avg of Averages Change	43.36%	13.14%	-2.69%	-11.81%
Measure 6: Energy per Square Meter	Weighted Avg Change	-3.03%	-9.85%	-6.04%	-4.35%
	Overall Avg Change	-18.91%	-28.20%	-26.87%	-25.93%
	Avg of Averages Change	-15.64%	-29.22%	-24.44%	-24.42%
Measure 8: Water per Occupied Room	Weighted Avg Change	5.18%	8.39%	4.30%	2.26%
	Overall Avg Change	19.97%	20.33%	9.65%	2.60%
	Avg of Averages Change	28.82%	21.44%	15.68%	11.19%
Measure 9: Water per Square Meter	Weighted Avg Change	-3.83%	-8.95%	-3.31%	-1.38%
	Overall Avg Change	-21.23%	-23.15%	-13.93%	-13.45%
	Avg of Averages Change	-20.86%	-23.15%	-8.27%	-2.79%

Luxury hotels have the smallest decrease in weighted average change for GHG emissions per square meter, at 3.14 percent, while upper upscale hotels have the highest decrease, at 11.09 percent. Similarly, for energy per square meter, luxury hotels have the smallest decrease in weighted average change, at 3.03 percent, whereas upper upscale hotels have the highest decrease, at 9.85 percent. On the contrary, for water per occupied room, all segments report an increase in average change. Upper upscale hotels have the highest increase in weighted average change at 8.39 percent, while upper midscale hotels recorded the lowest increase at 2.26 percent.

EXHIBIT 8

Year-over-year change by measure and Expedia stars

Measure	2019-2021 Average Change	5 Stars	4 Stars	3 Stars	2 Stars
Measure 3: GHG Emissions per Occupied Room	Weighted Avg Change	7.63%	6.33%	-2.76%	-3.94%
	Overall Avg Change	18.04%	10.26%	-17.83%	-34.27%
	Avg of Averages Change	43.54%	21.99%	-13.18%	-28.85%
Measure 4: GHG Emissions per Square Meter	Weighted Avg Change	-3.73%	-9.64%	-9.20%	-5.24%
	Overall Avg Change	-24.87%	-28.28%	-35.02%	-41.16%
	Avg of Averages Change	-17.43%	-23.00%	-32.12%	-36.07%
Measure 5: Energy per Occupied Room	Weighted Avg Change	7.08%	8.28%	-0.22%	-2.35%
	Overall Avg Change	24.22%	15.48%	-8.64%	-22.20%
	Avg of Averages Change	38.16%	24.36%	-3.83%	-17.15%
Measure 6: Energy per Square Meter	Weighted Avg Change	-3.57%	-8.64%	-7.27%	-3.82%
	Overall Avg Change	-20.93%	-24.89%	-27.75%	-30.36%
	Avg of Averages Change	-18.83%	-23.86%	-24.52%	-25.35%
Measure 8: Water per Occupied Room	Weighted Avg Change	6.37%	8.22%	4.10%	1.54%
	Overall Avg Change	23.31%	21.24%	8.15%	3.99%
	Avg of Averages Change	31.85%	21.08%	13.87%	11.50%
Measure 9: Water per Square Meter	Weighted Avg Change	-4.46%	-8.60%	-4.11%	-0.26%
	Overall Avg Change	-23.58%	-22.32%	-15.23%	-7.56%
	Avg of Averages Change	-23.27%	-23.69%	-9.54%	1.28%

The data presented in Exhibit 8 indicate the average changes in GHG emissions, energy consumption, and water consumption for hotels of different star ratings from 2019 to 2021. These data show that higher-rated hotels tend to have lower reduction in GHG emissions and energy consumption per square meter, and they consume more water per occupied room than lower-rated hotels. The overall average decline was highest for 2-star hotels, at -41.16 percent, while 5-star hotels had the lowest reduction, at -24.87 percent. The average of averages change showed a consistent decreasing trend with increasing star ratings, indicating that higher-rated hotels tend to have lower GHG emissions per square meter. Similarly, for energy, the average of averages change showed a decreasing trend with increasing star ratings, but the difference between star ratings was less significant compared to GHG emissions per square meter. The overall average change for water per occupied room was the highest for 5-star hotels at 23.31 percent, while 2-star hotels had the lowest increase at 3.99 percent. The average of averages change showed an increasing trend with increasing star ratings, indicating that higher-rated hotels tend to consume more water per occupied room.

Decreasing Trends with Increasing Star Ratings

Looking again at Exhibit 8, it displays the average changes in GHG emissions, energy, and water usage across various hotel categories between

2019 and 2021. The most noticeable observation is the decreasing trend in GHG emissions and energy consumption for hotels with higher star ratings. For instance, 5-star hotels experienced overall average reductions of 24.87 percent in GHG emissions and 20.93 percent in energy consumption per square meter. At the same time, 2-star hotels witnessed a reduction in GHG emissions of 41.16 percent and a drop of 30.36 percent in energy consumption. Conversely, water usage saw an overall average increase in water per occupied room of 23.31 percent for 5-star properties and 21.24 percent for 4-star hotels, whereas 3-star hotels reported an overall average increase of 8.15 percent in water per occupied room and that increase was 3.99 percent for 2-star hotels. Moreover, the average of averages change also indicates a decreasing trend in water usage across star ratings. However, in the context of water per occupied room, the decreasing trend refers to the decrease in reduction with increasing star ratings.

Significant Decrease in Energy Consumption

The average changes in GHG emissions and energy reported across different hotel categories for 2019 and 2021 (shown in Exhibits 6 and 7) show a significant reduction in energy consumption and emissions emitted across different hotel categories. Globally, the weighted average change for both GHG emissions per square meter and energy per square meter recorded a significant reduction and energy per square meter—at 30.41 percent for emissions and 25.32 percent for energy use in 2021. By comparison, reductions in 2019 were 5.4 percent for emissions and 3.09 percent for energy. While we have been seeing continuous reductions over the years, there is a significant decrease in reduction in energy consumption between 2019 and 2021. Even though it is possible that factors such as the implementation of energy-efficient technologies and practices may have played a vital role, these factors alone are unlikely to explain the significant reduction observed. The significant reduction observed can be attributed to the COVID-19 pandemic and its impact on the travel and hospitality industry. As we noted above, due to travel restrictions and safety concerns, many hotels experienced low occupancy rates, and some were forced to close temporarily. With fewer guests, there was less demand for energy-consuming amenities such as heating, cooling, lighting, and other electrical appliances. Additionally, hotels may have implemented energy conservation measures to reduce costs during a period of low revenue.

Substantial Uptick in Water Usage

Globally, the weighted average change for water per occupied room has increased substantially—by 20.23 percent in 2021 as compared to 2019, when a reduction of 1.27 percent was reported. While the increase in water consumption is concerning, it is possible that the closure or low occupancy of some hotels may have contributed to the increase in water use for several reasons. First, when hotels are closed or have low occupancy, the water systems may not be used as frequently, leading to stagnation and a higher risk of bacterial growth. Therefore, some hotels may need to flush their water systems more frequently to maintain water quality, which could increase water use. Second, some hotels may have implemented enhanced cleaning and sanitation procedures due to the COVID-19 pandemic, which may have required more water usage. This could include more frequent washing of linens, towels, and surfaces, as well as more frequent hand-washing by staff. Last, some hotels may have implemented new amenities or services during the pandemic to attract guests, such as expanded room service or outdoor dining options, which could increase water usage for food preparation, dishwashing, and cleaning.

Full-service Non-resorts Outperform Full-service Resorts

Both full-service resorts and full-service non-resorts experienced significant reductions in GHG emissions and energy consumption per square meter from 2019 to 2021. However, full-service non-resorts had a higher overall average reduction in both measures, with a decrease in emissions of 32.28 percent and a drop of 27.99 percent in consumption, compared to full-service resorts, which had a decrease of 23.61 percent in emissions and 19.16 percent in consumption. In terms of water usage, both full-service resorts and full-service non-resorts saw an overall average increase, with full-service resorts experiencing a higher increase, of 23.74 percent, compared to 14.54 percent for full-service non-resorts. It is important to note that the weighted average change for water usage for full-service resorts is only 6.12 percent, which is lower than the overall average, suggesting that some full-service resorts may have implemented more effective water conservation measures compared to others.

EXHIBIT 9

Energy efficiency opportunities among limited service non-resorts

	NONRESORTS	
	Energy Per Square Meter (M6)	
GEOGRAPHY	Limited Service	
	INHOUSE LAUNDRY	**OUTSOURCED LAUNDRY**
Atlanta, GA	1.84	2.34
Birmingham	2.03	2.63
Boston, MA	1.73	2.20
Chengdu	2.53	2.14
Chicago, IL	2.05	1.80
Dallas-Fort Worth, TX	1.74	1.64
Georgia State Non-Metropolitan Areas	1.56	2.87
Hangzhou	1.14	2.33
Houston, TX	1.95	1.60
London, UK	1.39	2.10
Los Angeles, CA	1.85	1.79
Madrid	1.48	1.49
Milwaukee, WI	1.84	1.62
Montreal	2.08	1.91
North Carolina State Non-Metropolitan Areas	1.77	2.35
New York, NY	1.84	2.84
Orlando, FL	2.11	5.39
Philadelphia, PA	1.93	3.54
Phoenix, AZ	2.05	1.75
San Francisco, CA	1.90	1.53
Shanghai	2.23	2.27
Singapore	1.83	3.28
Suzhou-Wuxi-Changzhou	1.97	2.14
Tennessee State Non-Metropolitan Areas	1.64	1.64
Toronto	1.89	1.82
Washington DC	1.68	2.20
AVERAGE	**1.92**	**2.23**

Upper Upscale Hotels Outperform Others

Upper upscale hotels outperformed luxury, upscale, and upper midscale hotels in terms of reducing GHG emissions and energy consumption. Specifically, upper upscale hotels reported a weighted average reduction of 11.09 percent for GHG emissions per square meter, whereas luxury hotels reported reductions of 3.14 percent; upscale, 7.72 percent; and upper midscale, 5.78 percent. Additionally, upper upscale hotels also had the highest weighted average (9.85%), overall average (28.20%), and average of averages reduction (29.22%) for energy per square meter compared to the other segments, followed by upscale, upper midscale, and luxury. The reduction suggests that upper upscale hotels have made significant progress in terms of reducing their environmental impact compared to other segments. This is particularly noteworthy given that upper upscale hotels are typically associated with luxury and high-end amenities, which might suggest that they consume more energy and produce more GHG emissions than their lower-tier counterparts. This implies that high-end hotels can prioritize performance improvements without sacrificing the quality of their service or guest experience.

Energy efficiency opportunities among full-service non-resorts

NONRESORTS		
	Energy Per Square Meter (M6)	
GEOGRAPHY	**Full Service**	
	INHOUSE LAUNDRY	**OUTSOURCED LAUNDRY**
Amsterdam	2.07	1.94
Atlanta, GA	2.15	2.06
Baltimore, MD	2.12	2.11
Bangkok	2.30	3.27
Beijing	2.16	2.45
Boston, MA	2.20	2.35
Chengdu	2.21	1.87
Chicago, IL	2.09	1.95
Dallas-Fort Worth, TX	2.12	2.11
Denver, CO	1.90	2.50
Doha	2.42	2.43
Dubai-Sharjah-Ajman	1.61	2.13
Guangzhou	2.28	2.24
Hangzhou	2.06	1.92
Hong Kong	2.39	3.46
Houston, TX	2.42	1.72
Istanbul	2.93	2.56
Jakarta	3.12	3.21
Kuala Lumpur	2.10	2.10
Las Vegas, NV	2.06	1.65
Lima	1.69	1.14
London, UK	1.85	2.12
Los Angeles, CA	2.01	1.58
Mexico City	1.55	2.27
Miami, FL	2.37	1.97
Minneapolis, MN	1.82	3.30
Montreal	2.06	2.17
Nanjing	1.82	1.67
New Orleans, LA	2.07	1.85
New York, NY	2.45	1.64
Orlando, FL	2.18	1.33
Paris	3.17	2.86
Philadelphia, PA	2.01	3.33

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Energy efficiency opportunities among full-service non-resorts (concluded)

NONRESORTS		
GEOGRAPHY	**Energy Per Square Meter (M6)**	
	Full Service	
	INHOUSE LAUNDRY	**OUTSOURCED LAUNDRY**
Philadelphia, PA	2.01	3.33
Portland, OR	2.40	1.92
Riyadh	2.05	1.81
San Diego, CA	2.01	1.21
San Francisco, CA	1.74	1.67
Seattle, WA	1.84	1.72
Shanghai	2.40	2.11
Singapore	1.81	2.29
Suzhou-Wuxi-Changzhou	2.12	2.07
Tokyo	1.62	1.80
Toronto	2.20	1.73
Warsaw	2.04	1.59
Washington DC	2.00	2.14
Wuhan	2.05	2.38
Xian	1.68	2.67
AVERAGE	**2.09**	**2.22**

The "Efficiency Gap" in Each Market

Similar to previous years, this year's study includes an analysis of performance ranges within a selected geography and segment, with a specific focus on laundry boundaries. By comparing hotels with onsite laundry and those without, the study revealed a significant dispersion in energy and water usage intensity, with the best-performing hotels outperforming their peers by over 1.5 times. The study also disclosed a marginal efficiency gap in energy and water usage intensity for full-service and limited-service hotels, with full-service hotels recording lower performance ratios of 2.22 for water per occupied room and 2.17 for energy per square meter. Limited-service hotels, while considered to perform better than full-service resorts,

had similar performance ratios of 2.23 for energy per square meter and 2.07 for water per occupied room, comparable to full-service non-resort hotels with laundry outsourced. Exhibits 9 through 12 display the ratio of upper quartile to lower quartile by asset class and laundry information for selected geographies for energy per square meter and water per occupied room. Performance ratios for full-service resorts were not tabulated due to an insufficient number of properties in the selected geographies. Nevertheless, the empirical data from this year's study emphasize the existence of opportunities for hotels within the upper quartile to reduce their utility use, given the wide gap between the upper quartile and lower quartile in most markets.

EXHIBIT 11

Water efficiency opportunities among limited-service non-resorts

NONRESORTS		
	Water Per Occupied Room (M8)	
GEOGRAPHY	**Limited Service**	
	INHOUSE LAUNDRY	**OUTSOURCED LAUNDRY**
Atlanta, GA	1.54	1.37
Bangkok	1.21	1.86
Beijing	2.12	1.71
Boston, MA	1.87	1.63
Chengdu	2.31	1.60
Chicago, IL	1.67	2.41
Dallas-Fort Worth, TX	1.65	1.25
Dubai-Sharjah-Ajman	1.44	2.44
Georgia State Non-Metropolitan Areas	2.31	1.29
Houston, TX	1.72	2.08
Jakarta	2.20	3.67
Los Angeles, CA	1.66	2.39
Madrid	1.34	1.28
Moscow	1.53	1.40
Nashville, TN	1.67	7.85
North Carolina State Non-Metropolitan Areas	1.46	2.51
New York, NY	1.56	1.92
Philadelphia, PA	1.67	1.69
Phoenix, AZ	1.79	1.60
Shanghai	2.01	2.16
Tennessee State Non-Metropolitan Areas	1.58	2.66
Toronto	2.10	1.66
Washington DC	1.58	2.16
AVERAGE	**2.18**	**2.07**

Limitations

The following limitations apply to this study due to the data set and representation of participating companies:

The results remain skewed toward the higher end of segment tiers. The results of CHSB2023 may be skewed towards the higher end of segment tiers. This is because the study relies heavily on large owners or operators of hotels to submit aggregate data sets, which tend to include hotels that are managed by the same operators and not franchised. As a result, the data set may not be representative of the entire hotel industry, particularly the economy and midscale segments, which may consume less energy and water due to their smaller public areas, fewer amenities, and less spacious guestrooms. To address this limitation, we encour-

EXHIBIT 12

Water efficiency opportunities among full-service non-resorts

	NONRESORTS	
GEOGRAPHY	Water Per Occupied Room (M8)	
	Full Service	
	INHOUSE LAUNDRY	OUTSOURCED LAUNDRY
Abu Dhabi	1.93	2.17
Atlanta, GA	1.84	2.08
Baltimore, MD	2.00	4.04
Bangkok	2.75	3.32
Beijing	1.70	1.90
Boston, MA	2.17	1.68
Chicago, IL	1.90	2.19
Dallas-Fort Worth, TX	2.24	1.81
Dubai-Sharjah-Ajman	1.39	1.92
Guangzhou	1.72	1.72
Hangzhou	1.77	3.81
Hong Kong	4.96	3.88
Houston, TX	1.82	2.38
Istanbul	2.25	1.85
Jakarta	1.52	2.83
Kuala Lumpur	2.07	1.87
Las Vegas, NV	1.48	1.59
Lima	1.85	1.81
London, UK	2.18	1.80
Los Angeles, CA	1.80	1.30
Manila	1.79	3.23
Mexico City	2.15	3.17
Miami, FL	1.77	2.05
Minneapolis, MN	1.58	1.88
Nanjing	2.13	2.75
New Orleans, LA	2.25	1.92
New York, NY	2.40	2.07
Orlando, FL	1.91	1.40
Philadelphia, PA	1.93	2.52
Phoenix, AZ	1.70	1.47
Portland, OR	2.10	2.62
Riyadh	2.58	4.85
San Diego, CA	1.73	1.40
San Francisco, CA	2.00	1.86
Seattle, WA	1.41	1.47
Shanghai	1.59	2.45
Singapore	3.36	2.65
Tampa Bay, FL	1.86	2.25
Tokyo	1.81	2.69
Toronto	2.38	1.45
Washington DC	2.09	1.84
AVERAGE	2.02	2.17

age more participation from economy and midscale or 1- and 2-star properties in future years. This would enable a more comprehensive view of the hotel industry and provide more accurate benchmarks for a metro area or country.

The results are skewed toward branded chains. Another limitation of CHSB2023 is that the results may be skewed towards branded chains. Most hotels in the study are represented by branded flags, which may not be representative of the full hotel supply. It is possible that branded hotels are more efficient than independent hotels due to the availability of capital that allows them to renovate and retrofit building equipment and furniture, fixtures, and equipment (FF&E), while such capital may not always be available to independent hotels. To address this limitation, independent hotels are encouraged to participate in future studies. This would help to balance out the range and provide a more representative view of the actual hotel supply in any given geography.

The results are skewed towards the United States. Although this year the data set covers 64 countries, seven more than last year, the bulk of the data still comes from the United States. This year, 50 percent of the data set was drawn from U.S. geographies, showing a significant improvement compared to CHSB2021 (64%). The ratio of hotels in the data set to potential hotels in the country is slightly lower outside of the U.S. To achieve a more equitable global representation, we are working to grow the data set both within and outside the U.S., and we will continue to seek data from all around the world in the future.

The data have not been verified. Although we have conducted validity tests, it is important to note that the data have not been independently verified by a third-party provider to ensure accuracy. However, more than 70 percent of the data set is submitted by participants who have undergone external third-party verification in their own corporate reporting, which serves as a primary validation method. To further enhance the accuracy and credibility of our data, we will continue to explore opportunities for involving third-party-verification providers in the future.

External factors. Additionally, the study does not account for external factors that may affect a hotel's energy and water usage, such as regional climate patterns or the availability of renewable energy sources. This may limit the ability to accurately compare the performance of hotels across different regions. For example, a hotel located in a region with high humidity may require more energy to maintain comfortable indoor temperatures than a hotel in a drier climate.

Unique characteristics. Finally, the study does not consider the unique characteristics of individual hotels, such as the age of the building, the type of guests, and the amenities offered. These factors can significantly affect a hotel's energy and water usage intensity and may result in unfair comparisons. For example, an older building may have outdated HVAC systems that require more energy to operate.

As CHSB continues to evolve and gain a deeper understanding of the drivers of energy, water, and carbon within hotels, we will strive to enhance our comparisons by incorporating additional attributes and normalizing the data to ensure fair and meaningful comparisons.

OUTLOOK FOR CHSB2024

As an evolving index and process, the CHSB study strives to continuously improve and expand its data set, segmentation, and granularity for participant benchmarking. The next study, CHSB2024, will collect data from the 2022 calendar year and aim to provide an updated index with even more robust and representative data. To achieve this, we will continue to seek participation from independent hotels, smaller chains, and smaller properties currently underrepresented in the global data set. With that in mind, hotels interested in participating in CHSB2024 and contributing to this valuable industry benchmarking effort can email hosp_research@cornell.edu for more information. ◼

Eric Ricaurte founded Greenview in 2008, an international consultancy and data intelligence firm catalyzing innovation and best practice in sustainability and ESG, providing services for strategy, programs, data management, benchmarking, and reporting. Greenview's clients include most of the world's largest hotel companies as well as hotel owners and developers, event organizers, cruise lines, NGOs, DMOs, OTAs and industry organizations including the WTTC, UNWTO, and AHLA. With over 25 years of hands-on experience, Eric is a frequent speaker, convener, and researcher on the topic of sustainability. His notable industry work includes launching the Cornell Hotel Sustainability Benchmarking Index, Green Lodging Trends Report, Destination Water Risk Index, Hotel Global Decarbonisation Report, Hotel Owners for Tomorrow Coalition, and Net-Zero Methodology for the Hotel Industry. Eric is a member of the UFI Committee on Sustainable Development, the International Standards Committee of the Global Sustainable Tourism Council, and the Board of Advisors of the Phuket Hotels Association. Prior to founding Greenview, Eric specialized in the operations and development of nature-based lodges, theme parks and attractions in Costa Rica, Mexico, and Brazil. Eric earned a Bachelor of Science degree from the Cornell University School of Hotel Administration and a Master of Science degree in Tourism & Travel Management from New York University. He has held a research fellowship at the Cornell University Center for Hospitality Research and been an adjunct instructor at New York University.

Rehmaashini Jagarajan, Ph.D., is a Senior Manager at Greenview with a primary role in data management and measurement, data platform enhancements, programs development and implementation, reporting, and research services in the areas of corporate responsibility and sustainability. She also sets up and manages company's related processes and data flows, as well as team's collaboration and productivity. She is an expert in processing, manipulating, analyzing and interpreting large data sets to identify trends and patterns and can communicate the findings efficiently. Rehma also leads the continuous development of the company's sustainability data management system; the Greenview Portal and data analytic tool; the Greenview Hotel Footprinting Tool, as well as their use with clients. Additionally, she performs benchmarking studies on sustainability programs, goals, disclosures, performance, and rankings. She leads the industry-led global data collection and benchmarking initiatives; the Cornell Hotels Sustainability Benchmarking Index (CHSB) published by Cornell's School of Hospitality Research and the global benchmarking study on sustainability best practices in hotels; the Green Lodging Trends Report (GLTR). Moreover, Rehma is also familiar with ESG reporting frameworks, and leads the data workstreams.

Prior to Greenview, she has served as a Property Researcher at Raine & Horne International (Malaysia) specializing in market research and feasibility studies. She has experience conducting and preparing market research for the purpose of determining the highest and best use of land, ascertaining appropriate development proposals, and preparing feasibility studies relating to new development projects, subdivisions and renovation and refurbishment to existing buildings. She has also served as a valuation executive at JS Valuers Property Consultants Group Malaysia providing valuation services covering extensive range of properties for various different purposes.

Rehma is based in Malaysia. She has a Doctorate Degree (PhD) in Facilities Management with a focus on sustainable buildings and a Bachelor's Degree in Property Management from the University of Technology Malaysia.

Appendices

APPENDIX 1: Greenhouse Gas Emission Factors Applied for Measures 1, 2, 3, 4, And 7

Country	Purchased Electricity	Natural Gas	Butane, Propane, and Liquefied Petroleum Gas (LPG)	Liquefied Natural Gas (LNG)	Compressed Natural Gas (CNG)	All fuels, unless specified in the "Other Fuels" column	Other Fuels, refer to specific types in brackets	Towngas / City Gas	Purchased Steam and Hot Water	Purchased Chilled Water	Biomass	Charcoal	Kerosene	Ethanol
Australia	National Greenhouse Accounts Factors Aug 2021	National Greenhouse Accounts Factors Aug 2021	National Greenhouse Accounts Factors Aug 2021	National Greenhouse Accounts Factors Aug 2021	National Greenhouse Accounts Factors Aug 2021	WRI Stationary Combustion Tool V4.1	National Greenhouse Accounts Factors Aug 2021 [Gasoline (Stationary), Diesel (Stationary), Fuel Oil 1-6, Biogas (captured methane), Biofuel Blend]	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	National Greenhouse Accounts Factors Aug 2021	WRI Stationary Combustion Tool V4.1	National Greenhouse Accounts Factors Aug 2021
Austria	European Environment Agency CO2-emission intensity from electricity generation 2021 (2019-year data)	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1 and US EPA Direct Emissions from Stationary Combustion Sources Dec 2020 [Biofuel Blend]	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
Canada	National Inventory Report 1990-2019 (2021)	2021 Climate Registry - Default Emissions Factors May 2021	2021 Climate Registry - Default Emissions Factors May 2021	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	2021 Climate Registry - Default Emissions Factors May 2021 [Gasoline (Stationary), Diesel (Stationary), Fuel Oil 1-6]	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	US Energy Star Portfolio Manager Technical Reference: Greenhouse Gas Emissions, August 2021	US Energy Star Portfolio Manager Technical Reference: Greenhouse Gas Emissions, August 2021	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	[Kerosene (Commercial /Institutional)] WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)

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Country	Purchased Electricity	Natural Gas	Butane, Propane, and Liquefied Petroleum Gas (LPG)	Liquefied Natural Gas (LNG)	Compressed Natural Gas (CNG)	All fuels, unless specified in the "Other Fuels" column	Other Fuels, refer to specific types in brackets	Towngas / City Gas	Purchased Steam and Hot Water	Purchased Chilled Water	Biomass	Charcoal	Kerosene	Ethanol
Hong Kong, China	International Energy Agency CO2 Emissions from Fuel Combustion 2021	WRI Stationary Combustion Tool V4.1	Hong Kong Carbon Accounting guidelines (revised 2010)	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	Hong Kong Carbon Accounting guidelines (revised 2010) [Diesel (Stationary)], US EPA Direct Emissions from Stationary Combustion Sources Dec 2020 [Biofuel Blend]	Towngas ESG Report 2021 & Hong Kong Carbon Accounting guidelines (revised 2010)	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	Hong Kong Carbon Accounting guidelines. Table 1.1 - 1.3 (revised 2010) - http://www.epd.gov.hk/epd/english/climate_change/files/Guidelines_English_2010.pdf	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
Japan	International Energy Agency CO2 Emissions from Fuel Combustion 2021	National Greenhouse Gas Inventory Report of JAPAN 2021	National Greenhouse Gas Inventory Report of JAPAN 2021	National Greenhouse Gas Inventory Report of JAPAN 2021	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	National Greenhouse Gas Inventory Report of JAPAN 2021 [Gasoline (Stationary), Diesel (Stationary), Biofuel Blend, Biofuel Wood Waste (CH4 & N2O only)]	National Greenhouse Gas Inventory Report of JAPAN 2021	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	National Greenhouse Gas Inventory Report of JAPAN 2021 Table 3-11, 3-22, 3-23	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
Mexico	México Registro Nacional de Emisiones 2022	Calculadora de emisiones para el Registro Nacional de Emisiones V8 Abr. 2021	Calculadora de emisiones para el Registro Nacional de Emisiones V8 Abr. 2021	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	Calculadora de emisiones para el Registro Nacional de Emisiones V8 Abr. 2021 [Gasoline (Stationary), Diesel (Stationary)]	Calculadora de emisiones para el Registro Nacional de Emisiones V8 Abr. 2021	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)

Country	Purchased Electricity	Natural Gas	Butane, Propane, and Liquefied Petroleum Gas (LPG)	Liquefied Natural Gas (LNG)	Compressed Natural Gas (CNG)	All fuels, unless specified in the "Other Fuels" column	Other Fuels, refer to specific types in brackets	Towngas / City Gas	Purchased Steam and Hot Water	Purchased Chilled Water	Biomass	Charcoal	Kerosene	Ethanol
New Zealand	Measuring emissions: A guide for organisations - 2022 detailed guide (2020-year data) (updated Aug 2022)	Measuring emissions: A guide for organisations - 2022 detailed guide (2020-year data) (updated Aug 2022)	Measuring emissions: A guide for organisations - 2022 detailed guide (2020-year data) (updated Aug 2022)	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	Measuring emissions: A guide for organisations - 2022 detailed guide (2020-year data) (updated Aug 2022) [Diesel (Stationary), Fuel Oil 1-6, Biofuel Wood Waste]	Measuring emissions: A guide for organisations - 2022 detailed guide (2020-year data) (updated Aug 2022)	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
United Kingdom	Association of Issuing Bodies European Residual Mixes 2021 (2020-year data)	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021 [Gasoline (Stationary), Diesel (Stationary), Fuel Oil 1-6]]	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
United States, Puerto Rico, other US Territories (American Samoa, Guam, Northern Mariana Islands, and US Virgin Islands)	EPA eGRID 2019 (Updated Feb 2021)	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021 [Gasoline (Stationary), Diesel (Stationary), Fuel Oil 1-6]	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021	US Energy Star Portfolio Manager Technical Reference: Greenhouse Gas Emissions, August 2021	US Energy Star Portfolio Manager Technical Reference: Greenhouse Gas Emissions, August 2021	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)

Appendix 1 (continued)

Country	Purchased Electricity	Natural Gas	Butane, Propane, and Liquefied Petroleum Gas (LPG)	Liquefied Natural Gas (LNG)	Compressed Natural Gas (CNG)	All fuels, unless specified in the "Other Fuels" column	Other Fuels, refer to specific types in brackets	Towngas / City Gas	Purchased Steam and Hot Water	Purchased Chilled Water	Biomass	Charcoal	Kerosene	Ethanol
European Union	Association of Issuing Bodies European Residual Mixes 2021 (2020-year data)	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)
All other countries and Territories	International Energy Agency CO2 Emissions from Fuel Combustion 2021	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	UK Government GHG Conversion Factors for Company Reporting 2021, Gross Calorific Values used per document guidance	WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	(Natural Gas as proxy) WRI Stationary Combustion Tool V4.1	WRI Stationary Combustion Tool V4.1	US EIA form 1605 (2010). Appendix N	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1 (CH4 and N20 Only)	WRI Stationary Combustion Tool V4.1	EPA Emission Factors for GHG Inventories 2021, last modified 1 April 2021 (CH4 and N20 Emissions only)

APPENDIX 2: List of Validity Tests performed on the Energy Data Set

ENERGY				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
ALL COUNTRIES	Property did not provide any purchased electricity data	N/A	N/A	Excluded from Measures 1-7,12
ALL COUNTRIES	Data did not have 12 separate electricity data points	N/A	N/A	Excluded from Measures 1-7,12
ALL COUNTRIES	Only one source of energy was indicated for calculating total energy	N/A	N/A	Notified only, no action taken
ALL COUNTRIES	At least one energy or water source had a high variance of a ratio of 4 to 1 between high/low months or 80% month-to-month	N/A	N/A	Notified only, no action taken
PER OCCUPIED ROOM				
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels	300	20	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels	700	50	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels	300	20	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels	300	20	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels	400	35	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels	300	25	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels	500	10	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels	700	50	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels	100	15	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels	100	15	Excluded from Measures 1,3,5,12

		ENERGY		
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels	300	15	Excluded from Measures 1,3,5,12
OTHER COUNTRIES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels	150	15	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in China	250	35	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in China	400	35	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels in China	600	60	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in China	400	35	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in China	300	20	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in China	300	20	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in China	300	15	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in China	200	15	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in China	100	15	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in China	500	10	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in China	400	60	Excluded from Measures 1,3,5,12
CHINA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in China	600	60	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels in Thailand	2000	80	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in Thailand	250	60	Excluded from Measures 1,3,5,12

COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in Thailand	150	15	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in Thailand	1800	25	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in Thailand	900	35	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in Thailand	300	20	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in Thailand	300	20	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in Thailand	300	15	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in Thailand	100	15	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in Thailand	100	15	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in Thailand	500	10	Excluded from Measures 1,3,5,12
THAILAND	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in Thailand	2000	80	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels in United Kingdom	700	50	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in United Kingdom	180	45	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service hotels upscale hotels in United Kingdom	120	5	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in United Kingdom	300	20	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in United Kingdom	300	20	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in United Kingdom	120	15	Excluded from Measures 1,3,5,12

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ENERGY				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in United Kingdom	200	20	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in United Kingdom	500	10	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in United Kingdom	700	50	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in United Kingdom	100	15	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in United Kingdom	45	10	Excluded from Measures 1,3,5,12
UNITED KINGDOM	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in United Kingdom	300	15	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada	700	50	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada with onsite laundry	300	45	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in Canada	180	35	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in Canada	300	20	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in Canada	300	20	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in Canada	250	25	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in Canada	250	45	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in Canada	500	10	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in Canada	700	50	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in Canada	100	15	Excluded from Measures 1,3,5,12

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	ENERGY			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in Canada	140	20	Excluded from Measures 1,3,5,12
CANADA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in Canada	300	15	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in India	700	50	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in India	400	45	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in India	300	25	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in India	200	60	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in India	300	20	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in India	300	20	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in India	300	20	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in India	500	10	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in India	700	50	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in India	100	15	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in India	140	10	Excluded from Measures 1,3,5,12
INDIA	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in India	300	15	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in Mexico	300	15	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in Mexico	150	15	Excluded from Measures 1,3,5,12

Appendix 2 (continued)

	ENERGY			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in Mexico	300	20	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels in Mexico	700	50	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in Mexico	300	20	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in Mexico	200	20	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in Mexico	300	25	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in Mexico	500	10	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in Mexico	700	50	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in Mexico	100	15	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in Mexico	250	20	Excluded from Measures 1,3,5,12
MEXICO	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in Mexico	300	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upscale hotels in United States	100	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upscale hotels in United States	180	25	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service luxury hotels in United States	400	45	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper midscale hotels in United States	250	20	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service midscale hotels in United States	300	20	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service economy hotels in United States	300	20	Excluded from Measures 1,3,5,12

ENERGY				
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper upscale hotels in United States	400	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service upper midscale hotels in United States	100	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service midscale hotels in United States	120	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service economy hotels in United States	600	15	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for full-service upper upscale hotels in United States	200	25	Excluded from Measures 1,3,5,12
UNITED STATES	Energy Per Occupied Room Outlier (kWh/ocrm) for limited-service luxury hotels in United States	400	45	Excluded from Measures 1,3,5,12
PER SQUARE METER				
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels	800	60	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels without laundry data	800	60	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels with onsite laundry	800	60	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels without onsite laundry	800	60	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for integrated resort without laundry data	2000	30	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for integrated resort without onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for integrated resort with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels	600	45	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels without laundry data	600	45	Excluded from Measures 2,4,6,7,12

Appendix 2 (continued)

	ENERGY			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels with onsite laundry	600	45	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels without onsite laundry	600	45	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for resort without laundry data	1000	30	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for resort without onsite laundry	1000	30	Excluded from Measures 2,4,6,7,12
OTHER COUNTRIES	Energy Per Square Meter outlier (kWh/m2) for resort with onsite laundry	1000	60	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in China	600	60	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in China	800	35	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in China with onsite laundry	600	80	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in China without onsite laundry	600	60	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in China with onsite laundry	800	60	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels China without onsite laundry	1000	35	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for resorts in China with onsite laundry	600	55	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for resorts in China without onsite laundry	600	15	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels without laundry data in China	600	80	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for integrated resort without laundry data in China	2000	30	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for integrated resort without onsite laundry in China	2000	30	Excluded from Measures 2,4,6,7,12

	ENERGY			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
CHINA	Energy Per Square Meter outlier (kWh/m2) for integrated resort with onsite laundry in China	2000	30	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels without laundry data in China	800	60	Excluded from Measures 2,4,6,7,12
CHINA	Energy Per Square Meter outlier (kWh/m2) for resort without laundry data in China	600	55	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Thailand	4000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Thailand with onsite laundry	2000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Thailand without onsite laundry	7000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for resorts in Thailand with onsite laundry	7000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for resorts in Thailand without onsite laundry	7000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Thailand	600	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Thailand with onsite laundry	600	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels Thailand without onsite laundry	600	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for full-service hotels without laundry data in Thailand	2000	45	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for integrated resort without laundry data in Thailand	2000	30	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for integrated resort without onsite laundry in Thailand	2000	30	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for integrated resort with onsite laundry in Thailand	2000	30	Excluded from Measures 2,4,6,7,12
THAILAND	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels without laundry data in Thailand	600	45	Excluded from Measures 2,4,6,7,12

	ENERGY			
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
THAILAND	Energy Per Square Meter outlier (kWh/m2) for resort without laundry data in Thailand	7000	45	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United Kingdom	800	45	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United Kingdom	1000	35	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United Kingdom with onsite laundry	800	100	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United Kingdom without onsite laundry	800	35	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United Kingdom with onsite laundry	2000	35	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United Kingdom without onsite laundry	1000	25	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for full-service hotels without laundry data in United Kingdom	800	100	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for integrated resort without laundry data in United Kingdom	2000	30	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for integrated resort without onsite laundry in United Kingdom	2000	30	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for integrated resort with onsite laundry in United Kingdom	2000	30	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels without laundry data in United Kingdom	2000	35	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for resort without laundry data in United Kingdom	1000	30	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for resort without onsite laundry in United Kingdom	1000	30	Excluded from Measures 2,4,6,7,12
UNITED KINGDOM	Energy Per Square Meter outlier (kWh/m2) for resort with onsite laundry in United Kingdom	1000	60	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Canada	1000	140	Excluded from Measures 2,4,6,7,12

ENERGY				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service luxury hotels in Canada	1000	80	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Canada with onsite laundry	4000	80	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Canada without onsite laundry	1000	100	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service upper upscale hotels in Canada	1000	100	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for resort in Canada with onsite laundry	1000	60	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Canada without laundry data	4000	80	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Canada without laundry data	2000	30	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Canada without onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Canada with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Canada without laundry data	1000	100	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Canada without onsite laundry	1000	100	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for resort in Canada without laundry data	1000	30	Excluded from Measures 2,4,6,7,12
CANADA	Energy Per Square Meter outlier (kWh/m2) for resort in Canada without onsite laundry	1000	30	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in India	600	100	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for full-service luxury hotels in India	400	150	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in India with onsite laundry	800	100	Excluded from Measures 2,4,6,7,12

	ENERGY			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
INDIA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in India without onsite laundry	800	100	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for resort in India without onsite laundry	1000	30	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for resort in India with onsite laundry	1000	60	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in India without laundry data	800	100	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in India with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Indiawithout onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Indiawith onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in India without laundry data	400	150	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in India with onsite laundry	400	150	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in India without onsite laundry	400	150	Excluded from Measures 2,4,6,7,12
INDIA	Energy Per Square Meter outlier (kWh/m2) for resort in India without laundry data	1000	30	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Mexico	2000	35	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Mexico	7000	45	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Mexico with onsite laundry	3000	15	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Mexico without onsite laundry	4000	55	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in Mexico without laundry data	3000	15	Excluded from Measures 2,4,6,7,12

ENERGY				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
MEXICO	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Mexico with onsite laundry	7000	45	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Mexico without onsite laundry	7000	45	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in Mexico without laundry data	7000	45	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for resorts in Mexico without onsite laundry	1000	30	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for resorts in Mexico with onsite laundry	1000	60	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for resorts in Mexico without laundry data	1000	30	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Mexico with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Mexico without onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
MEXICO	Energy Per Square Meter outlier (kWh/m2) for integrated resort in Mexico with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United States	800	80	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United States	600	60	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United States with onsite laundry	800	80	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United States without onsite laundry	600	100	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for full-service hotels in United States without laundry data	800	80	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United States with onsite laundry	800	60	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United States without onsite laundry	7000	60	Excluded from Measures 2,4,6,7,12

Appendix 2 (concluded)

	ENERGY			
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for limited-service hotels in United States without laundry data	800	60	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for resorts in Unites States with onsite laundry	800	10	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for resorts in Unites States without onsite laundry	600	15	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for resort in United States without laundry data	800	10	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for integrated resort in United States without laundry data	2000	30	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for integrated resort in United States without onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12
UNITED STATES	Energy Per Square Meter outlier (kWh/m2) for integrated resort in United States with onsite laundry	2000	30	Excluded from Measures 2,4,6,7,12

APPENDIX 3: List of Validity Tests performed on the Water Data Set

WATER				
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
ALL COUNTRIES	Property did not provide any water usage data	N/A	N/A	Excluded from Measures 8-11
ALL COUNTRIES	Data did not have 12 separate water data points	N/A	N/A	Excluded from Measures 8-11
PER OCCUPIED ROOM				
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels	3500	50	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels with onsite laundry	4000	100	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without onsite laundry	2500	150	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without laundry data	4000	100	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels	1000	30	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels with onsite laundry	1000	20	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without onsite laundry	950	30	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without laundry data	1000	20	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for resort with onsite laundry	10000	400	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for resort without onsite laundry	11000	400	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for resort without laundry data	11000	400	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort with onsite laundry	11000	400	Excluded from Measure 8,10,11
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without onsite laundry	11000	400	Excluded from Measure 8,10,11

Appendix 3 (continued)

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
OTHER COUNTRIES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without laundry data	11000	400	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Thailand	8000	200	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Thailand with onsite laundry	8000	400	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Thailand without onsite laundry	8000	200	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Thailand without laundry data	8000	400	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Thailand with onsite laundry	14000	100	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Thailand without onsite laundry	12000	450	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Thailand without laundry data	14000	100	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Thailand with onsite laundry	1000	20	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Thailand without onsite laundry	1400	150	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Thailand without laundry data	1000	20	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Thailand	1200	150	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Thailand with onsite laundry	11000	400	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Thailand without onsite laundry	11000	400	Excluded from Measure 8,10,11
THAILAND	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Thailand without laundry data	11000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in India	2800	300	Excluded from Measure 8,10,11

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in India with onsite laundry	2800	300	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in India without onsite laundry	2400	200	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in India without laundry data	2800	300	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in India	2400	200	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in India with onsite laundry	1000	20	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in India without onsite laundry	950	30	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in India without laundry data	1000	20	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in India with onsite laundry	11000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in India without onsite laundry	10000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in India without laundry data	11000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in India with onsite laundry	11000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in India without onsite laundry	11000	400	Excluded from Measure 8,10,11
INDIA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in India without laundry data	11000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Mexico	4000	100	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Mexico with onsite laundry	2400	25	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Mexico without onsite laundry	2000	200	Excluded from Measure 8,10,11

WATER				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Mexico without laundry data	2400	25	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Mexico	900	50	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Mexico with onsite laundry	800	50	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Mexico without onsite laundry	950	30	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Mexico without laundry data	800	50	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Mexico without onsite laundry	11000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Mexico with onsite laundry	10000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Mexico without laundry data	11000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Mexico with onsite laundry	11000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Mexico without onsite laundry	11000	400	Excluded from Measure 8,10,11
MEXICO	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Mexico without laundry data	11000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Canada	1400	150	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Canada with onsite laundry	1100	150	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Canada without onsite laundry	900	250	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in Canada without laundry data	1100	150	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada	1000	50	Excluded from Measure 8,10,11

	WATER			
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada with onsite laundry	1000	25	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada without onsite laundry	950	30	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in Canada without laundry data	1000	25	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Canada with onsite laundry	10000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Canada without onsite laundry	11000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for resort in Canada without laundry data	11000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Canada with onsite laundry	11000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Canada without onsite laundry	11000	400	Excluded from Measure 8,10,11
CANADA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in Canada without laundry data	11000	400	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in China	4500	450	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels with onsite laundry in China	5000	650	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without onsite laundry in China	3000	300	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without laundry data in China	500	300	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in China	2500	150	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels with onsite laundry in China	1600	150	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without onsite laundry in China	1200	100	Excluded from Measure 8,10,11

WATER				
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without laundry data in China	1600	150	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for resort with onsite laundry in China	10000	500	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for resort without onsite laundry in China	6000	400	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for resort without laundry data in China	10000	500	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort with onsite laundry in China	11000	400	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without onsite laundry in China	11000	400	Excluded from Measure 8,10,11
CHINA	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without laundry data China	11000	400	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in United States	1500	50	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels with onsite laundry in United States	1500	40	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without onsite laundry in United States	1300	90	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels without laundry data in United States	1500	40	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in United States	1000	20	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels with onsite laundry in United States	1000	10	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without onsite laundry in United States	1000	5	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels without laundry data in United States	1000	10	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for resort with onsite laundry in United States	2700	150	Excluded from Measure 8,10,11

Appendix 3 (continued)

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for resort without onsite laundry in United States	2500	400	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for resort without laundry data in United States	2700	150	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort with onsite laundry in United States	11000	400	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without onsite laundry in United States	11000	400	Excluded from Measure 8,10,11
UNITED STATES	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort without laundry data in United States	11000	400	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in United Kingdom	900	75	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in United Kingdom with onsite laundry	1100	150	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in United Kingdom without onsite laundry	800	75	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for full-service hotels in United Kingdom without laundry data	1100	150	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in United Kingdom	500	25	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in United Kingdom with onsite laundry	350	100	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in United Kingdom without onsite laundry	500	25	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for limited-service hotels in United Kingdom without laundry data	350	100	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in United Kingdom with onsite laundry	11000	400	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in United Kingdom without onsite laundry	11000	400	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for integrated resort in United Kingdom without laundry data	11000	400	Excluded from Measure 8,10,11

Appendix 3 (continued)

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for resort in United Kingdom with onsite laundry	10000	400	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for resort in United Kingdom without onsite laundry	11000	400	Excluded from Measure 8,10,11
UNITED KINGDOM	Water Per Occupied Room Outlier (kWh/ocrm) for resort in United Kingdom without laundry data	11000	400	Excluded from Measure 8,10,11
PER SQUARE METER				
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for full-service hotels	7000	300	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for full-service hotels with onsite laundry	8000	200	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for full-service hotels without onsite laundry	7000	300	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for full-service hotels without laundry data	8000	200	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for limited-service hotels	6000	40	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for limited-service hotels with onsite laundry	8000	20	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for limited-service hotels without onsite laundry	10000	40	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for limited-service hotels without laundry data	10000	20	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for resort with onsite laundry	13000	400	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for resort without onsite laundry	13500	400	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for resort without laundry data	13500	400	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for integrated resort with onsite laundry	13500	400	Excluded from Measures 9,11

WATER				
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for integrated resort without onsite laundry	13500	400	Excluded from Measures 9,11
OTHER COUNTRIES	Water Per Square Meter outlier (L/m2) for integrated resort without laundry data	13500	400	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for full-service hotels in Thailand	14000	300	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for full-service hotels in Thailand with onsite laundry	18000	500	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for full-service hotels in Thailand without onsite laundry	14000	200	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for full-service hotels in Thailand without laundry data	18000	500	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for resort in Thailand with onsite laundry	20000	150	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for resort in Thailand without onsite laundry	15000	150	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for resort in Thailand without laundry data	20000	150	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for limited-service hotels in Thailand	8000	20	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for limited-service hotels in Thailand with onsite laundry	10000	40	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for limited-service hotels in Thailand without onsite laundry	10000	20	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for limited-service hotels in Thailand without laundry data	6000	40	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for integrated resort in Thailand with onsite laundry	13500	400	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for integrated resort in Thailand without onsite laundry	13500	400	Excluded from Measures 9,11
THAILAND	Water Per Square Meter outlier (L/m2) for integrated resort in Thailand without laundry data	13500	400	Excluded from Measures 9,11

Appendix 3 (continued)

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
INDIA	Water Per Square Meter outlier (L/m2) for full-service hotels in India	6000	500	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for full-service hotels in India with onsite laundry	6000	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for full-service hotels in India without onsite laundry	5500	200	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for full-service hotels in India without laundry data	6000	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for limited-service hotels in India	4000	1000	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for limited-service hotels in India with onsite laundry	4000	1500	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for limited-service hotels in India without onsite laundry	10000	40	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for limited-service hotels in India without laundry data	4000	1500	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for resort in India with onsite laundry	13500	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for resort in India without onsite laundry	13000	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for resort in India without laundry data	13000	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for integrated resort in India with onsite laundry	13500	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for integrated resort in India without onsite laundry	13500	400	Excluded from Measures 9,11
INDIA	Water Per Square Meter outlier (L/m2) for integrated resort in India without laundry data	13500	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for full-service hotels in Mexico	20000	200	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for full-service hotels in Mexico with onsite laundry	20000	150	Excluded from Measures 9,11

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
MEXICO	Water Per Square Meter outlier (L/m2) for full-service hotels in Mexico without onsite laundry	15000	300	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for full-service hotels in Mexico without laundry data	20000	150	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for limited-service hotels in Mexico	10000	150	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for limited-service hotels in Mexico with onsite laundry	10000	150	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for limited-service hotels in Mexico without onsite laundry	10000	40	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for limited-service hotels in Mexico without laundry data	10000	150	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for resort in Mexico without onsite laundry	13500	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for resort in Mexico with onsite laundry	13000	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for resort in Mexico without laundry data	13000	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for integrated resort in Mexico with onsite laundry	13500	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for integrated resort in Mexico without onsite laundry	13500	400	Excluded from Measures 9,11
MEXICO	Water Per Square Meter outlier (L/m2) for integrated resort in Mexico without laundry data	13500	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for full-service hotels in Canada	7000	250	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for full-service hotels in Canada with onsite laundry	9000	500	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for full-service hotels in Canada without onsite laundry	7000	300	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for full-service hotels in Canada without laundry data	9000	500	Excluded from Measures 9,11

Appendix 3 (continued)

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
CANADA	Water Per Square Meter outlier (L/m2) for limited-service hotels in Canada	9000	80	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for limited-service hotels in Canada with onsite laundry	9000	20	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for limited-service hotels in Canada without onsite laundry	9000	40	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for limited-service hotels in Canada without laundry data	9000	20	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for resort in Canada with onsite laundry	13000	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for resort in Canada without onsite laundry	13500	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for resort in Canada without laundry data	13000	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for integrated resort in Canada with onsite laundry	13500	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for integrated resort in Canada without onsite laundry	13500	400	Excluded from Measures 9,11
CANADA	Water Per Square Meter outlier (L/m2) for integrated resort in Canada without laundry data	13500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for full-service hotels in China	5500	450	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for full-service hotels with onsite laundry in China	5500	550	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for full-service hotels without onsite laundry in China	4500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for full-service hotels without laundry data in China	5500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for limited-service hotels in China	6000	150	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for limited-service hotels with onsite laundry in China	8000	600	Excluded from Measures 9,11

WATER				
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
CHINA	Water Per Square Meter outlier (L/m2) for limited-service hotels without onsite laundry in China	5500	150	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for limited-service hotels without laundry data in China	8000	150	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for resort with onsite laundry in China	7500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for resort without onsite laundry in China	12500	150	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for resort without laundry data in China	12500	150	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for integrated resort with onsite laundry in China	13500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for integrated resort without onsite laundry in China	13500	400	Excluded from Measures 9,11
CHINA	Water Per Square Meter outlier (L/m2) for integrated resort without laundry data in China	13500	400	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for full-service hotels in United States	6000	150	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for full-service hotels with onsite laundry in United States	8000	40	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for full-service hotels without onsite laundry in United States	6000	400	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for full-service hotels without laundry data in United States	8000	40	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for limited-service hotels in United States	6000	30	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for limited-service hotels with onsite laundry in United States	10000	20	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for limited-service hotels without onsite laundry in United States	4000	10	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for limited-service hotels without laundry data in United States	10000	10	Excluded from Measures 9,11

	WATER			
COUNTRY	**VALIDITY TEST DESCRIPTION**	**HIGH THRESHOLD**	**LOW THRESHOLD**	**ACTION TAKEN IF BEYOND THRESHOLD OR MISSING**
UNITED STATES	Water Per Square Meter outlier (L/m2) for resort with onsite laundry in United States	12000	50	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for resort without onsite laundry in United States	8000	700	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for resort without laundry data in United States	12000	50	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for integrated resort with onsite laundry in United States	13500	400	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for integrated resort without onsite laundry in United States	13500	400	Excluded from Measures 9,11
UNITED STATES	Water Per Square Meter outlier (L/m2) for integrated resort without laundry data in United States	13500	400	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for full-service hotels in United Kingdom	5000	150	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for full-service hotels in United Kingdom with onsite laundry	4000	500	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for full-service hotels in United Kingdom without onsite laundry	5000	150	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for full-service hotels in United Kingdom without laundry data	4000	500	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for limited-service hotels in United Kingdom	7000	150	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for limited-service hotels in United Kingdom with onsite laundry	4000	200	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for limited-service hotels in United Kingdom without onsite laundry	8000	150	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for limited-service hotels in United Kingdom without laundry data	4000	200	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for integrated resort in United Kingdom with onsite laundry	13500	400	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for integrated resort in United Kingdom without onsite laundry	13500	400	Excluded from Measures 9,11

Appendix 3 (concluded)

	WATER			
COUNTRY	VALIDITY TEST DESCRIPTION	HIGH THRESHOLD	LOW THRESHOLD	ACTION TAKEN IF BEYOND THRESHOLD OR MISSING
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for integrated resort in United Kingdom without laundry data	13500	400	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for resort in United Kingdom with onsite laundry	13000	400	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for resort in United Kingdom without onsite laundry	13500	400	Excluded from Measures 9,11
UNITED KINGDOM	Water Per Square Meter outlier (L/m2) for resort in United Kingdom without laundry data	13500	400	Excluded from Measures 9,11

APPENDIX 4: Year-Over-Year overall average change by selected country for energy, 2019-2021

All Hotels

Country	ALL HOTELS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Argentina	9	225,934	-44.9%	38.4%	-37.6%
Australia	46	1,205,643	-33.5%	32.9%	-28.1%
Austria	9	224,383	-49.9%	58.5%	-34.7%
Brazil	13	387,633	-35.0%	15.9%	-31.2%
Canada	229	3,075,184	-22.6%	25.2%	-29.3%
Chile	9	164,083	-41.3%	16.7%	-40.5%
China	602	26,800,634	-16.4%	2.0%	-17.4%
Colombia	23	380,586	-15.2%	-1.6%	-31.5%
Costa Rica	16	294,484	3.8%	35.9%	-12.2%
Czech Republic	9	224,392	-45.7%	85.6%	-33.5%
Dominican Republic	8	141,492	-15.5%	-10.6%	-23.8%
Egypt	28	1,341,993	-20.5%	2.6%	-26.0%
France	28	357,935	-22.2%	83.6%	-17.8%
Germany	45	871,791	-47.2%	70.3%	-31.4%
Hong Kong, China	22	800,212	-5.3%	49.8%	-14.4%
India	101	2,357,697	-29.0%	-8.9%	-30.6%
Indonesia	61	1,662,567	-36.5%	7.9%	-38.2%
Ireland	9	147,916	-42.3%	56.5%	-35.3%
Italy	30	332,240	-34.5%	63.3%	-22.5%
Japan	52	2,042,730	-46.2%	64.6%	-33.7%
Jordan	13	422,725	-37.8%	27.0%	-17.1%
Kazakhstan	9	194,873	-29.5%	7.0%	-23.4%
Korea	23	1,047,202	-24.6%	13.3%	-19.6%
Macau, China	8	818,117	-22.0%	100.1%	-23.0%
Malaysia	22	787,777	-45.6%	44.1%	-49.0%
Mexico	165	2,480,857	-25.9%	15.1%	-18.8%
Netherlands	22	308,973	-41.3%	98.3%	-31.5%
New Zealand	9	129,634	-27.7%	20.1%	-27.0%
Oman	8	226,848	-27.6%	20.3%	-16.5%
Panama	9	201,367	67.4%	11.3%	-21.1%
Peru	10	262,926	-36.7%	-11.6%	-33.4%
Philippines	9	443,877	-44.2%	-41.7%	-45.7%
Poland	18	347,639	-34.8%	63.4%	-25.8%
Portugal	11	191,478	-41.8%	89.5%	-27.2%
Puerto Rico, USA	14	239,161	-24.4%	-4.1%	-16.7%
Qatar	14	907,129	-16.8%	-16.5%	-11.7%
Romania	8	140,682	-43.2%	34.0%	-34.5%
Russian Federation	14	251,913	-23.8%	-1.9%	-17.1%
Saudi Arabia	48	2,027,926	-35.1%	-3.0%	-25.7%
Singapore	38	1,191,466	-24.7%	7.2%	-19.7%
Spain	34	498,160	-39.2%	53.2%	-24.8%
Switzerland	9	149,803	-15.4%	49.8%	-19.1%
Thailand	60	1,872,949	-40.1%	90.2%	-38.8%
Turkey	71	1,779,634	-32.2%	-1.8%	-24.4%
United Arab Emirates	67	3,696,985	-33.1%	8.8%	-8.0%
United Kingdom	211	2,318,362	-38.9%	14.5%	-32.0%
United States	6,569	71,087,753	-36.1%	-9.5%	-27.5%
Vietnam	13	470,652	-10.2%	63.9%	-48.7%

All Non-Resorts

Country	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Argentina	9	225,934	-44.9%	38.4%	-37.6%
Australia	38	913,558	-36.8%	19.7%	-31.5%
Austria	9	224,383	-49.9%	58.5%	-34.7%
Brazil	10	223,577	-47.8%	-7.1%	-45.5%
Canada	222	2,821,881	-23.6%	24.2%	-29.4%
Chile	9	164,083	-41.3%	16.7%	-40.5%
China	498	21,184,022	-17.8%	1.5%	-18.8%
Colombia	21	312,886	-19.3%	-6.8%	-34.7%
Costa Rica	12	143,647	-9.8%	32.3%	-18.8%
Czech Republic	8	212,920	-47.6%	80.4%	-35.6%
Egypt	18	944,973	-20.2%	7.5%	-25.8%
France	25	259,510	-28.2%	61.1%	-22.6%
Germany	38	717,849	-50.2%	68.7%	-33.2%
Hong Kong, China	16	505,917	-11.8%	43.2%	-19.6%
India	78	1,661,824	-29.5%	-10.0%	-31.3%
Indonesia	41	1,078,602	-33.0%	-6.8%	-35.3%
Ireland	9	147,916	-42.3%	56.5%	-35.3%
Italy	28	316,536	-37.6%	66.3%	-22.2%
Japan	41	1,500,529	-51.6%	57.2%	-36.5%
Jordan	8	219,462	-28.9%	41.9%	-11.6%
Kazakhstan	9	194,873	-29.5%	7.0%	-23.4%
Korea	16	694,909	-30.3%	13.6%	-25.4%
Malaysia	17	570,941	-50.6%	30.1%	-54.5%
Mexico	142	1,786,021	-33.1%	8.6%	-26.9%
Netherlands	21	298,906	-40.4%	99.8%	-30.8%
Panama	8	131,870	61.3%	-6.4%	-24.4%
Peru	8	205,520	-39.2%	-17.5%	-36.0%
Poland	17	336,335	-37.7%	62.1%	-27.6%
Portugal	8	157,525	-42.7%	111.3%	-28.0%
Puerto Rico, USA	9	117,807	-21.5%	0.7%	-13.1%
Qatar	10	619,511	-20.9%	-18.8%	-11.7%
Romania	8	140,682	-43.2%	34.0%	-34.5%
Russian Federation	11	148,283	-48.3%	-23.4%	-35.6%
Saudi Arabia	44	1,800,440	-35.6%	-8.0%	-26.9%
Singapore	35	1,030,405	-24.6%	5.9%	-18.8%
Spain	30	371,384	-38.7%	58.4%	-24.8%
Thailand	31	1,113,108	-42.2%	95.5%	-40.5%
Turkey	66	1,611,332	-36.0%	-6.4%	-27.8%
United Arab Emirates	44	2,348,839	-30.0%	13.1%	-2.4%
United Kingdom	209	2,299,813	-39.1%	14.3%	-32.2%
United States	6,384	58,601,731	-38.9%	-13.3%	-29.6%
Vietnam	9	356,848	-11.7%	51.3%	-49.8%

All Resorts

Country	ALL RESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	8	292,085	-25.3%	88.0%	-19.0%
China	104	5,616,612	-12.0%	1.5%	-12.9%
Egypt	10	397,020	-21.4%	-8.0%	-26.6%
India	23	695,873	-27.8%	-6.2%	-29.3%
Indonesia	20	583,965	-41.4%	65.5%	-42.6%
Japan	11	542,201	-33.7%	84.5%	-26.3%
Mexico	23	694,836	-14.8%	14.7%	-5.3%
Thailand	29	759,841	-37.6%	78.1%	-36.9%
United Arab Emirates	23	1,348,146	-37.0%	4.4%	-15.2%
United States	185	12,486,022	-24.9%	13.0%	-18.9%

Full-Service Non-Resorts

Country	FULL SERVICE NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Argentina	8	220,084	-44.3%	47.2%	-37.1%
Australia	34	869,617	-37.8%	14.1%	-33.1%
Austria	8	206,133	-50.6%	60.3%	-35.7%
Brazil	8	207,702	-49.0%	-4.2%	-47.4%
Canada	94	1,808,415	-24.2%	33.2%	-31.3%
China	378	18,757,445	-18.4%	1.7%	-19.2%
Colombia	12	243,125	-19.4%	2.3%	-34.0%
Egypt	17	930,769	-20.5%	7.2%	-26.0%
France	15	196,416	-28.0%	62.0%	-23.5%
Germany	25	625,566	-53.9%	64.0%	-38.0%
Hong Kong, China	9	403,363	-12.7%	85.5%	-19.8%
India	56	1,416,606	-30.8%	-8.7%	-32.2%
Indonesia	26	897,308	-33.8%	-10.2%	-36.0%
Italy	15	233,301	-38.3%	83.6%	-22.9%
Japan	38	1,474,036	-51.8%	56.8%	-36.7%
Jordan	8	219,462	-28.9%	41.9%	-11.6%
Kazakhstan	8	182,456	-24.9%	9.3%	-19.9%
Korea	13	634,770	-30.4%	18.3%	-24.9%
Malaysia	15	536,369	-52.0%	28.4%	-55.6%
Mexico	56	1,081,290	-32.3%	17.8%	-26.0%
Netherlands	14	248,428	-41.5%	113.0%	-31.0%
Peru	8	205,520	-39.2%	-17.5%	-36.0%
Poland	14	311,823	-38.3%	66.2%	-27.9%
Qatar	10	619,511	-20.9%	-18.8%	-11.7%
Saudi Arabia	37	1,613,930	-36.5%	-5.7%	-27.9%
Singapore	29	948,965	-24.9%	5.7%	-18.8%
Spain	9	243,931	-39.2%	91.9%	-25.5%
Thailand	24	1,011,384	-42.6%	96.2%	-40.8%
Turkey	41	1,369,615	-33.7%	-3.8%	-26.1%
United Arab Emirates	33	2,152,268	-29.6%	15.4%	-2.1%
United Kingdom	134	1,887,291	-39.8%	20.1%	-33.2%
United States	1,403	27,539,347	-41.3%	-4.2%	-32.6%
Vietnam	8	351,608	-11.2%	53.2%	-49.6%

Appendix 4 (continued)

Full-Service Resorts

Country	FULL SERVICE RESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	8	292,085	-25.3%	88.0%	-19.0%
China	101	5,571,203	-11.9%	1.6%	-12.7%
Egypt	10	397,020	-21.4%	-8.0%	-26.6%
India	23	695,873	-27.8%	-6.2%	-29.3%
Indonesia	20	583,965	-41.4%	65.5%	-42.6%
Japan	11	542,201	-33.7%	84.5%	-26.3%
Mexico	23	694,836	-14.8%	14.7%	-5.3%
Thailand	29	759,841	-37.6%	78.1%	-36.9%
United Arab Emirates	23	1,348,146	-37.0%	4.4%	-15.2%
United States	171	12,357,061	-24.8%	13.6%	-18.9%

Limited-Service

Country	LIMITED SERVICE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Canada	129	1,021,844	-22.4%	15.7%	-24.7%
China	123	2,471,986	-12.1%	3.4%	-14.7%
Colombia	9	69,761	-18.6%	-24.5%	-38.3%
France	10	63,094	-29.2%	62.5%	-19.3%
Germany	13	92,283	-19.1%	138.4%	8.9%
India	22	245,218	-23.2%	-13.3%	-26.3%
Indonesia	15	181,294	-28.3%	5.7%	-30.7%
Italy	13	83,235	-35.7%	43.9%	-20.2%
Mexico	86	704,731	-34.3%	0.2%	-28.4%
Russian Federation	8	88,953	-45.6%	-18.7%	-31.6%
Spain	21	127,453	-37.3%	34.4%	-23.0%
Turkey	25	241,717	-50.2%	-21.8%	-39.1%
United Arab Emirates	11	196,571	-33.8%	0.0%	-7.2%
United Kingdom	75	412,522	-34.1%	7.5%	-25.1%
United States	4,995	31,191,345	-36.1%	-16.2%	-25.9%

Luxury Segment

Country	LUXURY				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	8	278,662	-30.4%	49.0%	-20.5%
China	110	6,897,700	-13.7%	7.1%	-14.7%
Hong Kong, China	9	397,832	-3.2%	90.9%	-12.9%
India	15	685,540	-29.4%	-7.6%	-29.4%
Indonesia	13	647,466	-34.4%	14.8%	-34.7%
Japan	15	648,849	-31.6%	100.8%	-21.6%
Korea	10	664,416	-21.9%	25.5%	-17.6%
Mexico	19	562,816	-13.6%	26.2%	-3.7%
Saudi Arabia	11	801,229	-34.8%	12.3%	-25.1%
Singapore	12	543,755	-22.5%	20.3%	-21.3%
Thailand	20	642,090	-39.5%	110.3%	-38.3%
Turkey	11	423,564	-18.2%	14.2%	-14.9%
United Arab Emirates	18	1,616,221	-29.9%	20.3%	-2.0%
United States	135	10,347,280	-23.1%	20.4%	-18.2%
Vietnam	8	326,050	9.9%	81.9%	-34.1%

Upper Upscale Segment

Country	UPPER UPSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	18	543,281	-38.4%	24.6%	-34.0%
Canada	40	1,199,439	-22.8%	38.1%	-33.7%
China	204	10,106,245	-17.7%	-1.0%	-18.5%
Egypt	22	980,088	-22.3%	-1.7%	-26.2%
France	11	218,758	-21.5%	101.4%	-18.7%
Germany	20	501,191	-53.7%	52.2%	-38.8%
India	45	948,223	-28.8%	-6.4%	-31.8%
Indonesia	25	613,198	-37.6%	6.2%	-40.5%
Japan	14	838,402	-62.1%	61.0%	-46.6%
Malaysia	12	415,354	-46.2%	37.6%	-47.0%
Mexico	22	591,558	-34.1%	16.4%	-27.7%
Netherlands	9	170,945	-42.6%	102.7%	-32.2%
Saudi Arabia	13	599,436	-43.4%	8.1%	-33.6%
Thailand	20	736,852	-40.2%	60.1%	-39.6%
Turkey	17	762,105	-35.0%	-5.2%	-26.3%
United Arab Emirates	26	1,337,064	-33.7%	7.8%	-11.1%
United Kingdom	45	860,110	-45.2%	21.2%	-38.8%
United States	754	21,024,675	-38.7%	3.1%	-30.5%

Upscale Segment

Country	UPSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	14	296,636	-30.4%	28.1%	-26.1%
Canada	87	1,017,374	-20.9%	26.0%	-28.1%
China	169	6,804,418	-20.1%	-1.2%	-20.8%
France	8	55,701	-33.6%	66.5%	-22.2%
Germany	8	73,694	-21.6%	159.2%	6.9%
India	29	578,065	-28.6%	-11.0%	-30.4%
Indonesia	12	213,352	-39.7%	12.3%	-40.5%
Italy	16	141,251	-30.2%	74.7%	-12.4%
Japan	19	502,001	-42.7%	32.0%	-29.4%
Mexico	46	474,917	-32.2%	8.0%	-27.3%
Saudi Arabia	17	473,417	-24.5%	-3.2%	-13.2%
Singapore	9	191,306	-20.5%	8.9%	-20.4%
Spain	9	57,769	-37.1%	32.6%	-22.3%
Thailand	8	198,750	-42.6%	90.0%	-40.3%
Turkey	30	500,821	-42.6%	-11.4%	-31.7%
United Arab Emirates	17	603,596	-40.1%	-6.5%	-16.0%
United Kingdom	44	543,908	-39.5%	19.0%	-31.9%
United States	2,352	20,532,814	-38.8%	-14.7%	-29.1%

Upper Midscale Segment

Country	UPPER MIDSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Canada	98	709,412	-24.5%	12.3%	-22.1%
China	118	2,978,877	-8.6%	8.9%	-12.0%
Germany	11	132,952	-33.1%	72.2%	-22.9%
India	12	145,869	-29.9%	-16.1%	-27.6%
Indonesia	11	188,551	-35.1%	-11.1%	-40.4%
Mexico	78	851,566	-26.6%	6.4%	-19.3%
Singapore	9	159,758	-19.1%	-12.3%	-12.0%
Spain	12	69,684	-37.7%	35.2%	-24.0%
Thailand	12	295,257	-39.6%	141.0%	-37.2%
Turkey	13	93,144	-39.3%	-12.5%	-31.8%
United Kingdom	119	821,122	-29.1%	12.1%	-21.9%
United States	3,166	18,299,231	-39.1%	-20.8%	-28.4%

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Appendix 4 (concluded)

5-Stars Segment

Country	5 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	16	492,070	-37.9%	32.1%	-28.6%
China	128	7,485,508	-13.6%	7.7%	-14.8%
Germany	12	295,929	-45.8%	87.8%	-30.7%
Hong Kong, China	9	397,832	-3.2%	90.9%	-12.9%
India	27	982,953	-30.7%	-8.8%	-32.0%
Indonesia	19	805,774	-34.4%	18.2%	-34.8%
Japan	14	614,243	-32.0%	95.3%	-21.7%
Korea	9	634,679	-22.5%	28.4%	-18.1%
Mexico	13	454,406	-16.4%	40.0%	-6.7%
Poland	10	232,565	-27.8%	86.8%	-20.3%
Qatar	10	765,102	-12.1%	-8.0%	-7.4%
Saudi Arabia	19	1,101,610	-36.0%	4.2%	-26.5%
Singapore	16	765,536	-24.1%	20.2%	-18.1%
Spain	9	263,678	-36.5%	58.7%	-20.3%
Thailand	31	1,136,377	-38.6%	88.4%	-37.9%
Turkey	24	1,038,868	-27.2%	6.0%	-20.3%
United Arab Emirates	26	1,934,881	-32.1%	12.6%	-5.0%
United States	78	5,016,637	-27.0%	17.0%	-21.0%
Vietnam	10	398,310	-6.7%	60.1%	-46.1%

4-Stars Segment

Country	4 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Australia	24	629,324	-29.1%	31.6%	-27.2%
Canada	38	1,178,806	-22.2%	43.9%	-31.3%
China	280	13,927,769	-16.8%	0.0%	-18.4%
Colombia	9	123,097	-20.0%	-1.2%	-35.7%
Egypt	21	892,806	-15.2%	5.2%	-21.1%
France	16	254,802	-23.2%	97.3%	-20.0%
Germany	24	519,802	-49.7%	67.2%	-33.3%
India	52	1,081,550	-28.4%	-6.4%	-30.6%
Indonesia	24	538,602	-39.0%	5.6%	-41.9%
Italy	22	237,932	-39.1%	63.0%	-24.0%
Japan	31	1,343,646	-54.9%	50.8%	-40.8%
Korea	9	236,657	-32.1%	-2.1%	-24.8%
Malaysia	15	406,525	-48.5%	21.3%	-52.8%
Mexico	35	815,423	-26.2%	17.4%	-20.1%
Netherlands	12	195,995	-40.1%	91.0%	-29.8%
Saudi Arabia	16	591,617	-36.2%	5.4%	-26.9%
Singapore	18	367,061	-26.9%	0.4%	-24.1%
Spain	12	153,818	-44.3%	52.0%	-32.7%
Thailand	20	583,950	-43.1%	96.1%	-42.4%
Turkey	22	511,678	-37.5%	-11.4%	-30.1%
United Arab Emirates	26	1,402,262	-32.3%	11.6%	-9.4%
United Kingdom	79	1,212,440	-43.2%	16.6%	-36.5%
United States	529	19,366,166	-31.4%	13.7%	-25.2%

3-Stars Segment

Country	3 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Canada	114	1,295,454	-19.3%	25.1%	-26.6%
China	140	4,674,669	-22.4%	-1.6%	-20.7%
India	18	271,294	-26.3%	-10.5%	-25.6%
Indonesia	15	290,021	-38.3%	-2.8%	-41.7%
Mexico	81	925,410	-30.4%	7.8%	-24.3%
Saudi Arabia	13	334,699	-29.8%	-20.5%	-19.7%
Spain	10	65,450	-39.6%	36.3%	-26.1%
Turkey	18	194,794	-40.8%	-10.6%	-28.5%
United Arab Emirates	12	312,103	-44.6%	-16.9%	-23.4%
United Kingdom	97	778,601	-31.3%	14.7%	-24.3%
United States	2,827	28,815,131	-38.0%	-12.5%	-28.8%

2-Stars Segment

Country	2 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Canada	75	540,430	-30.3%	0.3%	-31.3%
China	54	712,688	-5.5%	8.8%	-8.4%
Mexico	36	285,618	-35.4%	-7.4%	-26.8%
United Kingdom	28	126,774	-32.5%	3.9%	-22.7%
United States	3,135	17,889,819	-43.0%	-24.2%	-31.1%

APPENDIX 5: Year-Over-Year overall average change by selected metro area for energy, 2019-2021

All Hotels

Metro Area	Count	SqM	Measure 4	Measure 5	Measure 6
Abu Dhabi	15	765,269	-30.3%	4.5%	-7.9%
Akron, OH	19	114,778	-37.5%	-11.6%	-26.9%
Alabama State Non-Metropolitan Areas	26	175,732	-49.1%	-34.7%	-35.6%
Albany, NY	25	199,098	-42.9%	-23.8%	-40.0%
Albuquerque, NM	30	224,496	-20.3%	5.1%	-13.2%
Allentown, PA	15	85,214	-25.0%	-20.4%	-19.8%
Amsterdam	10	172,302	-44.9%	135.0%	-35.9%
Anchorage, AK	9	127,040	-24.0%	-14.4%	-17.1%
Arizona State Non-Metropolitan Areas	9	42,837	-18.9%	-14.3%	-12.3%
Arkansas State Non-Metropolitan Areas	17	71,296	-28.3%	-25.0%	-21.8%
Asheville, NC	17	139,732	-39.6%	-11.7%	-21.7%
Atlanta, GA	153	1,998,728	-36.9%	-3.9%	-28.2%
Augusta, GA	18	120,539	-36.5%	-25.3%	-28.7%
Austin, TX	66	696,374	-44.7%	-19.6%	-35.6%
Bakersfield, CA	9	81,532	-40.3%	-27.6%	-34.8%
Baltimore, MD	50	537,206	-30.0%	-5.7%	-23.1%
Bandung	8	223,942	-31.7%	-7.3%	-28.0%
Bangkok	30	1,136,771	-40.7%	109.8%	-38.6%
Barcelona	8	189,043	-41.6%	73.4%	-27.9%
Baton Rouge, LA	15	168,815	-38.1%	-40.2%	-33.7%
Beijing	36	1,577,633	-25.3%	10.4%	-23.0%
Berlin	9	259,948	-49.6%	112.6%	-31.3%
Billings, MT	10	65,195	-40.7%	-35.2%	-37.9%
Birmingham	11	92,036	-28.0%	48.2%	-20.2%
Birmingham, AL	32	265,130	-49.3%	-31.1%	-39.3%
Boise City, ID	19	124,959	-23.1%	-20.3%	-22.8%
Boston, MA	88	1,190,020	-31.3%	13.0%	-25.7%
Boulder, CO	13	91,309	-44.7%	-17.6%	-35.4%
Bowling Green, KY	8	55,655	-35.5%	-18.1%	-19.1%
Bridgeport, CT	22	255,268	-30.8%	-7.1%	-25.1%
Brownsville, TX	8	48,953	-50.2%	-46.8%	-46.9%
Buffalo, NY	20	152,521	-22.1%	-1.7%	-19.9%
Burlington, VT	8	84,144	-44.4%	-28.5%	-39.4%
Cairo	15	845,531	-14.0%	13.9%	-20.8%
Calgary	11	107,108	-31.8%	22.4%	-23.5%
Canton-Massillon, OH	12	64,336	-27.0%	-2.4%	-13.7%
Changsha	8	440,104	-7.8%	-14.0%	-22.7%
Charleston, SC	29	234,790	-39.5%	-17.7%	-28.1%
Charleston, WV	10	84,778	-46.4%	-18.4%	-32.1%
Charlotte, NC	68	658,872	-43.6%	-4.1%	-31.7%
Charlottesville, VA	9	62,273	-29.2%	-23.4%	-27.4%
Chattanooga, TN	19	116,201	-44.4%	-19.7%	-25.2%
Chengdu	26	1,087,589	-15.5%	1.8%	-15.3%
Chennai	9	225,115	-40.0%	-23.0%	-36.9%
Chicago, IL	146	1,903,551	-38.4%	5.8%	-25.0%
Chongqing	14	634,841	-18.6%	3.8%	-17.8%
Cincinnati, OH	50	412,824	-40.5%	-8.6%	-27.8%
Cleveland, OH	32	322,483	-39.4%	-3.7%	-24.9%

All Hotels (cont'd)

Metro Area	Count	SqM	Measure 4	Measure 5	Measure 6
College Station, TX	8	52,249	-44.1%	-25.8%	-29.9%
Colorado Springs, CO	14	121,030	-39.4%	-11.7%	-23.5%
Colorado State Non-Metropolitan Areas	21	135,585	-24.9%	-12.7%	-11.8%
Columbia, MO	9	78,078	-39.3%	-11.9%	-26.2%
Columbia, SC	21	163,915	-46.6%	-23.5%	-34.7%
Columbus, GA	11	59,044	-48.1%	-24.4%	-33.8%
Columbus, OH	45	387,066	-50.2%	-9.4%	-34.8%
Corpus Christi, TX	12	66,446	-40.8%	-22.5%	-29.9%
Dallas-Fort Worth, TX	177	2,058,330	-41.8%	-16.3%	-33.4%
Davenport, IA (Quad Cities)	10	70,428	-26.7%	-12.3%	-22.4%
Dayton, OH	18	109,965	-36.0%	-7.2%	-24.4%
Daytona Beach, FL	12	112,134	-57.9%	-43.5%	-45.1%
Delhi	20	693,610	-28.3%	-6.5%	-28.4%
Denver, CO	95	1,253,984	-38.7%	-13.1%	-34.7%
Des Moines, IA	22	193,628	-33.8%	-1.8%	-24.6%
Destin, FL	19	177,543	-44.3%	-24.4%	-30.2%
Detroit, MI	53	472,962	-40.6%	-9.8%	-32.1%
Doha	14	907,129	-16.8%	-16.5%	-11.7%
Dubai-Sharjah-Ajman	45	2,560,714	-29.5%	16.2%	-2.9%
Dublin	8	130,190	-43.5%	61.6%	-36.5%
Durham, NC	26	222,337	-42.2%	0.4%	-32.5%
El Paso, TX	16	94,319	-29.0%	-21.1%	-19.4%
Erie, PA	8	46,399	-29.9%	-5.9%	-22.0%
Evansville, IN-KY	9	62,296	-50.1%	-26.8%	-33.8%
Fargo, ND	11	76,673	-27.7%	-17.1%	-19.3%
Fayetteville, AR	19	165,542	-57.2%	-22.2%	-40.8%
Fayetteville, NC	10	73,980	-37.6%	-24.7%	-22.6%
Flagstaff, AZ	11	85,688	-37.8%	-21.9%	-25.5%
Florence, SC	8	56,805	-40.0%	-25.3%	-28.6%
Florida State Non-Metropolitan Areas	21	119,825	-36.4%	-20.5%	-21.0%
Fort Collins, CO	13	118,209	-47.9%	-16.8%	-38.2%
Fort Myers, FL	21	208,938	-31.1%	-14.1%	-18.1%
Fort Wayne, IN	11	76,094	-47.8%	-17.2%	-32.3%
Frankfurt	8	145,740	-53.0%	46.7%	-37.5%
Fresno, CA	10	69,357	-34.8%	-15.1%	-27.6%
Gainesville, FL	10	67,127	-37.8%	-24.1%	-26.7%
Georgia State Non-Metropolitan Areas	32	163,611	-32.0%	-20.4%	-21.3%
Glasgow	8	97,837	-44.7%	13.4%	-39.3%
Grand Rapids, MI	17	126,103	-32.9%	4.2%	-27.5%
Greater Manchester	8	134,590	-48.1%	12.8%	-41.4%
Greater Zhengzhou	11	357,060	-19.0%	3.4%	-18.6%
Greensboro, NC	13	133,550	-36.2%	-4.8%	-25.7%
Greenville, SC	22	192,756	-41.1%	-14.4%	-29.8%
Guadalajara	9	185,514	-34.1%	18.8%	-28.1%
Guangzhou	21	1,024,584	-20.3%	2.3%	-19.7%
Gulfport-Biloxi, MS	8	50,875	-41.1%	-31.7%	-27.5%
Hangzhou	22	868,673	-9.4%	2.9%	-11.4%
Harrisburg, PA	17	130,045	-40.5%	-11.4%	-30.8%

All Hotels (cont'd)

Metro Area	ALL				
	Count	SqM	Measure 4	Measure 5	Measure 6
Hartford, CT	22	154,844	-40.4%	-19.0%	-36.0%
Hawaii State Non-Metropolitan Areas	13	411,853	-10.2%	8.3%	-15.6%
Hefei	12	461,693	-17.9%	-9.3%	-19.5%
Hong Kong	21	774,412	-5.9%	48.8%	-14.7%
Houston, TX	146	1,705,296	-39.7%	-13.2%	-29.5%
Huntsville, AL	16	138,373	-46.8%	-18.8%	-28.3%
Idaho State Non-Metropolitan Areas	8	47,205	-14.6%	-16.2%	-13.3%
IllinoisState Non-Metropolitan Areas	24	138,431	-32.6%	-20.1%	-22.1%
Indiana State Non-Metropolitan Areas	16	73,378	-38.5%	-21.5%	-25.6%
Indianapolis, IN	56	653,047	-38.7%	-13.8%	-30.6%
Iowa State Non-Metropolitan Areas	13	57,013	-41.2%	-31.8%	-28.6%
Istanbul	37	1,194,192	-34.9%	0.5%	-26.8%
Jackson, MS	19	143,518	-38.1%	-27.4%	-32.3%
Jacksonville, FL	58	601,483	-35.0%	-17.1%	-23.6%
Jakarta	20	628,842	-31.1%	-16.7%	-35.8%
Kansas City, MO	54	566,052	-47.9%	-10.7%	-34.2%
Kansas State Non-Metropolitan Areas	17	82,108	-47.5%	-26.3%	-29.1%
Kennewick, WA	10	63,469	-32.6%	-23.0%	-31.7%
Kentucky State Non-Metropolitan Areas	28	125,824	-43.4%	-27.4%	-27.3%
Knoxville, TN	27	220,341	-48.8%	-25.0%	-32.8%
Kuala Lumpur	15	625,753	-50.2%	62.7%	-52.8%
Lafayette, LA	12	84,915	-47.8%	-32.7%	-30.4%
Lakeland, FL	13	67,123	-43.7%	-41.1%	-41.3%
Lancaster, PA	9	67,008	-48.1%	-27.3%	-38.5%
Lansing, MI	9	49,736	-31.7%	-14.9%	-26.5%
Las Vegas, NV	42	5,502,715	-23.8%	6.0%	-18.4%
Lexington, KY	27	203,644	-53.9%	-24.9%	-38.6%
Little Rock, AR	25	221,812	-41.2%	-29.2%	-35.4%
Liverpool–Birkenhead	8	71,255	-22.6%	20.0%	-16.1%
London, UK	52	832,881	-48.1%	18.0%	-41.8%
Los Angeles, CA	158	2,894,116	-35.7%	-5.3%	-29.5%
Louisiana State Non-Metropolitan Areas	11	48,166	-56.7%	-48.5%	-47.0%
Louisville, KY	36	354,954	-48.9%	-10.2%	-35.1%
Macon, GA	9	45,799	-40.1%	-27.6%	-30.2%
Madison, WI	24	188,725	-44.4%	-10.0%	-32.3%
Madrid	11	155,967	-34.6%	77.8%	-21.2%
Manchester, NH	9	57,563	-36.4%	-7.1%	-29.7%
Manila	8	417,693	-43.7%	-41.4%	-43.7%
Maryland State Non-Metropolitan Areas	8	69,873	-33.7%	-20.8%	-19.4%
Medford, OR MSA	8	41,350	-22.8%	-28.3%	-23.2%
Melbourne	8	208,363	-26.1%	74.0%	-16.1%
Memphis, TN	31	291,433	-33.4%	-16.6%	-30.9%
Mexico City	23	477,553	-37.6%	38.3%	-32.8%
Miami, FL	145	2,059,785	-35.5%	-15.4%	-25.4%
Michigan State Non-Metropolitan Areas	18	109,235	-33.4%	-18.3%	-24.2%
Milan	10	125,898	-33.1%	54.1%	-24.9%
Milwaukee, WI	32	333,027	-40.8%	-2.6%	-28.9%
Minneapolis, MN	56	666,619	-42.6%	6.7%	-34.7%
Minnesota State Non-Metropolitan Areas	9	43,258	-27.5%	-21.1%	-16.0%
Mississippi State Non-Metropolitan Areas	29	142,430	-49.5%	-32.4%	-35.7%

All Hotels (cont'd)

Metro Area	ALL				
	Count	SqM	Measure 4	Measure 5	Measure 6
Missouri State Non-Metropolitan Areas	14	79,507	-50.2%	-34.3%	-30.7%
Mobile, AL	13	110,569	-36.9%	-17.8%	-26.6%
Modesto, CA	9	57,764	-41.0%	-30.8%	-33.9%
Montana State Non-Metropolitan Areas	13	73,095	-27.8%	-24.2%	-24.1%
MONTERREY	11	164,863	-41.6%	14.7%	-34.3%
Montgomery, AL	15	93,575	-47.3%	-23.0%	-32.7%
Montreal	17	239,788	-34.6%	46.5%	-32.2%
Myrtle Beach, FL	16	193,335	-43.6%	-22.6%	-32.0%
Nanjing	17	702,464	-25.6%	-7.4%	-28.4%
Napa, CA	9	96,578	-20.1%	6.7%	-15.5%
Naples, FL	14	323,010	-16.8%	-1.7%	-5.9%
Nashville, TN	76	721,538	-47.6%	-12.9%	-31.4%
Nebraska State Non-Metropolitan Areas	24	148,238	-28.6%	-15.5%	-16.0%
New Hampshire State Non-Metropolitan Areas	8	47,540	-35.7%	-24.8%	-28.1%
New Mexico State Non-Metropolitan Areas	18	76,623	-42.0%	-21.7%	-31.3%
New Orleans, LA	43	1,046,200	-32.7%	8.7%	-31.2%
New York State Non-Metropolitan Areas	23	139,716	-24.7%	-11.7%	-22.4%
New York, NY	158	1,893,409	-37.3%	-6.0%	-32.7%
Ningbo	9	483,603	-17.5%	8.6%	-15.7%
North Carolina State Non-Metropolitan Areas	44	222,185	-46.6%	-28.7%	-33.0%
Norwich, CT	8	70,216	-23.5%	-6.8%	-17.9%
Ogden, UT	8	46,729	-39.3%	-31.2%	-37.2%
Ohio State Non-Metropolitan Areas	32	175,467	-40.3%	-23.0%	-25.2%
Oklahoma City, OK	38	337,572	-47.4%	-21.0%	-32.0%
Oklahoma State Non-Metropolitan Areas	30	135,956	-46.4%	-28.3%	-27.5%
Omaha, NE	28	267,680	-37.9%	-3.0%	-22.1%
Orlando, FL	96	1,711,794	-38.1%	-6.1%	-29.1%
Palm Bay, FL	15	145,066	-44.8%	-25.8%	-31.7%
Panama City	9	201,367	67.4%	11.3%	-21.1%
Paris	14	213,297	-16.9%	120.0%	-13.0%
Pennsylvania State Non-Metropolitan Areas	32	153,014	-44.1%	-30.5%	-35.5%
Pensacola, FL	14	93,812	-35.5%	-16.5%	-19.4%
Philadelphia, PA	92	940,669	-35.1%	-5.6%	-29.3%
Phoenix, AZ	104	1,474,089	-27.0%	-1.7%	-19.9%
Phuket	8	138,556	-40.5%	98.6%	-40.8%
Pittsburgh, PA	59	558,132	-42.7%	-9.7%	-33.6%
Portland, ME	18	105,264	-33.8%	-20.8%	-27.6%
Portland, OR	47	509,798	-28.7%	1.5%	-31.7%
Poughkeepsie, NY	10	73,135	-29.4%	-13.9%	-24.7%
Providence, RI	22	200,632	-33.2%	-14.2%	-27.3%
Provo, UT	10	84,928	-16.1%	-4.5%	-20.8%
Qingdao	17	914,333	-22.5%	-4.1%	-19.5%
Queretaro	9	109,608	-22.2%	63.7%	-8.9%
Raleigh, NC	43	388,298	-40.1%	-2.4%	-27.7%
Reno, NV	9	52,012	-20.0%	-22.9%	-21.9%
Richmond, VA	39	282,883	-40.9%	-16.7%	-29.1%
Riyadh	19	697,256	-26.3%	-5.2%	-15.0%
Roanoke, VA	8	67,102	-49.3%	-15.8%	-31.0%
Rochester, NY	15	105,410	-41.9%	-27.3%	-40.0%
Sacramento, CA	40	401,224	-35.7%	-8.9%	-28.7%

Appendix 5 (continued)

All Hotels (cont'd)

Metro Area	ALL				
	Count	SqM	Measure 4	Measure 5	Measure 6
Saginaw, MI	9	45,507	-24.9%	-2.0%	-20.9%
Salt Lake City, UT	28	261,199	-23.5%	-11.0%	-22.0%
San Antonio, TX	69	969,593	-32.1%	-7.4%	-22.3%
San Bernardino, CA	48	746,997	-25.7%	-5.8%	-16.3%
San Diego, CA	70	1,370,030	-32.8%	2.6%	-27.1%
San Francisco, CA	71	1,294,690	-35.2%	17.9%	-31.4%
San José, CA	36	396,045	-33.4%	12.0%	-27.6%
San Juan–Caguas–Guaynabo	11	193,512	-21.6%	2.1%	-13.6%
Sanya	23	1,373,875	-9.9%	3.1%	-7.7%
Sarasota, FL	22	191,564	-25.9%	-12.1%	-12.8%
Savannah, GA	22	214,667	-37.8%	-20.9%	-29.6%
Scranton, PA	14	82,385	-45.6%	-34.2%	-38.6%
Seattle, WA	75	1,204,222	-22.1%	16.6%	-26.5%
Seoul	16	773,754	-23.0%	24.0%	-19.4%
Shanghai	74	3,497,514	-14.0%	2.1%	-15.7%
Shenzhen	20	851,660	-17.8%	-0.2%	-20.4%
Shreveport, LA	12	82,024	-60.0%	-47.5%	-44.8%
Singapore	38	1,191,466	-24.7%	7.2%	-19.7%
Sioux Falls, SD	15	110,242	-30.8%	-10.8%	-21.9%
South Bali	16	451,699	-49.3%	95.1%	-51.2%
South Carolina State Non-Metropolitan Areas	21	132,067	-33.8%	-20.3%	-20.5%
South Dakota State Non-Metropolitan Areas	13	100,529	-24.2%	-10.7%	-9.9%
Spokane, WA	12	215,198	-30.2%	-10.2%	-33.0%
Springfield, MA	11	79,889	-29.9%	-4.2%	-24.3%
Springfield, MO	12	71,745	-51.9%	-28.4%	-33.9%
St. Louis, MO	43	499,045	-35.9%	-3.5%	-30.9%
Suzhou-Wuxi-Changzhou	43	1,826,911	-13.4%	8.7%	-16.4%
Sydney	11	297,370	-40.3%	57.5%	-38.0%
Syracuse, NY	20	174,215	-34.4%	-11.0%	-29.6%
Tallahassee, FL	19	140,600	-36.6%	-6.8%	-22.7%
Tampa Bay, FL	76	813,577	-41.3%	-22.0%	-32.7%
Temple, TX	8	34,284	-23.6%	-18.4%	-14.3%
Tennessee State Non-Metropolitan Areas	32	185,882	-48.1%	-29.1%	-29.0%
Texas State Non-Metropolitan Areas	48	210,980	-36.8%	-26.2%	-24.9%
Tianjin	17	730,786	-16.6%	11.9%	-15.3%
Tokyo	17	657,314	-39.9%	75.2%	-29.2%
Toledo, OH	14	90,378	-41.9%	-15.3%	-29.2%
Toronto	52	888,794	-15.3%	29.5%	-30.4%
Tucson, AZ	22	292,802	-29.6%	-0.6%	-19.1%
Tulsa, OK	22	190,807	-40.9%	-9.4%	-21.2%
Utah State Non-Metropolitan Areas	9	40,132	-16.2%	-23.0%	-17.3%
Vancouver	22	436,824	-6.1%	49.8%	-13.9%
Ventura, CA	16	159,329	-29.4%	-13.9%	-25.3%
Virginia Beach, VA	60	629,151	-40.3%	-21.9%	-29.1%

All Hotels (cont'd)

Metro Area	ALL				
	Count	SqM	Measure 4	Measure 5	Measure 6
Virginia State Non-Metropolitan Areas	22	96,939	-38.2%	-18.9%	-17.8%
Washington DC	173	2,390,561	-33.9%	8.7%	-26.9%
Washington State Non-Metropolitan Areas	9	50,693	-11.1%	-5.2%	-15.2%
West Virginia State Non-Metropolitan Areas	10	43,884	-36.3%	-15.8%	-24.5%
Wichita, KS	16	134,533	-42.2%	-13.2%	-24.7%
Wilmington, NC	14	104,355	-34.9%	-9.7%	-22.9%
Winston-Salem, NC	10	75,304	-43.3%	-12.1%	-33.7%
Worcester, MA	12	87,581	-35.1%	-19.2%	-28.9%
Wuhan	12	582,602	-18.5%	-4.4%	-18.3%
Wyoming State Non-Metropolitan Areas	23	122,841	-29.4%	-20.5%	-25.4%
Xiamen	11	463,121	-19.6%	-6.7%	-22.3%
Xian	18	687,198	-19.3%	0.3%	-18.6%
Youngstown, OH	13	66,857	-39.5%	-34.2%	-24.8%

Appendix 5 (continued)

All Non-Resorts

Metro Area	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Abu Dhabi	11	575,841	-31.3%	-1.4%	-10.2%
Akron, OH	19	114,778	-37.5%	-11.6%	-26.9%
Alabama State Non-Metropolitan Areas	26	175,732	-49.1%	-34.7%	-35.6%
Albany, NY	25	199,098	-42.9%	-23.8%	-40.0%
Albuquerque, NM	30	224,496	-20.3%	5.1%	-13.2%
Allentown, PA	15	85,214	-25.0%	-20.4%	-19.8%
Amsterdam	9	162,235	-43.7%	138.5%	-35.0%
Anchorage, AK	9	127,040	-24.0%	-14.4%	-17.1%
Arizona State Non-Metropolitan Areas	9	42,837	-18.9%	-14.3%	-12.3%
Arkansas State Non-Metropolitan Areas	17	71,296	-28.3%	-25.0%	-21.8%
Asheville, NC	17	139,732	-39.6%	-11.7%	-21.7%
Atlanta, GA	151	1,826,853	-37.1%	-3.9%	-27.3%
Augusta, GA	18	120,539	-36.5%	-25.3%	-28.7%
Austin, TX	65	660,379	-45.5%	-21.2%	-36.4%
Bakersfield, CA	9	81,532	-40.3%	-27.6%	-34.8%
Baltimore, MD	49	501,776	-29.9%	-7.5%	-22.6%
Bandung	8	223,942	-31.7%	-7.3%	-28.0%
Bangkok	28	1,046,616	-41.2%	104.7%	-38.8%
Baton Rouge, LA	15	168,815	-38.1%	-40.2%	-33.7%
Beijing	32	1,329,779	-24.7%	9.8%	-21.9%
Berlin	8	227,149	-50.6%	116.1%	-31.9%
Billings, MT	10	65,195	-40.7%	-35.2%	-37.9%
Birmingham	11	92,036	-28.0%	48.2%	-20.2%
Birmingham, AL	32	265,130	-49.3%	-31.1%	-39.3%
Boise City, ID	19	124,959	-23.1%	-20.3%	-22.8%
Boston, MA	85	1,113,468	-31.5%	11.8%	-25.9%
Boulder, CO	13	91,309	-44.7%	-17.6%	-35.4%
Bowling Green, KY	8	55,655	-35.5%	-18.1%	-19.1%
Bridgeport, CT	21	226,050	-33.4%	-11.5%	-27.3%
Buffalo, NY	20	152,521	-22.1%	-1.7%	-19.9%
Burlington, VT	8	84,144	-44.4%	-28.5%	-39.4%
Cairo	13	779,431	-14.5%	14.6%	-21.4%
Calgary	11	107,108	-31.8%	22.4%	-23.5%
Canton-Massillon, OH	12	64,336	-27.0%	-2.4%	-13.7%
Charleston, SC	28	231,383	-39.7%	-18.0%	-28.4%
Charleston, WV	10	84,778	-46.4%	-18.4%	-32.1%
Charlotte, NC	67	624,892	-42.9%	-3.0%	-31.1%
Charlottesville, VA	9	62,273	-29.2%	-23.4%	-27.4%
Chattanooga, TN	19	116,201	-44.4%	-19.7%	-25.2%
Chengdu	24	1,004,957	-15.8%	3.4%	-14.4%
Chicago, IL	143	1,798,834	-38.4%	6.2%	-24.8%
Chongqing	13	594,841	-18.9%	3.4%	-18.7%
Cincinnati, OH	49	370,681	-42.8%	-13.1%	-29.8%
Cleveland, OH	32	322,483	-39.4%	-3.7%	-24.9%
College Station, TX	8	52,249	-44.1%	-25.8%	-29.9%
Colorado Springs, CO	14	121,030	-39.4%	-11.7%	-23.5%
Colorado State Non-Metropolitan Areas	20	103,069	-30.2%	-16.7%	-15.3%
Columbia, MO	9	78,078	-39.3%	-11.9%	-26.2%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Columbia, SC	21	163,915	-46.6%	-23.5%	-34.7%
Columbus, GA	11	59,044	-48.1%	-24.4%	-33.8%
Columbus, OH	45	387,066	-50.2%	-9.4%	-34.8%
Corpus Christi, TX	12	66,446	-40.8%	-22.5%	-29.9%
Dallas-Fort Worth, TX	174	1,872,754	-43.5%	-19.3%	-35.0%
Davenport, IA (Quad Cities)	10	70,428	-26.7%	-12.3%	-22.4%
Dayton, OH	18	109,965	-36.0%	-7.2%	-24.4%
Daytona Beach, FL	11	66,792	-36.9%	-22.6%	-24.7%
Delhi	18	596,587	-30.2%	-8.5%	-29.4%
Denver, CO	94	1,204,417	-38.1%	-11.7%	-33.3%
Des Moines, IA	22	193,628	-33.8%	-1.8%	-24.6%
Destin, FL	15	92,017	-38.7%	-19.0%	-25.4%
Detroit, MI	52	468,503	-40.8%	-9.6%	-32.2%
Doha	10	619,511	-20.9%	-18.8%	-11.7%
Dubai-Sharjah-Ajman	31	1,731,204	-29.0%	20.6%	1.4%
Dublin	8	130,190	-43.5%	61.6%	-36.5%
Durham, NC	26	222,337	-42.2%	0.4%	-32.5%
El Paso, TX	16	94,319	-29.0%	-21.1%	-19.4%
Erie, PA	8	46,399	-29.9%	-5.9%	-22.0%
Evansville, IN-KY	9	62,296	-50.1%	-26.8%	-33.8%
Fargo, ND	11	76,673	-27.7%	-17.1%	-19.3%
Fayetteville, AR	19	165,542	-57.2%	-22.2%	-40.8%
Fayetteville, NC	10	73,980	-37.6%	-24.7%	-22.6%
Flagstaff, AZ	11	85,688	-37.8%	-21.9%	-25.5%
Florence, SC	8	56,805	-40.0%	-25.3%	-28.6%
Florida State Non-Metropolitan Areas	18	97,067	-41.1%	-26.0%	-26.9%
Fort Collins, CO	13	118,209	-47.9%	-16.8%	-38.2%
Fort Myers, FL	19	141,661	-38.4%	-24.3%	-24.5%
Fort Wayne, IN	11	76,094	-47.8%	-17.2%	-32.3%
Fresno, CA	10	69,357	-34.8%	-15.1%	-27.6%
Gainesville, FL	10	67,127	-37.8%	-24.1%	-26.7%
Georgia State Non-Metropolitan Areas	31	137,360	-43.6%	-31.7%	-31.5%
Glasgow	8	97,837	-44.7%	13.4%	-39.3%
Grand Rapids, MI	17	126,103	-32.9%	4.2%	-27.5%
Greater Manchester	8	134,590	-48.1%	12.8%	-41.4%
Greater Zhengzhou	11	357,060	-19.0%	3.4%	-18.6%
Greensboro, NC	13	133,550	-36.2%	-4.8%	-25.7%
Greenville, SC	21	167,672	-37.9%	-11.5%	-26.5%
Guadalajara	9	185,514	-34.1%	18.8%	-28.1%
Guangzhou	19	928,847	-22.1%	0.1%	-22.3%
Gulfport-Biloxi, MS	8	50,875	-41.1%	-31.7%	-27.5%
Hangzhou	17	601,431	-13.6%	-0.6%	-15.9%
Harrisburg, PA	17	130,045	-40.5%	-11.4%	-30.8%
Hartford, CT	22	154,844	-40.4%	-19.0%	-36.0%
Hefei	12	461,693	-17.9%	-9.3%	-19.5%
Hong Kong	16	505,917	-11.8%	43.2%	-19.6%
Houston, TX	143	1,632,052	-40.1%	-14.2%	-30.0%
Huntsville, AL	16	138,373	-46.8%	-18.8%	-28.3%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Idaho State Non-Metropolitan Areas	8	47,205	-14.6%	-16.2%	-13.3%
IllinoisState Non-Metropolitan Areas	24	138,431	-32.6%	-20.1%	-22.1%
Indiana State Non-Metropolitan Areas	16	73,378	-38.5%	-21.5%	-25.6%
Indianapolis, IN	56	653,047	-38.7%	-13.8%	-30.6%
Iowa State Non-Metropolitan Areas	13	57,013	-41.2%	-31.8%	-28.6%
Istanbul	34	1,082,817	-36.8%	-2.3%	-28.3%
Jackson, MS	19	143,518	-38.1%	-27.4%	-32.3%
Jacksonville, FL	52	367,006	-42.9%	-26.6%	-31.1%
Jakarta	18	514,922	-34.8%	-23.4%	-40.3%
Kansas City, MO	54	566,052	-47.9%	-10.7%	-34.2%
Kansas State Non-Metropolitan Areas	17	82,108	-47.5%	-26.3%	-29.1%
Kennewick, WA	10	63,469	-32.6%	-23.0%	-31.7%
Kentucky State Non-Metropolitan Areas	28	125,824	-43.4%	-27.4%	-27.3%
Knoxville, TN	27	220,341	-48.8%	-25.0%	-32.8%
Kuala Lumpur	13	457,187	-53.5%	44.5%	-57.0%
Lafayette, LA	12	84,915	-47.8%	-32.7%	-30.4%
Lakeland, FL	12	62,969	-43.0%	-41.1%	-41.1%
Lancaster, PA	8	48,427	-45.2%	-25.3%	-36.8%
Lansing, MI	9	49,736	-31.7%	-14.9%	-26.5%
Las Vegas, NV	32	309,705	-30.1%	-13.7%	-20.8%
Lexington, KY	27	203,644	-53.9%	-24.9%	-38.6%
Little Rock, AR	25	221,812	-41.2%	-29.2%	-35.4%
Liverpool–Birkenhead	8	71,255	-22.6%	20.0%	-16.1%
London, UK	52	832,881	-48.1%	18.0%	-41.8%
Los Angeles, CA	151	2,556,692	-37.2%	-8.3%	-31.1%
Louisiana State Non-Metropolitan Areas	11	48,166	-56.7%	-48.5%	-47.0%
Louisville, KY	35	320,791	-50.2%	-13.2%	-35.9%
Macon, GA	9	45,799	-40.1%	-27.6%	-30.2%
Madison, WI	24	188,725	-44.4%	-10.0%	-32.3%
Madrid	11	155,967	-34.6%	77.8%	-21.2%
Manchester, NH	9	57,563	-36.4%	-7.1%	-29.7%
Maryland State Non-Metropolitan Areas	8	69,873	-33.7%	-20.8%	-19.4%
Medford, OR MSA	8	41,350	-22.8%	-28.3%	-23.2%
Memphis, TN	31	291,433	-33.4%	-16.6%	-30.9%
Mexico City	22	399,979	-38.5%	34.5%	-33.1%
Miami, FL	130	1,504,320	-38.2%	-18.3%	-27.9%
Michigan State Non-Metropolitan Areas	18	109,235	-33.4%	-18.3%	-24.2%
Milan	8	110,194	-40.6%	60.6%	-24.9%
Milwaukee, WI	31	295,969	-41.9%	-4.2%	-29.5%
Minneapolis, MN	55	596,860	-42.4%	5.6%	-32.8%
Minnesota State Non-Metropolitan Areas	9	43,258	-27.5%	-21.1%	-16.0%
Mississippi State Non-Metropolitan Areas	29	142,430	-49.5%	-32.4%	-35.7%
Missouri State Non-Metropolitan Areas	14	79,507	-50.2%	-34.3%	-30.7%
Mobile, AL	13	110,569	-36.9%	-17.8%	-26.6%
Modesto, CA	9	57,764	-41.0%	-30.8%	-33.9%
Montana State Non-Metropolitan Areas	13	73,095	-27.8%	-24.2%	-24.1%
MONTERREY	11	164,863	-41.6%	14.7%	-34.3%
Montgomery, AL	15	93,575	-47.3%	-23.0%	-32.7%
Montreal	17	239,788	-34.6%	46.5%	-32.2%
Myrtle Beach, FL	15	178,210	-51.3%	-30.2%	-39.9%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Nanjing	17	702,464	-25.6%	-7.4%	-28.4%
Naples, FL	9	66,551	-37.2%	-15.6%	-23.8%
Nashville, TN	76	721,538	-47.6%	-12.9%	-31.4%
Nebraska State Non-Metropolitan Areas	24	148,238	-28.6%	-15.5%	-16.0%
New Hampshire State Non-Metropolitan Areas	8	47,540	-35.7%	-24.8%	-28.1%
New Mexico State Non-Metropolitan Areas	18	76,623	-42.0%	-21.7%	-31.3%
New Orleans, LA	42	942,117	-34.6%	2.9%	-33.3%
New York State Non-Metropolitan Areas	23	139,716	-24.7%	-11.7%	-22.4%
New York, NY	155	1,832,293	-37.2%	-6.5%	-32.8%
North Carolina State Non-Metropolitan Areas	44	222,185	-46.6%	-28.7%	-33.0%
Norwich, CT	8	70,216	-23.5%	-6.8%	-17.9%
Ogden, UT	8	46,729	-39.3%	-31.2%	-37.2%
Ohio State Non-Metropolitan Areas	32	175,467	-40.3%	-23.0%	-25.2%
Oklahoma City, OK	38	337,572	-47.4%	-21.0%	-32.0%
Oklahoma State Non-Metropolitan Areas	30	135,956	-46.4%	-28.3%	-27.5%
Omaha, NE	28	267,680	-37.9%	-3.0%	-22.1%
Orlando, FL	84	1,007,178	-43.5%	-16.3%	-33.6%
Palm Bay, FL	15	145,066	-44.8%	-25.8%	-31.7%
Panama City	8	131,870	61.3%	-6.4%	-24.4%
Paris	11	114,872	-24.1%	94.8%	-17.6%
Pennsylvania State Non-Metropolitan Areas	32	153,014	-44.1%	-30.5%	-35.5%
Pensacola, FL	14	93,812	-35.5%	-16.5%	-19.4%
Philadelphia, PA	92	940,669	-35.1%	-5.6%	-29.3%
Phoenix, AZ	90	864,799	-27.6%	-5.9%	-19.5%
Pittsburgh, PA	58	512,888	-44.2%	-14.0%	-35.2%
Portland, ME	18	105,264	-33.8%	-20.8%	-27.6%
Portland, OR	47	509,798	-28.7%	1.5%	-31.7%
Poughkeepsie, NY	10	73,135	-29.4%	-13.9%	-24.7%
Providence, RI	22	200,632	-33.2%	-14.2%	-27.3%
Provo, UT	10	84,928	-16.1%	-4.5%	-20.8%
Qingdao	14	734,693	-22.3%	1.0%	-20.4%
Queretaro	9	109,608	-22.2%	63.7%	-8.9%
Raleigh, NC	43	388,298	-40.1%	-2.4%	-27.7%
Reno, NV	9	52,012	-20.0%	-22.9%	-21.9%
Richmond, VA	39	282,883	-40.9%	-16.7%	-29.1%
Riyadh	18	672,666	-27.7%	-7.5%	-16.5%
Roanoke, VA	8	67,102	-49.3%	-15.8%	-31.0%
Rochester, NY	15	105,410	-41.9%	-27.3%	-40.0%
Sacramento, CA	39	360,701	-35.0%	-10.5%	-27.9%
Saginaw, MI	9	45,507	-24.9%	-2.0%	-20.9%
Salt Lake City, UT	28	261,199	-23.5%	-11.0%	-22.0%
San Antonio, TX	65	645,952	-36.1%	-15.7%	-25.7%
San Bernardino, CA	42	340,513	-29.9%	-19.1%	-21.9%
San Diego, CA	63	1,071,888	-34.0%	-1.6%	-28.5%
San Francisco, CA	67	1,083,402	-38.4%	5.6%	-35.2%
San José, CA	35	364,892	-33.0%	8.6%	-27.0%
San Juan–Caguas–Guaynabo	8	112,780	-22.2%	0.7%	-13.7%
Sarasota, FL	20	122,949	-35.4%	-20.7%	-22.1%
Savannah, GA	20	150,191	-45.9%	-27.4%	-35.1%
Scranton, PA	14	82,385	-45.6%	-34.2%	-38.6%

Appendix 5 (continued)

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Seattle, WA	71	987,897	-25.2%	8.4%	-28.8%
Seoul	13	582,665	-26.1%	24.3%	-23.3%
Shanghai	65	3,017,765	-14.7%	3.5%	-16.5%
Shenzhen	17	682,807	-19.2%	-1.2%	-21.4%
Shreveport, LA	12	82,024	-60.0%	-47.5%	-44.8%
Singapore	35	1,030,405	-24.6%	5.9%	-18.8%
Sioux Falls, SD	15	110,242	-30.8%	-10.8%	-21.9%
South Carolina State Non-Metropolitan Areas	20	98,027	-50.1%	-35.4%	-36.1%
South Dakota State Non-Metropolitan Areas	12	97,302	-18.9%	-3.0%	-2.7%
Spokane, WA	12	215,198	-30.2%	-10.2%	-33.0%
Springfield, MA	11	79,889	-29.9%	-4.2%	-24.3%
Springfield, MO	12	71,745	-51.9%	-28.4%	-33.9%
St. Louis, MO	43	499,045	-35.9%	-3.5%	-30.9%
Suzhou-Wuxi-Changzhou	34	1,375,718	-14.2%	7.7%	-15.9%
Sydney	9	236,170	-42.8%	36.4%	-39.5%
Syracuse, NY	20	174,215	-34.4%	-11.0%	-29.6%
Tallahassee, FL	19	140,600	-36.6%	-6.8%	-22.7%
Tampa Bay, FL	73	711,886	-42.9%	-24.0%	-34.2%
Temple, TX	8	34,284	-23.6%	-18.4%	-14.3%
Tennessee State Non-Metropolitan Areas	31	178,937	-49.4%	-30.4%	-30.2%
Texas State Non-Metropolitan Areas	48	210,980	-36.8%	-26.2%	-24.9%
Tianjin	16	679,117	-16.0%	14.1%	-14.9%
Tokyo	15	540,085	-45.9%	64.3%	-34.6%
Toledo, OH	14	90,378	-41.9%	-15.3%	-29.2%
Toronto	52	888,794	-15.3%	29.5%	-30.4%
Tucson, AZ	20	211,773	-39.4%	-11.5%	-27.6%
Tulsa, OK	21	159,371	-53.6%	-26.8%	-35.4%
Utah State Non-Metropolitan Areas	9	40,132	-16.2%	-23.0%	-17.3%
Vancouver	20	349,239	-9.7%	40.9%	-14.7%
Ventura, CA	15	142,267	-29.9%	-16.3%	-25.8%
Virginia Beach, VA	58	606,443	-41.0%	-22.6%	-29.9%
Virginia State Non-Metropolitan Areas	22	96,939	-38.2%	-18.9%	-17.8%
Washington DC	167	2,124,341	-35.9%	6.6%	-27.7%
Washington State Non-Metropolitan Areas	9	50,693	-11.1%	-5.2%	-15.2%
West Virginia State Non-Metropolitan Areas	10	43,884	-36.3%	-15.8%	-24.5%
Wichita, KS	16	134,533	-42.2%	-13.2%	-24.7%
Wilmington, NC	14	104,355	-34.9%	-9.7%	-22.9%
Winston-Salem, NC	10	75,304	-43.3%	-12.1%	-33.7%
Worcester, MA	12	87,581	-35.1%	-19.2%	-28.9%
Wuhan	12	582,602	-18.5%	-4.4%	-18.3%
Wyoming State Non-Metropolitan Areas	23	122,841	-29.4%	-20.5%	-25.4%
Xiamen	9	371,665	-22.8%	-10.6%	-23.4%
Xian	17	657,144	-20.2%	-1.0%	-19.5%
Youngstown, OH	13	66,857	-39.5%	-34.2%	-24.8%

All Resorts

Metro Area	ALL RESORTS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Dubai-Sharjah-Ajman	14	829,510	-30.3%	10.4%	-9.2%
Hawaii State Non-Metropolitan Areas	10	377,213	-11.7%	9.4%	-16.4%
Las Vegas, NV	10	5,193,010	-23.5%	9.1%	-18.3%
Miami, FL	15	555,465	-28.2%	-7.5%	-18.7%
Orlando, FL	12	704,616	-31.1%	13.6%	-23.2%
Phoenix, AZ	14	609,290	-26.6%	10.8%	-20.2%
Sanya	20	1,237,404	-10.0%	3.7%	-7.6%
Shanghai	9	479,749	-10.6%	-9.4%	-12.0%
South Bali	12	407,183	-49.4%	89.3%	-51.3%
Suzhou-Wuxi-Changzhou	9	451,193	-11.3%	14.3%	-18.0%

Full-Service Resorts

Metro Area	FULL SERVICE RESORT				
	Count	SqM	Measure 4	Measure 5	Measure 6
Dubai-Sharjah-Ajman	14	829,510	-30.3%	10.4%	-9.2%
Hawaii State Non-Metropolitan Areas	8	342,176	-11.0%	11.0%	-15.9%
Las Vegas, NV	10	5,193,010	-23.5%	9.1%	-18.3%
Miami, FL	15	555,465	-28.2%	-7.5%	-18.7%
Orlando, FL	11	699,009	-31.1%	13.8%	-23.2%
Phoenix, AZ	14	609,290	-26.6%	10.8%	-20.2%
Sanya	20	1,237,404	-10.0%	3.7%	-7.6%
Shanghai	8	463,745	-10.5%	-11.0%	-11.9%
South Bali	12	407,183	-49.4%	89.3%	-51.3%
Suzhou-Wuxi-Changzhou	9	451,193	-11.3%	14.3%	-18.0%

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Full-Service Non-Resorts

Metro Area	FULL SERVICE NONRESORT				
	Count	SqM	Measure 4	Measure 5	Measure 6
Abu Dhabi	11	575,841	-31.3%	-1.4%	-10.2%
Albuquerque, NM	8	102,018	-22.1%	21.0%	-12.4%
Amsterdam	8	154,038	-42.8%	150.6%	-33.7%
Atlanta, GA	42	1,136,622	-37.5%	8.4%	-28.1%
Austin, TX	16	343,223	-46.3%	-9.8%	-37.6%
Baltimore, MD	16	284,674	-25.6%	11.0%	-18.0%
Bangkok	22	959,394	-41.8%	108.2%	-39.3%
Beijing	26	1,192,646	-26.4%	6.3%	-23.6%
Birmingham, AL	8	123,841	-53.1%	-33.6%	-44.4%
Boston, MA	27	695,036	-33.3%	24.0%	-28.0%
Cairo	12	765,227	-14.8%	14.4%	-21.6%
Charleston, SC	8	93,654	-41.2%	-15.3%	-30.5%
Charlotte, NC	15	249,847	-49.0%	-3.1%	-37.6%
Chengdu	17	930,669	-14.6%	3.7%	-13.4%
Chicago, IL	53	1,143,792	-38.4%	18.2%	-24.8%
Chongqing	13	594,841	-18.9%	3.4%	-18.7%
Cincinnati, OH	12	150,541	-40.2%	-4.6%	-27.2%
Cleveland, OH	9	188,935	-37.6%	6.2%	-21.7%
Columbus, OH	14	190,604	-54.3%	-7.5%	-36.7%
Dallas-Fort Worth, TX	47	1,034,075	-47.5%	-16.8%	-40.4%
Delhi	14	551,708	-30.8%	-7.6%	-29.5%
Denver, CO	27	716,517	-40.5%	-4.8%	-36.8%
Detroit, MI	12	222,799	-45.5%	-3.7%	-36.9%
Doha	10	619,511	-20.9%	-18.8%	-11.7%
Dubai-Sharjah-Ajman	21	1,563,335	-28.9%	23.6%	1.6%
Durham, NC	10	112,319	-48.9%	-0.7%	-39.5%
Guangzhou	17	846,447	-23.4%	2.3%	-22.0%
Hangzhou	11	481,341	-14.3%	-3.3%	-16.9%
Hefei	8	388,455	-20.0%	-11.6%	-20.2%
Hong Kong	9	403,363	-12.7%	85.5%	-19.8%
Houston, TX	35	951,250	-42.5%	-6.2%	-33.0%
Indianapolis, IN	14	381,476	-38.8%	-4.6%	-32.5%
Istanbul	26	1,003,307	-35.9%	-2.6%	-27.7%
Jacksonville, FL	10	116,860	-49.7%	-33.1%	-38.0%
Jakarta	14	472,861	-36.0%	-22.0%	-41.5%
Kansas City, MO	16	298,239	-52.0%	-5.1%	-39.2%
Kuala Lumpur	11	422,615	-55.3%	46.2%	-58.4%
London, UK	39	737,371	-49.0%	25.2%	-42.7%
Los Angeles, CA	64	1,815,000	-39.5%	-4.2%	-33.5%
Louisville, KY	8	153,425	-53.7%	-3.7%	-40.2%
Memphis, TN	9	162,445	-35.1%	-8.9%	-32.9%
Mexico City	14	317,020	-39.4%	43.2%	-32.9%
Miami, FL	35	823,999	-43.4%	-16.0%	-33.6%
Milwaukee, WI	10	160,152	-36.6%	19.3%	-25.4%
Minneapolis, MN	18	339,475	-42.9%	20.9%	-32.5%
Montreal	10	170,864	-34.1%	40.2%	-33.9%
Nanjing	17	702,464	-25.6%	-7.4%	-28.4%
Nashville, TN	20	332,065	-51.9%	-13.4%	-34.8%

Full-Service Non-Resorts (cont'd)

Metro Area	FULL SERVICE NONRESORT				
	Count	SqM	Measure 4	Measure 5	Measure 6
New Orleans, LA	22	798,141	-35.6%	9.4%	-35.0%
New York, NY	35	876,052	-40.8%	0.5%	-36.6%
Orlando, FL	28	541,834	-49.3%	-18.3%	-39.1%
Philadelphia, PA	34	514,900	-39.1%	-0.4%	-33.4%
Phoenix, AZ	22	368,534	-28.0%	2.8%	-20.1%
Pittsburgh, PA	10	201,679	-47.5%	-4.6%	-40.9%
Portland, OR	18	303,473	-32.6%	6.0%	-34.0%
Qingdao	12	685,014	-21.9%	2.1%	-18.9%
Raleigh, NC	10	163,392	-44.6%	4.1%	-31.4%
Riyadh	14	618,193	-28.3%	-7.6%	-17.0%
San Antonio, TX	15	312,217	-39.7%	-12.6%	-29.0%
San Bernardino, CA	8	136,075	-34.2%	-17.1%	-26.4%
San Diego, CA	21	714,954	-36.3%	7.8%	-31.0%
San Francisco, CA	29	803,456	-40.3%	21.2%	-37.8%
Seattle, WA	20	530,332	-31.0%	25.1%	-33.7%
Seoul	10	522,526	-25.9%	34.0%	-22.6%
Shanghai	46	2,539,853	-15.0%	4.8%	-16.9%
Shenzhen	11	573,175	-20.3%	-1.6%	-22.8%
Singapore	29	948,965	-24.9%	5.7%	-18.8%
St. Louis, MO	16	337,575	-37.3%	4.6%	-32.0%
Suzhou-Wuxi-Changzhou	24	1,165,390	-15.2%	5.5%	-17.0%
Sydney	8	226,631	-43.9%	30.4%	-40.4%
Tampa Bay, FL	17	348,090	-47.0%	-27.5%	-39.9%
Tianjin	13	633,821	-16.4%	11.9%	-14.8%
Tokyo	13	526,787	-46.0%	61.2%	-34.6%
Toronto	24	581,681	-16.7%	38.2%	-31.5%
Tucson, AZ	8	134,147	-48.2%	-12.2%	-35.5%
Vancouver	14	303,014	-12.5%	45.4%	-16.0%
Virginia Beach, VA	16	327,779	-41.8%	-20.1%	-31.3%
Washington DC	55	1,249,580	-35.8%	21.6%	-28.2%
Wuhan	10	547,788	-19.4%	-4.9%	-19.1%
Xiamen	8	359,713	-23.3%	-10.1%	-24.0%
Xian	13	586,092	-22.1%	1.0%	-21.5%

Appendix 5 (continued)

Limited-Service

Metro Area	Count	SqM	Measure 4	Measure 5	Measure 6
		LIMITED SERVICE			
Akron, OH	16	79,867	-35.6%	-9.7%	-22.8%
Alabama State Non-Metropolitan Areas	23	130,074	-44.8%	-32.9%	-34.2%
Albany, NY	18	112,610	-33.9%	-14.2%	-31.4%
Albuquerque, NM	22	122,478	-18.0%	-4.1%	-14.4%
Allentown, PA	13	70,688	-28.8%	-22.7%	-22.8%
Arizona State Non-Metropolitan Areas	9	42,837	-18.9%	-14.3%	-12.3%
Arkansas State Non-Metropolitan Areas	16	62,006	-31.6%	-25.3%	-23.1%
Asheville, NC	10	62,725	-38.4%	-7.6%	-19.7%
Atlanta, GA	109	690,231	-36.3%	-13.8%	-25.4%
Augusta, GA	15	79,878	-41.3%	-30.2%	-28.1%
Austin, TX	49	317,156	-44.4%	-27.1%	-34.3%
Baltimore, MD	33	217,102	-36.9%	-26.1%	-30.3%
Baton Rouge, LA	9	56,143	-34.2%	-36.2%	-29.0%
Billings, MT	8	43,849	-33.9%	-31.8%	-33.8%
Birmingham	8	51,075	-34.0%	**30.1%**	-24.1%
Birmingham, AL	24	141,289	-45.3%	-27.3%	-33.7%
Boise City, ID	18	116,258	-24.4%	-21.2%	-23.9%
Boston, MA	58	418,432	-27.7%	**1.7%**	-21.4%
Boulder, CO	11	66,230	-44.9%	-17.4%	-35.1%
Bridgeport, CT	17	119,217	-30.2%	-13.0%	-24.0%
Brownsville, TX	8	48,953	-50.2%	-46.8%	-46.9%
Buffalo, NY	15	94,622	-30.0%	-13.3%	-25.1%
Canton-Massillon, OH	11	56,440	-32.7%	-18.3%	-25.6%
Charleston, SC	20	137,729	-38.4%	-19.0%	-26.5%
Charleston, WV	8	38,538	-52.1%	-27.0%	-33.1%
Charlotte, NC	52	375,045	-37.6%	**0.0%**	-25.2%
Chattanooga, TN	17	93,468	-42.0%	-20.7%	-26.1%
Chicago, IL	90	655,042	-38.5%	-7.2%	-25.0%
Cincinnati, OH	37	220,140	-45.0%	-18.8%	-32.2%
Cleveland, OH	23	133,548	-42.5%	-15.7%	-31.4%
Colorado Springs, CO	10	59,805	-29.9%	-9.3%	-19.4%
Colorado State Non-Metropolitan Areas	18	83,904	-25.6%	-13.2%	-10.8%
Columbia, SC	17	105,455	-40.2%	-19.9%	-28.3%
Columbus, GA	10	48,592	-45.8%	-26.3%	-34.4%
Columbus, OH	31	196,462	-44.6%	-9.1%	-31.9%
Corpus Christi, TX	10	48,959	-37.2%	-19.0%	-25.6%
Dallas-Fort Worth, TX	127	838,679	-36.6%	-15.2%	-25.6%
Davenport, IA (Quad Cities)	8	51,235	-27.3%	-14.4%	-20.5%
Dayton, OH	17	89,341	-39.3%	-14.3%	-24.8%
Daytona Beach, FL	9	52,122	-33.4%	-18.7%	-21.1%
Denver, CO	67	487,900	-33.5%	-12.3%	-25.6%
Des Moines, IA	16	96,110	-35.9%	-12.1%	-26.5%
Destin, FL	16	91,570	-30.6%	-10.4%	-18.6%
Detroit, MI	41	250,163	-35.5%	-9.9%	-26.9%
Dubai-Sharjah-Ajman	10	167,869	-29.5%	**9.1%**	-0.8%
Durham, NC	16	110,018	-33.3%	**5.4%**	-23.2%
El Paso, TX	13	69,795	-22.7%	-16.7%	-14.5%
Evansville, IN-KY	8	48,361	-45.0%	-20.9%	-27.4%

Limited-Service (cont'd)

Metro Area	Count	SqM	Measure 4	Measure 5	Measure 6
		LIMITED SERVICE			
Fargo, ND	9	51,128	-26.2%	-18.3%	-15.7%
Fayetteville, AR	14	83,115	-50.9%	-17.7%	-34.6%
Fayetteville, NC	8	47,804	-26.7%	-16.5%	-12.4%
Flagstaff, AZ	8	45,250	-23.1%	-3.6%	-11.5%
Florence, SC	8	56,805	-40.0%	-25.3%	-28.6%
Florida State Non-Metropolitan Areas	17	74,486	-43.6%	-27.8%	-28.8%
Fort Collins, CO	8	40,738	-41.4%	-14.2%	-29.6%
Fort Myers, FL	14	88,683	-37.1%	-22.4%	-25.1%
Fort Wayne, IN	9	54,049	-37.7%	-3.6%	-22.5%
Fresno, CA	8	42,132	-27.4%	-10.6%	-19.4%
Georgia State Non-Metropolitan Areas	30	131,733	-45.1%	-30.9%	-30.6%
Grand Rapids, MI	13	69,109	-29.2%	**1.4%**	-24.4%
Greensboro, NC	9	54,141	-38.7%	-18.3%	-27.9%
Greenville, SC	15	88,196	-38.0%	-15.8%	-25.6%
Harrisburg, PA	14	86,543	-37.3%	-11.5%	-28.5%
Hartford, CT	16	96,075	-37.7%	-18.3%	-32.5%
Houston, TX	108	680,802	-35.3%	-16.9%	-23.7%
Huntsville, AL	12	70,678	-42.1%	-18.1%	-24.7%
IllinoisState Non-Metropolitan Areas	20	89,652	-30.2%	-17.6%	-18.8%
Indiana State Non-Metropolitan Areas	16	73,378	-38.5%	-21.5%	-25.6%
Indianapolis, IN	42	271,571	-38.5%	-16.9%	-24.8%
Iowa State Non-Metropolitan Areas	13	57,013	-41.2%	-31.8%	-28.6%
Istanbul	8	79,510	-47.8%	-8.0%	-36.5%
Jackson, MS	15	94,664	-42.3%	-33.6%	-37.6%
Jacksonville, FL	43	258,600	-37.8%	-21.3%	-25.9%
Kansas City, MO	38	267,813	-41.6%	-9.1%	-25.1%
Kansas State Non-Metropolitan Areas	17	82,108	-47.5%	-26.3%	-29.1%
Kennewick, WA	9	55,029	-32.2%	-22.5%	-32.4%
Kentucky State Non-Metropolitan Areas	27	118,763	-42.3%	-26.0%	-26.4%
Knoxville, TN	21	120,487	-47.9%	-25.0%	-31.5%
Lafayette, LA	10	49,519	-40.6%	-25.5%	-20.5%
Lakeland, FL	12	60,628	-37.5%	-26.6%	-26.7%
Lansing, MI	9	49,736	-31.7%	-14.9%	-26.5%
Las Vegas, NV	26	227,388	-23.3%	-13.0%	-16.9%
Lexington, KY	21	116,470	-35.7%	-8.4%	-19.6%
Little Rock, AR	20	118,893	-33.6%	-25.5%	-27.5%
London, UK	13	95,510	-37.0%	**3.3%**	-29.0%
Los Angeles, CA	88	757,723	-29.8%	-10.1%	-23.6%
Louisiana State Non-Metropolitan Areas	11	48,166	-56.7%	-48.5%	-47.0%
Louisville, KY	27	167,366	-46.6%	-15.8%	-32.0%
Macon, GA	9	45,799	-40.1%	-27.6%	-30.2%
Madison, WI	19	126,591	-41.5%	-10.7%	-30.6%
Manchester, NH	8	48,725	-32.7%	-1.6%	-26.2%
Memphis, TN	22	128,988	-30.5%	-20.1%	-27.2%
Mexico City	8	82,959	-33.7%	**13.5%**	-34.3%
Miami, FL	95	680,321	-30.6%	-15.8%	-19.8%
Michigan State Non-Metropolitan Areas	15	81,783	-39.4%	-21.7%	-27.3%
Milwaukee, WI	21	135,817	-50.2%	-26.3%	-36.8%

Appendix 5 (continued)

Limited-Service (cont'd)

Metro Area	LIMITED SERVICE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Minneapolis, MN	37	257,385	-41.7%	-7.0%	-33.4%
Minnesota State Non-Metropolitan Areas	8	36,265	-33.9%	-25.3%	-21.4%
Mississippi State Non-Metropolitan Areas	29	142,430	-49.5%	-32.4%	-35.7%
Missouri State Non-Metropolitan Areas	13	56,337	-40.0%	-29.9%	-24.5%
Mobile, AL	9	52,751	-51.9%	-39.0%	-39.1%
Modesto, CA	8	33,307	-19.2%	-4.6%	-11.5%
Montana State Non-Metropolitan Areas	12	65,663	-26.2%	-22.6%	-22.8%
Montgomery, AL	11	52,318	-42.6%	-19.4%	-29.1%
Myrtle Beach, FL	11	73,113	-38.3%	-23.5%	-25.6%
Naples, FL	8	52,024	-25.5%	-2.6%	-11.1%
Nashville, TN	56	389,473	-42.0%	-10.3%	-26.9%
Nebraska State Non-Metropolitan Areas	24	148,238	-28.6%	-15.5%	-16.0%
New Hampshire State Non-Metropolitan Areas	8	47,540	-35.7%	-24.8%	-28.1%
New Mexico State Non-Metropolitan Areas	17	72,080	-43.5%	-23.1%	-32.3%
New Orleans, LA	20	143,976	-28.5%	-8.5%	-21.5%
New York State Non-Metropolitan Areas	21	113,791	-25.3%	-14.0%	-23.3%
New York, NY	120	956,241	-33.1%	-7.6%	-27.9%
North Carolina State Non-Metropolitan Areas	42	208,987	-46.9%	-28.8%	-33.2%
Ogden, UT	8	46,729	-39.3%	-31.2%	-37.2%
Ohio State Non-Metropolitan Areas	31	147,440	-42.7%	-25.3%	-27.1%
Oklahoma City, OK	31	201,324	-40.6%	-16.2%	-25.2%
Oklahoma State Non-Metropolitan Areas	29	131,311	-46.6%	-28.7%	-27.5%
Omaha, NE	21	120,623	-33.8%	-7.6%	-22.1%
Orlando, FL	57	470,951	-34.7%	-10.7%	-25.1%
Palm Bay, FL	10	58,762	-34.4%	-14.5%	-21.5%
Pennsylvania State Non-Metropolitan Areas	32	153,014	-44.1%	-30.5%	-35.5%
Pensacola, FL	13	77,131	-39.0%	-20.1%	-21.3%
Philadelphia, PA	58	425,769	-28.2%	-7.4%	-22.1%
Phoenix, AZ	68	496,265	-27.2%	-9.5%	-19.0%
Pittsburgh, PA	48	311,209	-41.4%	-15.1%	-30.1%
Portland, ME	15	83,913	-31.6%	-18.3%	-25.6%
Portland, OR	29	206,325	-21.3%	0.7%	-27.1%
Poughkeepsie, NY	10	73,135	-29.4%	-13.9%	-24.7%
Providence, RI	17	110,445	-43.0%	-30.0%	-37.1%
Provo, UT	9	56,214	-24.0%	-15.8%	-27.4%
Raleigh, NC	33	224,906	-36.1%	-3.4%	-24.4%
Reno, NV	8	45,752	-14.5%	-17.6%	-17.2%
Richmond, VA	33	204,055	-33.6%	-11.2%	-19.8%
Rochester, NY	10	57,961	-38.1%	-24.5%	-36.1%
Sacramento, CA	33	207,693	-29.3%	-12.8%	-21.4%
Saginaw, MI	9	45,507	-24.9%	-2.0%	-20.9%
Salt Lake City, UT	22	156,191	-21.3%	-19.4%	-23.4%
San Antonio, TX	50	333,735	-31.0%	-14.9%	-20.7%
San Bernardino, CA	34	204,438	-26.4%	-18.4%	-17.9%
San Diego, CA	42	356,934	-28.5%	-8.8%	-22.4%
San Francisco, CA	38	279,946	-31.3%	-9.0%	-25.4%
San José, CA	29	225,200	-30.2%	5.4%	-24.2%
Sarasota, FL	16	98,318	-41.6%	-25.1%	-28.2%
Savannah, GA	16	102,350	-39.0%	-19.5%	-27.3%
Scranton, PA	13	67,285	-42.5%	-30.9%	-36.5%

Limited-Service (cont'd)

Metro Area	LIMITED SERVICE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Seattle, WA	51	457,565	-15.9%	0.8%	-21.2%
Shanghai	20	493,916	-12.3%	0.6%	-14.1%
Shreveport, LA	10	53,710	-48.1%	-38.8%	-32.8%
Sioux Falls, SD	11	57,162	-39.1%	-16.4%	-25.6%
South Carolina State Non-Metropolitan Areas	20	98,027	-50.1%	-35.4%	-36.1%
South Dakota State Non-Metropolitan Areas	11	50,836	-42.1%	-34.4%	-34.4%
Springfield, MA	10	53,187	-39.5%	-23.0%	-34.0%
Springfield, MO	11	59,073	-47.4%	-26.7%	-30.0%
St. Louis, MO	27	161,470	-31.9%	-10.9%	-27.7%
Suzhou-Wuxi-Changzhou	10	210,328	-6.8%	23.2%	-5.8%
Syracuse, NY	13	71,949	-33.7%	-15.2%	-29.2%
Tallahassee, FL	15	94,429	-33.3%	-5.2%	-17.2%
Tampa Bay, FL	56	363,796	-37.7%	-17.6%	-26.3%
Tennessee State Non-Metropolitan Areas	30	145,474	-43.2%	-23.6%	-23.4%
Texas State Non-Metropolitan Areas	48	210,980	-36.8%	-26.2%	-24.9%
Toledo, OH	12	68,815	-45.4%	-17.0%	-32.0%
Toronto	28	307,113	-10.6%	19.6%	-27.0%
Tucson, AZ	12	77,626	-23.7%	-3.9%	-12.4%
Tulsa, OK	18	98,811	-46.7%	-28.1%	-28.9%
Utah State Non-Metropolitan Areas	8	33,705	-12.7%	-22.1%	-15.3%
Ventura, CA	13	99,412	-32.6%	-21.3%	-28.7%
Virginia Beach, VA	43	290,295	-39.5%	-22.5%	-27.3%
Virginia State Non-Metropolitan Areas	22	96,939	-38.2%	-18.9%	-17.8%
Washington DC	112	874,761	-36.1%	-5.7%	-26.8%
Washington State Non-Metropolitan Areas	9	50,693	-11.1%	-5.2%	-15.2%
West Virginia State Non-Metropolitan Areas	10	43,884	-36.3%	-15.8%	-24.5%
Wichita, KS	12	82,936	-51.3%	-22.0%	-34.7%
Wilmington, NC	12	73,403	-37.5%	-12.3%	-25.0%
Winston-Salem, NC	8	43,675	-50.1%	-32.9%	-43.0%
Worcester, MA	10	66,513	-27.1%	-8.6%	-20.7%
Wyoming State Non-Metropolitan Areas	19	104,100	-30.3%	-20.2%	-25.6%
Youngstown, OH	11	49,062	-36.5%	-34.3%	-22.2%

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Appendix 5 (continued)

Luxury Segment

Metro Area	LUXURY				
	Count	SqM	Measure 4	Measure 5	Measure 6
Bangkok	8	432,410	-41.7%	130.4%	-40.6%
Beijing	12	644,037	-30.0%	12.2%	-29.7%
Dubai-Sharjah-Ajman	11	1,142,560	-26.5%	27.4%	3.6%
Hong Kong	9	397,832	-3.2%	90.9%	-12.9%
Las Vegas, NV	9	5,160,587	-23.1%	9.6%	-18.0%
Los Angeles, CA	11	444,397	-30.3%	21.0%	-23.5%
Miami, FL	12	553,506	-23.6%	9.6%	-13.7%
San Francisco, CA	14	373,251	-35.8%	46.3%	-35.5%
Sanya	9	531,232	-13.3%	-3.3%	-13.2%
Seoul	8	612,064	-23.4%	30.4%	-19.1%
Shanghai	18	1,044,019	-7.9%	9.4%	-9.2%
Singapore	12	543,755	-22.5%	20.3%	-21.3%
Tokyo	8	396,779	-32.3%	95.6%	-22.0%
Washington DC	10	359,688	-8.0%	44.6%	-9.6%

Upper Upscale Segment

Metro Area	UPPER UPSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Atlanta, GA	27	937,428	-40.6%	2.6%	-33.6%
Austin, TX	10	288,507	-43.3%	0.3%	-35.0%
Baltimore, MD	10	236,756	-21.0%	33.1%	-14.1%
Beijing	10	464,435	-22.7%	10.7%	-20.0%
Boston, MA	15	451,107	-32.5%	27.9%	-26.8%
Cairo	9	483,626	-12.3%	13.0%	-16.7%
Charlotte, NC	10	219,085	-48.9%	0.5%	-38.2%
Chicago, IL	30	782,456	-43.4%	13.6%	-30.6%
Columbus, OH	8	144,984	-55.0%	-3.2%	-35.3%
Dallas-Fort Worth, TX	30	988,474	-43.3%	-8.7%	-36.9%
Denver, CO	13	488,469	-38.5%	-1.2%	-37.6%
Dubai-Sharjah-Ajman	19	1,021,295	-30.7%	13.0%	-6.8%
Houston, TX	24	735,878	-40.4%	-1.6%	-30.9%
Istanbul	12	615,586	-35.3%	-0.3%	-25.5%
Jakarta	8	203,962	-36.8%	-27.6%	-44.5%
Kansas City, MO	11	222,389	-51.0%	-1.1%	-38.6%
Kuala Lumpur	8	324,786	-52.7%	46.1%	-52.7%
London, UK	15	394,640	-54.7%	24.7%	-47.9%
Los Angeles, CA	44	1,458,803	-37.8%	-0.9%	-31.7%
Miami, FL	28	686,410	-46.2%	-21.8%	-36.5%
Minneapolis, MN	10	253,733	-46.5%	18.3%	-39.8%
Nashville, TN	10	234,930	-49.9%	-4.4%	-32.1%
New Orleans, LA	12	581,188	-31.9%	22.2%	-30.4%
New York, NY	18	541,294	-37.6%	7.0%	-32.9%
Orlando, FL	19	727,347	-37.9%	4.3%	-28.1%
Paris	8	153,764	-17.6%	137.6%	-14.2%
Philadelphia, PA	13	242,328	-33.0%	11.6%	-26.2%
Phoenix, AZ	19	562,616	-33.9%	4.0%	-25.8%
Qingdao	8	380,769	-21.1%	-4.5%	-17.9%
San Antonio, TX	9	304,015	-36.5%	-2.5%	-26.9%
San Diego, CA	19	696,255	-35.2%	9.4%	-30.0%
San Francisco, CA	14	568,101	-35.9%	36.4%	-30.2%
Sanya	8	493,960	-0.8%	8.6%	1.4%
Seattle, WA	16	594,526	-25.4%	40.1%	-28.9%
Shanghai	22	1,163,985	-16.1%	1.2%	-19.2%
Suzhou-Wuxi-Changzhou	15	741,432	-14.1%	3.9%	-16.5%
Tampa Bay, FL	12	326,550	-39.2%	-8.8%	-28.0%
Tianjin	8	369,208	-22.0%	5.9%	-22.2%
Toronto	11	351,600	-16.5%	44.7%	-31.3%
Vancouver	10	293,158	-9.1%	61.7%	-15.1%
Washington DC	30	838,759	-37.7%	26.7%	-30.6%
Xian	8	332,614	-26.1%	-8.1%	-26.2%

Appendix 5 (continued)

Upscale Segment

Metro Area	UPSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Albany, NY	14	96,053	-40.1%	-27.8%	-37.5%
Albuquerque, NM	12	90,306	-34.8%	-12.9%	-30.1%
Atlanta, GA	50	419,820	-35.2%	-6.1%	-23.2%
Austin, TX	19	185,507	-50.6%	-30.1%	-40.7%
Baltimore, MD	19	164,126	-42.6%	-24.9%	-35.0%
Birmingham, AL	10	90,871	-42.9%	-27.1%	-37.2%
Boston, MA	41	383,822	-33.7%	0.8%	-28.3%
Bridgeport, CT	14	110,227	-33.5%	-16.4%	-27.5%
Buffalo, NY	10	69,657	-34.3%	-17.8%	-29.7%
Charleston, SC	14	98,669	-36.2%	-18.1%	-25.2%
Charlotte, NC	32	272,609	-39.1%	2.0%	-26.9%
Chicago, IL	58	588,690	-37.5%	1.2%	-23.0%
Cincinnati, OH	19	147,408	-44.9%	-16.1%	-32.5%
Cleveland, OH	16	129,782	-40.7%	-11.8%	-27.6%
Columbia, SC	8	67,984	-44.1%	-17.2%	-33.1%
Columbus, OH	20	131,891	-43.2%	-11.5%	-31.2%
Dallas-Fort Worth, TX	80	687,033	-39.6%	-14.1%	-29.1%
Delhi	11	290,589	-29.1%	-15.8%	-32.7%
Denver, CO	48	466,526	-41.2%	-15.7%	-32.8%
Des Moines, IA	8	52,720	-34.2%	-8.7%	-22.6%
Detroit, MI	23	193,687	-45.9%	-17.2%	-36.5%
Dubai-Sharjah-Ajman	11	306,820	-34.9%	4.0%	-9.3%
Durham, NC	15	128,034	-48.9%	-13.0%	-38.7%
Fayetteville, AR	10	69,833	-56.9%	-19.2%	-39.0%
Fort Myers, FL	11	87,484	-33.0%	-21.8%	-19.7%
Grand Rapids, MI	8	48,925	-42.4%	-13.1%	-37.2%
Greenville, SC	8	58,939	-29.1%	-3.7%	-17.1%
Hartford, CT	11	85,956	-32.1%	-10.6%	-25.8%
Houston, TX	61	552,544	-41.0%	-16.4%	-28.4%
Indianapolis, IN	20	160,417	-39.6%	-18.2%	-27.2%
Istanbul	13	299,856	-40.3%	-2.1%	-30.3%
Jackson, MS	8	52,377	-44.4%	-36.5%	-41.5%
Jacksonville, FL	23	183,047	-42.5%	-26.8%	-30.7%
Kansas City, MO	17	157,748	-46.9%	-5.9%	-28.8%
Las Vegas, NV	17	173,339	-23.8%	-5.6%	-13.2%
Lexington, KY	11	76,436	-43.2%	-15.6%	-27.6%
Little Rock, AR	10	88,402	-43.8%	-31.2%	-38.1%
London, UK	14	206,355	-50.3%	10.8%	-44.9%
Los Angeles, CA	67	747,297	-35.2%	-14.4%	-29.3%
Louisville, KY	15	139,575	-41.7%	-5.7%	-28.6%
Madison, WI	11	79,971	-45.6%	-17.2%	-34.4%
Memphis, TN	12	85,544	-25.1%	-11.3%	-20.9%
Miami, FL	52	478,148	-30.6%	-15.2%	-19.6%
Milwaukee, WI	11	95,340	-51.5%	-23.6%	-39.9%
Minneapolis, MN	22	222,883	-44.9%	-1.3%	-37.4%
Montreal	8	106,708	-25.6%	83.7%	-27.5%
Nashville, TN	29	256,270	-45.3%	-13.6%	-31.3%
New Orleans, LA	11	133,624	-26.1%	4.9%	-23.0%

Upscale Segment (cont'd)

Metro Area	UPSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
New York, NY	84	765,472	-36.9%	-14.7%	-33.1%
Oklahoma City, OK	14	112,402	-41.1%	-16.6%	-27.7%
Omaha, NE	8	62,515	-29.5%	5.2%	-14.9%
Orlando, FL	39	484,675	-41.6%	-12.9%	-29.7%
Philadelphia, PA	51	498,242	-37.0%	-9.7%	-31.6%
Phoenix, AZ	42	373,653	-28.3%	-7.9%	-19.1%
Pittsburgh, PA	24	244,605	-46.8%	-16.4%	-37.1%
Portland, OR	22	235,157	-22.4%	4.0%	-25.9%
Raleigh, NC	18	153,376	-38.1%	0.8%	-25.5%
Richmond, VA	15	133,650	-41.4%	-13.4%	-31.1%
Riyadh	10	234,694	-22.5%	-5.2%	-10.7%
Sacramento, CA	19	189,897	-34.9%	-9.2%	-27.6%
Salt Lake City, UT	12	113,227	-25.5%	-20.4%	-29.4%
San Antonio, TX	26	221,621	-34.7%	-14.6%	-25.4%
San Bernardino, CA	16	165,210	-39.0%	-30.2%	-33.5%
San Diego, CA	30	341,735	-30.0%	-6.7%	-24.0%
San Francisco, CA	27	261,304	-34.8%	-2.7%	-29.6%
San José, CA	22	196,366	-31.4%	3.6%	-25.5%
Sarasota, FL	8	50,482	-29.3%	-18.9%	-18.8%
Savannah, GA	9	69,678	-38.9%	-19.3%	-28.8%
Seattle, WA	31	352,524	-16.1%	11.2%	-21.6%
Shanghai	19	798,848	-20.6%	-2.3%	-21.1%
Singapore	9	191,306	-20.5%	8.9%	-20.4%
St. Louis, MO	17	159,122	-47.9%	-21.2%	-43.2%
Suzhou-Wuxi-Changzhou	12	497,513	-25.8%	-10.3%	-33.7%
Syracuse, NY	9	75,256	-27.9%	-0.1%	-23.9%
Tallahassee, FL	9	81,745	-40.9%	-13.4%	-29.4%
Tampa Bay, FL	28	231,191	-39.8%	-20.0%	-28.0%
Toronto	29	348,856	-14.2%	13.6%	-33.4%
Tucson, AZ	9	90,755	-36.8%	-7.4%	-24.2%
Virginia Beach, VA	28	285,667	-43.6%	-24.9%	-31.2%
Washington DC	83	799,307	-38.1%	-3.3%	-29.3%
Wichita, KS	8	54,909	-40.6%	-14.9%	-24.2%

Appendix 5 (continued)

Upper Midscale Segment

Metro Area	UPPER MIDSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Akron, OH	13	61,882	-39.6%	-16.8%	-27.6%
Alabama State Non-Metropolitan Areas	18	81,546	-54.4%	-45.9%	-43.6%
Albany, NY	9	56,210	-46.7%	-28.6%	-43.6%
Albuquerque, NM	15	76,874	-1.1%	19.5%	12.4%
Arkansas State Non-Metropolitan Areas	16	66,427	-30.1%	-25.8%	-23.5%
Asheville, NC	10	77,238	-30.9%	-3.5%	-11.9%
Atlanta, GA	68	426,901	-39.8%	-18.0%	-28.1%
Augusta, GA	11	54,403	-49.0%	-35.4%	-34.5%
Austin, TX	35	200,638	-41.1%	-25.1%	-30.4%
Baltimore, MD	19	118,493	-40.0%	-33.9%	-33.9%
Bangkok	9	225,320	-34.7%	173.1%	-32.3%
Baton Rouge, LA	8	59,729	-31.9%	-30.6%	-22.4%
Beijing	8	212,812	-7.8%	32.8%	-5.0%
Birmingham	9	64,725	-23.2%	47.9%	-15.2%
Birmingham, AL	18	100,809	-51.0%	-35.1%	-39.2%
Boise City, ID	11	70,104	-25.5%	-24.3%	-23.3%
Boston, MA	28	180,534	-30.9%	-6.0%	-23.9%
Charleston, SC	11	76,839	-44.4%	-23.5%	-32.4%
Charleston, WV	8	38,538	-52.1%	-27.0%	-33.1%
Charlotte, NC	25	161,715	-40.8%	-9.4%	-27.2%
Chattanooga, TN	11	54,940	-41.9%	-22.3%	-25.6%
Chengdu	9	162,495	-5.5%	14.9%	-11.6%
Chicago, IL	53	354,938	-40.1%	-13.3%	-28.5%
Cincinnati, OH	26	154,595	-44.1%	-18.1%	-30.1%
Cleveland, OH	13	69,057	-57.7%	-29.3%	-43.1%
Colorado State Non-Metropolitan Areas	17	81,199	-28.3%	-13.4%	-13.0%
Columbia, SC	10	54,831	-46.7%	-28.4%	-34.2%
Columbus, OH	17	110,191	-50.2%	-13.7%	-38.8%
Dallas-Fort Worth, TX	66	378,534	-40.7%	-20.7%	-27.5%
Dayton, OH	12	54,355	-34.7%	-4.0%	-16.4%
Denver, CO	30	202,282	-34.4%	-10.9%	-23.7%
Des Moines, IA	11	70,171	-36.7%	-15.9%	-28.1%
Destin, FL	10	54,552	-39.5%	-16.2%	-23.5%
Detroit, MI	23	121,783	-33.4%	-13.6%	-23.7%
Florida State Non-Metropolitan Areas	16	84,180	-42.2%	-29.2%	-30.4%
Georgia State Non-Metropolitan Areas	30	130,686	-43.5%	-32.5%	-32.5%
Grand Rapids, MI	8	43,830	-38.4%	-4.4%	-31.1%
Greenville, SC	8	42,844	-48.8%	-23.3%	-35.4%
Harrisburg, PA	9	53,208	-41.1%	-16.4%	-33.1%
Hartford, CT	9	52,654	-57.3%	-42.1%	-55.3%
Houston, TX	53	294,124	-43.4%	-28.9%	-34.9%
Huntsville, AL	8	44,988	-45.0%	-19.6%	-26.2%
IllinoisState Non-Metropolitan Areas	23	125,425	-27.0%	-16.4%	-17.3%
Indiana State Non-Metropolitan Areas	16	73,378	-38.5%	-21.5%	-25.6%
Indianapolis, IN	23	137,008	-44.7%	-20.3%	-30.1%
Iowa State Non-Metropolitan Areas	13	57,013	-41.2%	-31.8%	-28.6%
Jackson, MS	8	47,490	-27.8%	-21.2%	-21.1%
Jacksonville, FL	26	146,822	-41.9%	-24.2%	-29.6%

Upper Midscale Segment (cont'd)

Metro Area	UPPER MIDSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Kansas City, MO	24	154,499	-45.7%	-19.4%	-31.6%
Kansas State Non-Metropolitan Areas	17	82,108	-47.5%	-26.3%	-29.1%
Kentucky State Non-Metropolitan Areas	26	113,867	-42.9%	-26.0%	-27.3%
Knoxville, TN	17	107,292	-48.2%	-28.2%	-32.8%
Lakeland, FL	9	46,895	-48.7%	-48.2%	-48.2%
Las Vegas, NV	12	83,620	-30.4%	-26.2%	-26.0%
Lexington, KY	13	68,098	-37.8%	-10.6%	-21.4%
Little Rock, AR	12	72,186	-32.2%	-23.6%	-25.1%
London, UK	22	172,764	-36.9%	8.1%	-31.2%
Los Angeles, CA	36	243,619	-35.7%	-15.9%	-29.5%
Louisiana State Non-Metropolitan Areas	11	48,166	-56.7%	-48.5%	-47.0%
Louisville, KY	15	109,395	-45.2%	-7.6%	-27.3%
Madison, WI	10	68,371	-37.4%	-1.1%	-26.2%
Memphis, TN	14	82,241	-41.2%	-36.0%	-39.9%
Miami, FL	51	327,720	-41.5%	-27.4%	-31.6%
Michigan State Non-Metropolitan Areas	17	103,227	-34.6%	-20.4%	-25.1%
Milwaukee, WI	14	79,512	-46.9%	-24.0%	-34.6%
Minneapolis, MN	21	132,265	-46.0%	-5.2%	-34.4%
Minnesota State Non-Metropolitan Areas	8	38,328	-28.6%	-19.3%	-16.7%
Mississippi State Non-Metropolitan Areas	24	109,687	-50.0%	-32.9%	-35.5%
Missouri State Non-Metropolitan Areas	13	56,337	-40.0%	-29.9%	-24.5%
Montana State Non-Metropolitan Areas	8	38,651	-23.2%	-21.8%	-17.7%
Montgomery, AL	8	37,995	-37.0%	-7.1%	-24.1%
Myrtle Beach, FL	8	49,694	-40.8%	-22.8%	-28.7%
Nashville, TN	35	221,345	-47.2%	-17.2%	-30.5%
Nebraska State Non-Metropolitan Areas	21	120,610	-28.6%	-13.1%	-15.6%
New Mexico State Non-Metropolitan Areas	17	72,050	-43.1%	-23.5%	-32.0%
New Orleans, LA	14	87,569	-30.0%	-8.0%	-22.2%
New York State Non-Metropolitan Areas	16	76,987	-26.4%	-10.9%	-22.0%
New York, NY	50	354,505	-39.0%	-14.5%	-33.7%
North Carolina State Non-Metropolitan Areas	37	175,161	-46.8%	-29.9%	-33.2%
Ohio State Non-Metropolitan Areas	30	165,079	-37.9%	-21.1%	-22.7%
Oklahoma City, OK	14	80,504	-49.0%	-21.3%	-30.8%
Oklahoma State Non-Metropolitan Areas	24	101,341	-49.3%	-30.0%	-30.2%
Omaha, NE	14	77,162	-37.1%	-19.3%	-29.4%
Orlando, FL	34	281,166	-38.4%	-19.8%	-31.0%
Palm Bay, FL	9	57,846	-39.3%	-20.8%	-26.9%
Pennsylvania State Non-Metropolitan Areas	31	148,105	-43.8%	-30.4%	-35.3%
Pensacola, FL	11	76,080	-39.4%	-23.0%	-27.2%
Philadelphia, PA	27	167,583	-40.9%	-24.5%	-34.7%
Phoenix, AZ	36	243,856	-37.2%	-20.4%	-28.1%
Pittsburgh, PA	28	154,305	-49.0%	-24.1%	-35.7%
Portland, ME	8	40,703	-36.1%	-26.2%	-30.1%
Portland, OR	15	120,095	-28.5%	-8.1%	-32.9%
Providence, RI	12	70,882	-43.5%	-35.8%	-37.3%
Raleigh, NC	19	125,713	-41.8%	-10.1%	-29.9%
Richmond, VA	20	108,507	-39.1%	-22.4%	-26.7%
Sacramento, CA	17	97,344	-32.5%	-14.8%	-24.6%

Appendix 5 (continued)

Upper Midscale Segment (cont'd)

Metro Area	UPPER MIDSCALE				
	Count	SqM	Measure 4	Measure 5	Measure 6
Salt Lake City, UT	13	81,911	-22.8%	-18.5%	-20.5%
San Antonio, TX	27	171,228	-34.0%	-22.1%	-23.9%
San Bernardino, CA	24	132,999	-28.2%	-17.7%	-18.8%
San Diego, CA	16	102,938	-34.0%	-18.6%	-27.8%
San Francisco, CA	16	92,034	-27.9%	-9.3%	-21.5%
San José, CA	9	46,962	-26.6%	6.6%	-19.4%
Sarasota, FL	10	60,575	-52.4%	-32.3%	-36.9%
Scranton, PA	9	44,377	-50.3%	-40.9%	-44.4%
Seattle, WA	24	167,471	-27.2%	-20.7%	-29.3%
Shanghai	15	490,662	-17.9%	-10.1%	-18.2%
Shreveport, LA	8	40,024	-43.5%	-39.4%	-27.9%
Singapore	9	159,758	-19.1%	-12.3%	-12.0%
Sioux Falls, SD	9	62,444	-29.6%	-9.8%	-23.4%
South Carolina State Non-Metropolitan Areas	18	85,876	-47.6%	-31.9%	-33.2%
South Dakota State Non-Metropolitan Areas	11	92,419	-15.0%	6.7%	4.5%
St. Louis, MO	18	112,389	-30.6%	-9.8%	-27.0%
Suzhou-Wuxi-Changzhou	10	234,565	-2.3%	17.9%	-0.5%
Tampa Bay, FL	35	219,117	-47.2%	-39.6%	-44.6%
Tennessee State Non-Metropolitan Areas	27	125,809	-42.9%	-23.1%	-22.9%
Texas State Non-Metropolitan Areas	44	185,854	-36.5%	-27.3%	-24.5%
Toledo, OH	10	62,579	-43.9%	-17.9%	-29.7%
Toronto	10	105,908	4.4%	33.7%	-15.8%
Tulsa, OK	14	76,794	-45.0%	-27.4%	-26.5%
Vancouver	8	70,226	5.5%	23.1%	-10.1%
Virginia Beach, VA	25	196,517	-38.5%	-21.4%	-25.3%
Virginia State Non-Metropolitan Areas	22	96,939	-38.2%	-18.9%	-17.8%
Washington DC	50	392,807	-40.3%	-12.7%	-31.5%
West Virginia State Non-Metropolitan Areas	8	33,576	-40.2%	-17.9%	-28.3%
Wilmington, NC	8	47,275	-39.1%	-12.4%	-25.7%
Wyoming State Non-Metropolitan Areas	18	92,103	-28.1%	-18.9%	-24.4%
Youngstown, OH	10	47,901	-45.7%	-39.1%	-31.0%

5-Stars Segment

Metro Area	5 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Bangkok	14	682,772	-40.7%	94.0%	-40.0%
Beijing	14	747,769	-28.0%	13.2%	-27.7%
Doha	10	765,102	-12.1%	-8.0%	-7.4%
Dubai-Sharjah-Ajman	17	1,422,621	-29.5%	19.9%	-0.6%
Hong Kong	9	397,832	-3.2%	90.9%	-12.9%
Istanbul	17	790,498	-33.8%	1.1%	-25.9%
Miami, FL	10	411,560	-25.8%	10.5%	-16.5%
Sanya	10	573,425	-12.6%	-3.1%	-12.5%
Seoul	8	612,064	-23.4%	30.4%	-19.1%
Shanghai	19	1,187,233	-11.0%	14.2%	-11.3%
Singapore	16	765,536	-24.1%	20.2%	-18.1%
Tokyo	8	396,779	-32.3%	95.6%	-22.0%

4-Stars Segment

Metro Area	4 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Atlanta, GA	17	745,468	-34.1%	13.0%	-28.3%
Austin, TX	8	245,599	-37.3%	12.2%	-30.4%
Bangkok	9	324,389	-43.3%	170.9%	-40.7%
Beijing	11	532,676	-23.3%	10.5%	-19.6%
Boston, MA	16	538,621	-29.7%	33.5%	-24.3%
Cairo	10	457,230	-4.7%	19.2%	-12.5%
Chengdu	9	409,656	-12.8%	0.3%	-16.5%
Chicago, IL	21	651,106	-31.4%	38.4%	-19.0%
Chongqing	10	476,692	-14.8%	3.7%	-17.1%
Dallas-Fort Worth, TX	20	792,184	-40.9%	-3.3%	-35.2%
Delhi	8	291,001	-23.5%	-5.1%	-26.2%
Denver, CO	10	306,341	-32.8%	10.3%	-30.1%
Dubai-Sharjah-Ajman	18	937,666	-30.1%	14.9%	-6.5%
Guangzhou	10	494,905	-17.3%	5.1%	-18.4%
Houston, TX	20	715,427	-38.4%	3.0%	-28.0%
Istanbul	14	345,798	-35.0%	-1.5%	-27.2%
Kuala Lumpur	9	251,259	-59.2%	34.3%	-63.0%
London, UK	23	469,879	-54.7%	14.0%	-48.4%
Los Angeles, CA	34	1,394,529	-35.7%	5.0%	-29.5%
Mexico City	8	212,969	-41.5%	29.4%	-34.6%
Miami, FL	22	645,001	-37.3%	-11.5%	-28.2%
Nanjing	10	415,670	-31.2%	-14.0%	-34.6%
New Orleans, LA	13	651,964	-30.3%	29.9%	-29.0%
New York, NY	17	511,490	-30.4%	25.0%	-26.6%
Orlando, FL	15	643,688	-32.5%	12.4%	-23.2%
Paris	9	160,504	-17.5%	143.4%	-14.3%
Philadelphia, PA	9	177,911	-35.4%	11.8%	-27.9%
Phoenix, AZ	13	408,568	-31.0%	4.5%	-23.0%
Qingdao	10	577,273	-23.4%	-9.7%	-19.0%
San Diego, CA	21	860,907	-34.1%	12.1%	-28.5%
San Francisco, CA	17	590,042	-35.1%	54.5%	-29.6%
Sanya	11	715,707	-2.4%	12.0%	1.0%
Seattle, WA	16	624,379	-20.9%	57.0%	-26.4%
Shanghai	31	1,612,233	-16.3%	-4.2%	-19.4%
Shenzhen	9	382,714	-20.9%	-8.7%	-23.7%
Singapore	18	367,061	-26.9%	0.4%	-24.1%
Suzhou-Wuxi-Changzhou	22	1,002,746	-9.6%	8.0%	-16.6%
Toronto	12	414,880	-20.3%	50.7%	-32.4%
Vancouver	9	270,007	-9.7%	63.3%	-15.3%
Washington DC	23	761,821	-29.3%	37.6%	-21.3%
Wuhan	8	418,810	-22.1%	-6.9%	-19.9%
Xian	10	490,075	-23.2%	3.8%	-21.9%

3-Stars Segment

Metro Area	3 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Albany, NY	17	150,506	-44.3%	-25.3%	-40.8%
Albuquerque, NM	15	128,388	-27.0%	5.1%	-20.4%
Asheville, NC	9	88,507	-44.9%	-16.2%	-27.1%
Atlanta, GA	62	693,870	-42.3%	-11.0%	-31.7%
Austin, TX	23	240,143	-53.3%	-32.6%	-43.7%
Baltimore, MD	23	255,149	-33.9%	-5.9%	-26.9%
Birmingham, AL	15	163,305	-45.1%	-23.8%	-36.9%
Boise City, ID	8	61,651	-28.5%	-19.6%	-28.5%
Boston, MA	50	482,726	-33.4%	2.6%	-28.0%
Bridgeport, CT	15	156,826	-37.3%	-17.2%	-31.0%
Buffalo, NY	11	85,822	-33.9%	-17.1%	-30.7%
Charleston, SC	19	164,451	-37.4%	-15.3%	-26.5%
Charlotte, NC	36	368,527	-40.8%	1.3%	-29.3%
Chattanooga, TN	9	65,977	-44.0%	-16.1%	-22.8%
Chicago, IL	75	855,482	-41.1%	-2.0%	-27.1%
Cincinnati, OH	23	185,555	-39.3%	-9.8%	-27.1%
Cleveland, OH	15	123,916	-45.8%	-14.6%	-31.5%
Colorado Springs, CO	9	92,167	-39.5%	-9.2%	-23.1%
Columbia, SC	10	88,824	-46.3%	-21.2%	-35.5%
Columbus, OH	24	189,724	-44.0%	0.5%	-24.4%
Corpus Christi, TX	8	46,425	-40.9%	-22.5%	-30.9%
Dallas-Fort Worth, TX	96	898,978	-42.0%	-17.1%	-32.1%
Denver, CO	50	501,154	-37.3%	-10.5%	-29.6%
Des Moines, IA	13	118,210	-36.3%	-8.7%	-28.2%
Detroit, MI	27	256,417	-50.2%	-20.8%	-40.1%
Durham, NC	17	161,921	-45.5%	-0.5%	-35.8%
El Paso, TX	8	55,939	-32.4%	-25.8%	-21.9%
Fayetteville, AR	10	69,833	-56.9%	-19.2%	-39.0%
Fort Myers, FL	13	109,914	-34.1%	-21.4%	-20.4%
Grand Rapids, MI	8	48,925	-42.4%	-13.1%	-37.2%
Greenville, SC	10	95,810	-41.8%	-17.8%	-30.9%
Harrisburg, PA	8	55,046	-35.0%	-9.0%	-27.6%
Hartford, CT	13	108,463	-37.5%	-12.9%	-33.2%
Houston, TX	69	639,511	-42.0%	-19.7%	-32.1%
Huntsville, AL	8	93,385	-47.3%	-17.5%	-29.0%
Indianapolis, IN	25	246,782	-35.5%	-5.5%	-25.0%
Jackson, MS	10	77,090	-42.7%	-32.5%	-36.6%
Jacksonville, FL	26	229,324	-40.1%	-24.5%	-28.6%
Kansas City, MO	23	267,597	-47.6%	-3.2%	-31.4%
Knoxville, TN	10	106,586	-46.7%	-22.9%	-31.5%
Las Vegas, NV	21	1,290,365	-18.1%	13.6%	-12.4%
Lexington, KY	15	134,550	-57.2%	-27.9%	-42.8%
Little Rock, AR	13	130,627	-44.1%	-32.5%	-38.5%
London, UK	22	222,106	-41.4%	13.3%	-35.7%
Los Angeles, CA	83	1,102,201	-36.0%	-11.3%	-30.0%
Louisville, KY	16	161,558	-47.1%	-12.2%	-33.4%
Madison, WI	13	95,977	-40.2%	-10.8%	-29.6%
Memphis, TN	17	142,758	-27.4%	-15.5%	-25.4%

3-Stars Segment (cont'd)

Metro Area	3 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Mexico City	8	81,333	-48.4%	12.9%	-45.3%
Miami, FL	58	607,815	-34.0%	-17.0%	-22.5%
Milwaukee, WI	12	95,516	-54.5%	-30.1%	-42.1%
Minneapolis, MN	27	326,298	-43.8%	6.6%	-35.6%
Montreal	12	149,513	-28.4%	64.0%	-29.1%
Myrtle Beach, FL	8	134,232	-53.7%	-30.9%	-43.0%
Nashville, TN	34	309,001	-44.1%	-10.2%	-29.6%
New Orleans, LA	18	189,676	-32.1%	-22.0%	-36.6%
New York, NY	97	986,735	-38.1%	-14.4%	-33.8%
Oklahoma City, OK	16	135,695	-44.3%	-19.1%	-30.2%
Omaha, NE	11	100,641	-26.5%	2.4%	-17.2%
Orlando, FL	47	638,328	-42.6%	-13.0%	-31.0%
Philadelphia, PA	56	562,478	-34.8%	-7.8%	-30.1%
Phoenix, AZ	48	499,279	-27.2%	-3.4%	-19.0%
Pittsburgh, PA	26	324,598	-42.8%	-5.6%	-33.4%
Portland, ME	8	56,307	-37.3%	-26.3%	-31.0%
Portland, OR	26	304,443	-23.7%	2.4%	-27.7%
Raleigh, NC	23	248,839	-37.3%	7.2%	-24.5%
Richmond, VA	15	127,601	-41.9%	-14.2%	-31.8%
Rochester, NY	8	67,813	-44.4%	-27.2%	-42.8%
Sacramento, CA	21	214,795	-34.9%	-5.3%	-27.2%
Salt Lake City, UT	16	171,656	-18.2%	-0.6%	-17.4%
San Antonio, TX	33	319,102	-38.3%	-21.1%	-29.1%
San Bernardino, CA	19	193,806	-33.3%	-24.8%	-27.0%
San Diego, CA	28	279,187	-29.6%	-8.2%	-23.5%
San Francisco, CA	35	349,426	-36.4%	-1.9%	-30.9%
San José, CA	22	206,992	-32.6%	1.9%	-26.4%
Sarasota, FL	8	50,482	-29.3%	-18.9%	-18.8%
Savannah, GA	10	84,243	-46.1%	-27.6%	-36.2%
Seattle, WA	33	386,164	-22.2%	3.5%	-25.6%
Shanghai	17	597,586	-17.5%	-2.0%	-18.6%
St. Louis, MO	28	307,315	-40.7%	-8.5%	-34.6%
Suzhou-Wuxi-Changzhou	13	497,099	-22.5%	8.1%	-16.0%
Syracuse, NY	11	115,711	-32.0%	-7.1%	-28.0%
Tallahassee, FL	10	93,683	-40.4%	-14.3%	-29.6%
Tampa Bay, FL	37	444,991	-46.6%	-28.4%	-38.5%
Toronto	34	389,040	-5.6%	18.3%	-28.0%
Tucson, AZ	10	105,017	-34.6%	-6.4%	-23.7%
Ventura, CA	8	103,583	-29.2%	-13.4%	-25.6%
Virginia Beach, VA	35	429,524	-36.1%	-17.3%	-24.5%
Washington DC	100	1,117,258	-39.2%	-0.9%	-31.2%
Wichita, KS	8	69,981	-38.5%	-11.2%	-21.2%

Appendix 5 (continued)

2-Stars Segment

Metro Area	2 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Akron, OH	12	56,143	-37.0%	-14.4%	-23.8%
Alabama State Non-Metropolitan Areas	20	109,508	-49.7%	-38.0%	-40.2%
Albany, NY	8	48,592	-36.7%	-18.0%	-36.1%
Albuquerque, NM	15	96,108	-9.2%	7.7%	-1.0%
Allentown, PA	8	42,444	-37.6%	-27.2%	-29.6%
Arizona State Non-Metropolitan Areas	9	42,837	-18.9%	-14.3%	-12.3%
Arkansas State Non-Metropolitan Areas	15	57,137	-34.3%	-26.7%	-25.4%
Atlanta, GA	70	415,793	-43.7%	-22.2%	-30.6%
Augusta, GA	11	53,118	-45.4%	-31.7%	-30.0%
Austin, TX	35	210,632	-46.4%	-30.3%	-35.4%
Baltimore, MD	21	138,978	-39.5%	-32.7%	-32.5%
Birmingham, AL	16	85,912	-51.0%	-36.4%	-38.3%
Boise City, ID	11	63,308	-17.4%	-20.9%	-16.7%
Boston, MA	20	108,869	-26.1%	-5.4%	-18.9%
Buffalo, NY	8	44,986	-35.2%	-21.1%	-33.5%
Charleston, SC	9	60,921	-52.4%	-30.9%	-39.7%
Charleston, WV	9	62,019	-54.9%	-31.4%	-36.1%
Charlotte, NC	29	241,535	-47.9%	-16.4%	-35.7%
Chattanooga, TN	10	50,224	-44.9%	-24.3%	-28.6%
Chicago, IL	48	324,126	-48.4%	-19.5%	-34.5%
Cincinnati, OH	23	133,380	-55.5%	-29.0%	-40.5%
Cleveland, OH	13	69,057	-57.7%	-29.3%	-43.1%
Colorado State Non-Metropolitan Areas	17	77,660	-26.7%	-13.0%	-10.6%
Columbia, SC	11	75,091	-47.0%	-26.1%	-33.8%
Columbus, OH	15	100,873	-60.3%	-26.2%	-46.4%
Dallas-Fort Worth, TX	61	367,168	-44.4%	-24.0%	-30.3%
Dayton, OH	12	54,355	-34.7%	-4.0%	-16.4%
Denver, CO	33	227,754	-40.6%	-19.3%	-30.0%
Des Moines, IA	8	43,227	-41.4%	-19.5%	-31.2%
Destin, FL	11	53,430	-32.2%	-9.3%	-17.0%
Detroit, MI	22	114,888	-31.4%	-13.7%	-22.7%
El Paso, TX	8	38,380	-23.4%	-14.5%	-15.7%
Fayetteville, AR	9	95,709	-57.4%	-24.6%	-42.0%
Florida State Non-Metropolitan Areas	14	56,036	-45.4%	-30.7%	-32.4%
Georgia State Non-Metropolitan Areas	28	120,163	-46.1%	-33.1%	-32.6%
Grand Rapids, MI	8	43,830	-38.4%	-4.4%	-31.1%
Greenville, SC	10	73,180	-52.4%	-26.8%	-39.6%
Harrisburg, PA	8	45,776	-44.1%	-20.8%	-34.9%
Hartford, CT	9	46,381	-48.3%	-33.2%	-44.0%
Houston, TX	55	290,181	-41.9%	-25.2%	-30.4%
Huntsville, AL	8	44,988	-45.0%	-19.6%	-26.2%
IllinoisState Non-Metropolitan Areas	19	84,283	-28.6%	-16.8%	-18.4%
Indiana State Non-Metropolitan Areas	16	73,378	-38.5%	-21.5%	-25.6%
Indianapolis, IN	26	174,793	-45.7%	-23.5%	-29.8%
Iowa State Non-Metropolitan Areas	12	52,510	-43.4%	-33.9%	-31.0%
Jackson, MS	8	54,643	-45.8%	-32.9%	-36.4%
Jacksonville, FL	26	139,867	-44.9%	-26.8%	-32.3%
Kansas City, MO	24	169,840	-47.2%	-19.5%	-32.0%

2-Stars Segment (cont'd)

Metro Area	2 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
Kansas State Non-Metropolitan Areas	17	82,108	-47.5%	-26.3%	-29.1%
Kentucky State Non-Metropolitan Areas	26	113,867	-42.9%	-26.0%	-27.3%
Knoxville, TN	16	89,121	-55.6%	-32.8%	-38.3%
Lafayette, LA	9	41,342	-35.2%	-24.9%	-16.3%
Lakeland, FL	9	44,554	-42.7%	-31.4%	-31.6%
Las Vegas, NV	13	98,965	-38.4%	-28.5%	-31.5%
Lexington, KY	12	69,094	-46.3%	-17.6%	-29.5%
Little Rock, AR	11	56,113	-35.8%	-28.2%	-27.9%
Los Angeles, CA	36	270,504	-42.1%	-23.5%	-36.0%
Louisiana State Non-Metropolitan Areas	10	44,598	-60.3%	-51.8%	-50.3%
Louisville, KY	16	91,083	-59.4%	-28.4%	-42.3%
Madison, WI	9	56,706	-48.5%	-13.9%	-35.7%
Memphis, TN	11	58,591	-49.3%	-40.6%	-44.5%
Miami, FL	55	395,409	-46.8%	-31.8%	-36.1%
Michigan State Non-Metropolitan Areas	14	75,775	-41.8%	-25.1%	-29.1%
Milwaukee, WI	14	90,286	-49.3%	-22.2%	-35.1%
Minneapolis, MN	22	168,495	-47.5%	-6.4%	-34.3%
Minnesota State Non-Metropolitan Areas	8	36,265	-33.9%	-25.3%	-21.4%
Mississippi State Non-Metropolitan Areas	25	113,811	-51.3%	-36.4%	-38.5%
Missouri State Non-Metropolitan Areas	13	56,337	-40.0%	-29.9%	-24.5%
Montana State Non-Metropolitan Areas	8	38,651	-23.2%	-21.8%	-17.7%
Montgomery, AL	8	36,137	-36.6%	-12.4%	-23.1%
Nashville, TN	36	262,967	-55.0%	-22.2%	-35.8%
Nebraska State Non-Metropolitan Areas	23	143,752	-29.0%	-15.9%	-16.3%
New Mexico State Non-Metropolitan Areas	17	72,080	-43.5%	-23.1%	-32.3%
New Orleans, LA	10	59,994	-35.4%	-9.9%	-25.3%
New York State Non-Metropolitan Areas	16	76,987	-26.4%	-10.9%	-22.0%
New York, NY	41	287,861	-44.3%	-21.9%	-38.0%
North Carolina State Non-Metropolitan Areas	37	173,667	-47.6%	-30.9%	-34.1%
Ohio State Non-Metropolitan Areas	29	137,052	-40.4%	-23.4%	-24.6%
Oklahoma City, OK	20	154,328	-54.3%	-29.0%	-36.7%
Oklahoma State Non-Metropolitan Areas	25	105,551	-48.4%	-29.0%	-28.9%
Omaha, NE	16	116,190	-52.8%	-30.7%	-40.9%
Orlando, FL	32	250,596	-48.9%	-32.5%	-40.6%
Palm Bay, FL	9	57,846	-39.3%	-20.8%	-26.9%
Pennsylvania State Non-Metropolitan Areas	31	148,105	-43.8%	-30.4%	-35.3%
Pensacola, FL	10	59,399	-45.2%	-29.2%	-31.5%
Philadelphia, PA	26	167,764	-44.1%	-23.2%	-35.5%
Phoenix, AZ	37	299,127	-46.2%	-26.5%	-35.8%
Pittsburgh, PA	30	163,028	-47.8%	-24.7%	-34.6%
Portland, ME	9	44,475	-31.9%	-19.0%	-25.9%
Portland, OR	15	96,682	-41.8%	-18.8%	-41.9%
Providence, RI	12	70,882	-43.5%	-35.8%	-37.3%
Raleigh, NC	20	139,459	-46.5%	-18.8%	-35.2%
Richmond, VA	23	140,357	-36.9%	-15.2%	-21.2%
Sacramento, CA	15	72,446	-31.6%	-22.7%	-24.9%
Salt Lake City, UT	12	89,543	-34.9%	-30.4%	-32.1%
San Antonio, TX	29	183,309	-46.8%	-30.9%	-35.0%

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2-Stars Segment (cont'd)

Metro Area	2 STARS				
	Count	SqM	Measure 4	Measure 5	Measure 6
San Bernardino, CA	22	117,011	-28.8%	-17.8%	-18.2%
San Diego, CA	17	107,227	-33.6%	-18.8%	-27.4%
San Francisco, CA	13	87,237	-39.2%	-25.3%	-33.0%
San José, CA	8	41,736	-27.6%	3.4%	-20.5%
Sarasota, FL	10	60,575	-52.4%	-32.3%	-36.9%
Savannah, GA	9	57,696	-55.1%	-35.0%	-41.5%
Scranton, PA	9	44,377	-50.3%	-40.9%	-44.4%
Seattle, WA	26	193,679	-28.1%	-19.2%	-28.7%
Shreveport, LA	8	40,024	-43.5%	-39.4%	-27.9%
Sioux Falls, SD	8	36,174	-40.4%	-18.1%	-27.5%
South Carolina State Non-Metropolitan Areas	18	85,876	-47.6%	-31.9%	-33.2%
South Dakota State Non-Metropolitan Areas	11	50,836	-42.1%	-34.4%	-34.4%
Springfield, MO	8	35,953	-53.7%	-35.7%	-36.3%
St. Louis, MO	11	52,841	-37.1%	-26.6%	-30.6%
Syracuse, NY	8	43,392	-37.0%	-22.6%	-35.8%
Tallahassee, FL	8	40,600	-30.6%	8.5%	-7.3%
Tampa Bay, FL	33	187,829	-43.4%	-25.0%	-31.6%
Tennessee State Non-Metropolitan Areas	27	127,728	-44.5%	-25.0%	-24.8%
Texas State Non-Metropolitan Areas	47	204,604	-35.5%	-25.2%	-23.6%
Toledo, OH	9	46,321	-50.1%	-21.5%	-34.4%
Tucson, AZ	8	48,317	-26.8%	1.6%	-8.9%
Tulsa, OK	14	79,536	-41.3%	-24.0%	-22.3%
Virginia Beach, VA	23	151,978	-52.3%	-35.9%	-42.3%
Virginia State Non-Metropolitan Areas	22	96,939	-38.2%	-18.9%	-17.8%
Washington DC	43	278,372	-49.0%	-26.8%	-39.0%
West Virginia State Non-Metropolitan Areas	8	33,576	-40.2%	-17.9%	-28.3%
Wilmington, NC	8	47,275	-39.1%	-12.4%	-25.7%
Wyoming State Non-Metropolitan Areas	18	96,649	-29.6%	-18.7%	-25.1%
Youngstown, OH	10	44,396	-43.1%	-39.1%	-27.2%

APPENDIX 6: Year-Over-Year overall average change by selected country for water, 2019-2021

All Hotels

Country	ALL			
	Count	SqM	Measure 8	Measure 9
Argentina	10	252,410	58.1%	-36.8%
Australia	41	1,075,178	11.6%	-44.0%
Austria	11	251,979	17.8%	-50.7%
Belgium	11	144,740	19.3%	-46.4%
Brazil	12	381,232	2.7%	-41.7%
Canada	206	2,706,347	12.2%	-35.6%
Chile	9	143,075	-27.1%	-51.0%
China	521	24,491,861	12.3%	-10.3%
Colombia	24	373,000	14.9%	-20.8%
Costa Rica	16	268,400	0.6%	-35.8%
Czech Republic	10	232,801	33.1%	-53.4%
Egypt	24	1,178,782	15.2%	-16.1%
France	36	327,758	25.4%	-43.4%
Germany	57	1,133,243	18.7%	-48.7%
Hong Kong, China	24	793,446	53.9%	-11.0%
India	86	1,942,853	4.8%	-22.2%
Indonesia	42	1,247,904	-2.0%	-35.6%
Italy	25	276,576	12.5%	-42.5%
Japan	61	2,168,260	45.4%	-42.3%
Jordan	14	460,725	17.4%	-24.8%
Kazakhstan	11	255,950	19.6%	-12.7%
Korea	18	856,018	18.4%	-17.0%
Macau, China	8	818,117	46.2%	-43.7%
Malaysia	25	1,200,095	34.3%	-43.6%
Mexico	145	2,217,224	9.2%	-23.4%
Netherlands	25	325,274	42.6%	-51.5%
New Zealand	10	136,444	-7.9%	-40.7%
Oman	8	185,073	41.8%	-9.9%
Panama	8	166,200	-6.6%	-27.9%
Peru	10	149,330	-29.8%	-42.5%
Philippines	10	470,549	-38.2%	-41.4%
Poland	19	313,022	10.8%	-46.2%
Portugal	13	211,857	39.6%	-46.4%
Puerto Rico, USA	13	235,813	16.1%	-0.5%
Qatar	13	872,159	-20.4%	-19.5%
Romania	8	117,602	16.6%	-42.6%
Russian Federation	20	354,970	7.5%	-6.7%
Saudi Arabia	40	1,923,040	6.8%	-16.4%
Singapore	46	1,332,245	-23.1%	-40.3%
Spain	42	584,092	24.3%	-37.0%
Switzerland	11	173,783	20.0%	-40.4%
Taiwan, China	10	383,777	34.7%	-31.6%
Thailand	70	2,406,984	89.5%	-43.3%
Turkey	76	1,868,343	5.0%	-20.8%
United Arab Emirates	77	4,203,628	5.7%	-10.8%
United Kingdom	234	2,652,317	2.0%	-40.3%
United States	5,834	65,536,653	9.1%	-13.2%
Vietnam	15	568,442	51.0%	-45.9%

All Non-Resorts

Country	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Argentina	10	252,410	58.1%	-36.8%
Australia	34	804,739	4.0%	-44.7%
Austria	11	251,979	17.8%	-50.7%
Belgium	11	144,740	19.3%	-46.4%
Brazil	10	262,113	-6.4%	-46.9%
Canada	199	2,414,404	10.2%	-35.9%
Chile	9	143,075	-27.1%	-51.0%
China	440	20,051,203	10.9%	-12.2%
Colombia	22	305,300	11.9%	-22.5%
Costa Rica	15	254,637	-18.3%	-48.6%
Czech Republic	9	221,329	33.9%	-53.3%
Egypt	17	902,045	16.3%	-19.8%
France	34	287,338	22.9%	-42.9%
Germany	51	986,878	20.7%	-48.1%
Hong Kong, China	18	499,151	42.5%	-18.7%
India	67	1,359,416	2.5%	-25.0%
Indonesia	33	901,008	-2.8%	-28.5%
Italy	23	249,239	17.1%	-39.6%
Japan	48	1,550,597	33.8%	-47.8%
Jordan	10	279,462	6.9%	-33.9%
Kazakhstan	11	255,950	19.6%	-12.7%
Korea	12	604,681	20.4%	-20.9%
Malaysia	18	775,085	23.0%	-46.2%
Mexico	131	1,783,940	-2.5%	-32.7%
Netherlands	24	315,207	41.4%	-51.8%
New Zealand	9	117,379	-9.1%	-41.3%
Panama	8	166,200	-6.6%	-27.9%
Peru	10	149,330	-29.8%	-42.5%
Philippines	8	365,942	-42.8%	-38.7%
Poland	18	301,718	9.7%	-47.5%
Portugal	11	187,577	32.8%	-52.8%
Puerto Rico, USA	8	110,989	14.1%	-2.8%
Qatar	11	690,394	-22.9%	-20.2%
Romania	8	117,602	16.6%	-42.6%
Russian Federation	16	189,114	5.2%	-8.0%
Saudi Arabia	36	1,695,554	4.2%	-14.3%
Singapore	43	1,171,184	-25.5%	-40.9%
Spain	37	435,066	21.3%	-40.3%
Switzerland	9	122,403	15.8%	-44.9%
Thailand	41	1,511,820	76.6%	-46.0%
Turkey	71	1,700,041	0.9%	-23.8%
United Arab Emirates	53	2,737,306	3.7%	-10.9%
United Kingdom	230	2,587,705	1.5%	-40.2%
United States	5,674	54,426,004	8.0%	-13.0%
Vietnam	11	454,638	47.1%	-44.2%

All Resorts

Country	ALL RESORTS			
	Count	SqM	Measure 8	Measure 9
China	81	4,440,658	15.7%	-2.9%
India	19	583,437	6.7%	-17.2%
Indonesia	9	346,896	27.6%	-46.6%
Japan	13	617,663	64.6%	-31.1%
Mexico	14	433,284	20.9%	-8.9%
Thailand	29	895,164	109.8%	-39.7%
United Arab Emirates	24	1,466,322	10.2%	-10.7%
United States	160	11,110,649	20.7%	-14.1%

Full-Service Non-Resorts

Country	FULL SERVICE NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Argentina	8	234,540	66.6%	-38.4%
Australia	29	745,932	2.1%	-44.3%
Austria	9	213,454	28.7%	-48.5%
Brazil	8	246,238	-1.0%	-47.6%
Canada	81	1,513,584	14.1%	-40.1%
China	342	18,120,799	12.5%	-11.7%
Colombia	12	226,647	10.9%	-26.7%
Egypt	17	902,045	16.3%	-19.8%
France	22	218,631	20.7%	-43.4%
Germany	31	767,462	27.6%	-47.8%
Hong Kong, China	11	413,877	76.4%	-20.6%
India	48	1,219,975	3.4%	-25.9%
Indonesia	23	788,648	-1.1%	-28.4%
Italy	13	187,008	25.6%	-40.4%
Japan	39	1,486,218	33.4%	-47.6%
Jordan	10	279,462	6.9%	-33.9%
Kazakhstan	10	243,533	17.4%	-12.4%
Korea	10	561,814	26.2%	-21.2%
Malaysia	14	706,183	24.5%	-45.9%
Mexico	50	963,649	0.4%	-36.1%
Netherlands	13	241,545	41.3%	-55.8%
New Zealand	8	107,580	-8.2%	-41.3%
Peru	8	130,291	-33.3%	-41.5%
Poland	14	269,031	11.7%	-48.0%
Qatar	11	690,394	-22.9%	-20.2%
Saudi Arabia	30	1,515,759	8.1%	-14.8%
Singapore	34	1,033,961	-24.1%	-40.8%
Spain	9	236,093	51.5%	-41.5%
Thailand	35	1,426,811	78.4%	-45.1%
Turkey	47	1,460,716	1.9%	-24.3%
United Arab Emirates	41	2,488,555	4.2%	-11.6%
United Kingdom	155	2,187,840	5.2%	-41.5%
United States	1,315	26,423,118	13.3%	-20.5%
Vietnam	10	449,398	47.2%	-44.3%

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Full-Service Resorts

Country	FULL SERVICE RESORTS			
	Count	SqM	Measure 8	Measure 9
China	80	4,432,258	15.6%	-2.9%
India	19	583,437	6.7%	-17.2%
Indonesia	9	346,896	27.6%	-46.6%
Japan	13	617,663	64.6%	-31.1%
Mexico	14	433,284	20.9%	-8.9%
Thailand	28	878,713	107.3%	-39.4%
United Arab Emirates	24	1,466,322	10.2%	-10.7%
United States	144	10,949,393	20.9%	-14.5%

Limited Service

Country	LIMITED SERVICE			
	Count	SqM	Measure 8	Measure 9
Canada	118	900,820	8.3%	-27.9%
China	99	1,938,804	-0.4%	-18.1%
Colombia	10	78,653	26.1%	-5.8%
Costa Rica	8	51,420	12.4%	-17.4%
France	12	68,707	29.0%	-41.2%
Germany	20	219,416	1.2%	-49.2%
India	19	139,441	6.5%	-14.4%
Indonesia	10	112,360	-8.0%	-29.0%
Italy	10	62,231	6.1%	-37.3%
Japan	9	64,379	32.6%	-51.8%
Mexico	81	820,291	-0.7%	-27.0%
Netherlands	11	73,662	50.3%	-41.0%
Russian Federation	13	129,784	5.8%	-6.1%
Singapore	9	137,223	-31.5%	-41.3%
Spain	28	198,973	5.7%	-38.2%
Turkey	24	239,325	0.1%	-20.5%
United Arab Emirates	12	248,751	6.1%	-3.6%
United Kingdom	75	399,865	-4.1%	-33.1%
United States	4,375	28,164,142	7.2%	-5.7%

Luxury Segment

Country	LUXURY			
	Count	SqM	Measure 8	Measure 9
China	96	5,999,223	14.9%	-9.2%
Hong Kong, China	8	362,934	105.7%	-7.1%
India	13	568,665	-6.6%	-30.2%
Indonesia	10	515,483	-14.1%	-38.9%
Japan	14	651,357	60.3%	-36.4%
Korea	9	637,358	23.2%	-18.3%
Mexico	11	321,043	47.0%	-6.5%
Saudi Arabia	10	791,212	2.4%	-30.8%
Singapore	14	615,676	-15.4%	-40.3%
Thailand	13	536,073	92.9%	-42.5%
Turkey	10	411,378	13.4%	-14.4%
United Arab Emirates	21	1,903,220	9.7%	-12.6%
United States	90	8,345,904	20.5%	-15.8%
Vietnam	9	378,770	44.2%	-38.4%

Upper Upscale Segment

Country	UPPER UPSCALE			
	Count	SqM	Measure 8	Measure 9
Australia	18	517,862	18.1%	-41.2%
Canada	29	1,014,745	29.4%	-41.6%
China	192	9,964,727	9.8%	-11.3%
Egypt	18	807,481	17.5%	-10.2%
France	10	153,335	36.1%	-44.9%
Germany	22	633,696	16.7%	-50.9%
India	38	866,127	13.5%	-17.4%
Indonesia	16	471,514	10.1%	-37.2%
Japan	21	941,375	57.8%	-44.0%
Malaysia	10	537,982	16.2%	-43.7%
Mexico	19	491,662	6.1%	-29.5%
Netherlands	9	180,805	41.0%	-55.4%
Saudi Arabia	10	488,478	43.0%	-1.4%
Singapore	12	323,098	-19.9%	-37.8%
Spain	8	186,571	47.0%	-43.2%
Thailand	36	1,322,271	84.0%	-41.0%
Turkey	19	819,455	3.9%	-24.4%
United Arab Emirates	27	1,351,396	9.0%	-9.1%
United Kingdom	55	993,847	14.6%	-43.9%
United States	738	20,788,854	19.0%	-21.3%

Upscale Segment

Country	UPSCALE			
	Count	SqM	Measure 8	Measure 9
Australia	13	270,087	-6.3%	-41.8%
Canada	77	865,388	10.5%	-34.0%
China	152	6,398,869	14.1%	-8.3%
Costa Rica	8	155,818	-19.4%	-48.3%
France	8	53,499	9.0%	-51.1%
Germany	12	132,465	15.5%	-46.7%
India	21	363,513	5.1%	-22.4%
Italy	13	105,161	23.1%	-34.2%
Japan	22	524,404	11.9%	-47.3%
Mexico	33	345,610	-1.8%	-35.0%
Russian Federation	9	105,926	6.9%	0.8%
Saudi Arabia	15	546,434	-11.5%	-20.6%
Singapore	10	215,020	-12.4%	-38.8%
Spain	13	82,987	14.2%	-34.3%
Thailand	9	212,364	77.7%	-45.1%
Turkey	31	510,139	-0.4%	-23.8%
United Arab Emirates	24	820,484	1.1%	-9.4%
United Kingdom	43	591,117	7.0%	-39.7%
United States	2,129	19,574,790	9.5%	-9.0%

Upper Midscale Segment

Country	UPPER MIDSCALE			
	Count	SqM	Measure 8	Measure 9
Canada	98	749,672	5.0%	-27.5%
China	81	2,129,042	9.7%	-15.7%
Colombia	9	83,993	12.7%	-12.7%
France	15	69,946	40.6%	-30.7%
Germany	16	169,587	17.4%	-43.0%
India	14	144,548	-10.3%	-27.8%
Indonesia	9	128,943	-5.5%	-22.5%
Mexico	82	1,058,909	0.5%	-24.4%
Netherlands	8	43,471	43.8%	-40.6%
Poland	8	79,768	4.1%	-46.8%
Singapore	9	163,469	-46.8%	-47.3%
Spain	15	115,986	-3.7%	-42.9%
Thailand	11	319,825	84.2%	-56.2%
Turkey	16	127,371	-0.1%	-20.4%
United Kingdom	132	933,829	-5.9%	-33.8%
United States	2,737	15,969,027	4.0%	-6.4%

5-Stars Segment

Country	5 STARS			
	Count	SqM	Measure 8	Measure 9
Australia	15	438,965	13.3%	-47.8%
China	109	6,549,470	15.3%	-10.1%
Germany	12	348,349	42.7%	-49.4%
Hong Kong, China	8	362,934	105.7%	-7.1%
India	21	757,897	-4.8%	-29.7%
Indonesia	16	673,791	-6.8%	-40.3%
Japan	13	616,751	59.7%	-34.9%
Jordan	8	264,394	18.4%	-28.9%
Korea	8	607,621	25.7%	-19.1%
Malaysia	8	554,083	75.0%	-40.6%
Poland	8	169,716	19.1%	-45.9%
Qatar	9	730,132	-18.9%	-23.7%
Saudi Arabia	17	978,155	13.5%	-19.6%
Singapore	17	746,044	-9.3%	-39.8%
Spain	10	278,090	28.9%	-34.6%
Thailand	34	1,411,305	91.1%	-40.1%
Turkey	27	1,087,657	12.1%	-17.4%
United Arab Emirates	33	2,414,469	5.5%	-12.7%
United Kingdom	9	270,446	32.4%	-58.1%
United States	52	3,612,485	27.1%	-11.8%
Vietnam	11	451,030	47.1%	-42.5%

4-Stars Segment

Country	4 STARS			
	Count	SqM	Measure 8	Measure 9
Australia	21	560,829	8.9%	-42.4%
Canada	29	985,329	28.2%	-40.9%
China	250	13,228,886	11.7%	-9.9%
Colombia	8	128,697	29.6%	-14.2%
Egypt	16	705,995	17.5%	-9.7%
France	18	202,295	23.2%	-50.1%
Germany	28	592,922	21.6%	-48.6%
Hong Kong, China	8	320,953	56.6%	-15.8%
India	41	916,573	15.7%	-17.3%
Indonesia	14	391,010	7.1%	-29.1%
Italy	17	193,402	17.4%	-44.4%
Japan	38	1,445,792	42.2%	-45.3%
Malaysia	13	526,989	10.1%	-46.0%
Mexico	30	642,934	9.0%	-25.6%
Netherlands	11	162,623	31.3%	-48.4%
Russian Federation	10	240,713	10.2%	-1.0%
Saudi Arabia	14	698,659	15.1%	-11.6%
Singapore	25	525,153	-26.3%	-39.6%
Spain	16	179,036	28.5%	-40.7%
Thailand	27	843,321	98.4%	-45.2%
Turkey	21	515,484	-6.5%	-30.2%
United Arab Emirates	27	1,377,438	10.1%	-9.5%
United Kingdom	92	1,429,865	8.9%	-42.1%
United States	488	18,483,991	22.1%	-20.8%

3-Stars Segment

Country	3 STARS			
	Count	SqM	Measure 8	Measure 9
Canada	101	1,147,558	9.9%	-32.7%
China	126	4,216,298	12.0%	-11.4%
Costa Rica	8	61,918	-12.7%	-39.0%
France	10	46,175	34.7%	-35.3%
Germany	14	178,218	-11.5%	-48.7%
India	15	219,709	-6.5%	-22.6%
Indonesia	9	154,933	19.4%	-24.0%
Japan	10	105,717	24.3%	-43.3%
Mexico	64	787,982	1.7%	-28.9%
Saudi Arabia	9	246,226	-16.8%	-18.8%
Spain	12	107,657	0.8%	-43.4%
Turkey	21	230,908	-7.2%	-24.0%
United Arab Emirates	15	375,558	0.7%	-5.8%
United Kingdom	108	823,340	-3.2%	-34.9%
United States	2,547	27,169,929	8.5%	-12.4%

2-Stars Segment

Country	2 STARS			
	Count	SqM	Measure 8	Measure 9
Canada	75	546,157	3.6%	-31.0%
China	36	497,207	-4.2%	-20.5%
India	9	48,674	-0.1%	-20.6%
Mexico	44	496,082	-5.2%	-25.3%
United Kingdom	25	128,666	1.4%	-23.2%
United States	2,747	16,270,248	4.3%	-5.7%

APPENDIX 7: Year-Over-Year overall average change by selected metro area for water, 2019-2021

All Hotels

Metro Area	ALL			
	Count	SqM	Measure 8	Measure 9
Abu Dhabi	18	976,035	1.9%	-12.0%
Akron, OH	17	107,555	3.5%	-15.9%
Alabama State Non-Metropolitan Areas	31	229,791	-19.0%	-16.8%
Albany, NY	12	96,149	0.3%	-17.4%
Albuquerque, NM	28	229,017	2.8%	-17.2%
Allentown, PA	12	68,952	-15.2%	-12.1%
Amarillo, TX	8	40,743	4.2%	9.4%
Amsterdam	13	206,894	53.5%	-56.8%
Anchorage, AK	9	127,040	-8.0%	-10.9%
Arkansas State Non-Metropolitan Areas	14	60,283	-8.9%	-5.4%
Asheville, NC	14	112,328	7.3%	-3.4%
Atlanta, GA	143	2,615,290	13.7%	-16.4%
Augusta, GA	11	64,360	-4.1%	0.3%
Austin, TX	59	705,071	7.0%	-15.2%
Bakersfield, CA	9	85,149	1.3%	-6.4%
Baltimore, MD	31	328,875	6.6%	-15.1%
Bangkok	40	1,483,478	86.5%	-47.3%
Barcelona	9	192,451	35.4%	-43.2%
Baton Rouge, LA	13	136,389	-20.4%	-13.1%
Beijing	30	1,498,239	18.3%	-20.8%
Bengaluru	11	226,828	18.0%	-31.7%
Berlin	13	392,340	35.1%	-50.6%
Billings, MT	8	55,988	-2.9%	-6.2%
Birmingham	10	97,914	4.6%	-43.8%
Birmingham, AL	32	262,282	8.6%	-4.3%
Bogotá	8	120,036	31.4%	-35.0%
Boise City, ID	13	81,721	-10.0%	-13.2%
Boston, MA	66	998,930	15.8%	-26.7%
Boulder, CO	11	84,924	15.4%	-11.9%
Bridgeport, CT	19	254,470	17.0%	-9.9%
Brownsville, TX	8	47,872	4.0%	7.3%
Buffalo, NY	15	118,045	10.9%	-10.4%
Cairo	13	767,603	17.6%	-18.9%
Calgary	17	225,274	24.2%	-34.0%
Changsha	8	394,490	17.9%	6.2%
Charleston, SC	35	265,753	9.9%	-3.7%
Charleston, WV	10	84,778	-12.0%	-26.7%
Charlotte, NC	62	652,536	12.2%	-22.0%
Charlottesville, VA	11	86,618	-22.3%	-28.1%
Chattanooga, TN	17	108,655	-2.3%	-10.2%
Chengdu	19	813,377	2.8%	-13.0%
Chennai	8	196,048	-12.7%	-25.8%
Chicago, IL	129	1,805,587	14.0%	-23.3%
Chongqing	13	585,341	4.9%	-17.3%
Cincinnati, OH	45	396,353	13.5%	-11.4%
Cleveland, OH	30	308,241	18.2%	-5.6%
College Station, TX	8	52,249	29.2%	22.1%
Colorado Springs, CO	16	169,263	-7.7%	-18.9%

All Hotels (cont'd)

Metro Area	ALL			
	Count	SqM	Measure 8	Measure 9
Colorado State Non-Metropolitan Areas	25	224,321	-0.6%	-1.2%
Columbia, MO	9	66,215	8.6%	-2.7%
Columbia, SC	18	160,042	16.5%	-4.5%
Columbus, GA	11	60,898	13.8%	0.6%
Columbus, OH	43	403,238	4.9%	-28.4%
Corpus Christi, TX	13	68,548	11.9%	1.5%
Dallas-Fort Worth, TX	164	2,055,105	8.1%	-15.3%
Dayton, OH	12	81,776	1.1%	-19.8%
Daytona Beach, FL	14	126,369	-2.5%	-6.0%
Delhi	16	521,034	4.0%	-19.3%
Denver, CO	91	1,218,125	4.1%	-21.2%
Des Moines, IA	23	216,968	26.3%	-4.8%
Destin, FL	14	147,066	21.2%	13.2%
Detroit, MI	50	511,995	9.9%	-19.7%
Doha	13	872,159	-20.4%	-19.5%
Dubai-Sharjah-Ajman	51	2,842,479	6.8%	-10.9%
Durham, NC	23	203,241	6.6%	-27.3%
Edmonton	13	151,582	29.0%	-23.0%
El Paso, TX	20	135,871	-7.6%	-7.6%
Evansville, IN-KY	9	62,296	-2.6%	-11.8%
Fargo, ND	9	64,858	-16.6%	-21.8%
Fayetteville, AR	19	122,817	18.0%	-9.1%
Fayetteville, NC	11	78,219	-4.0%	-1.1%
Flagstaff, AZ	10	66,308	7.1%	-7.3%
Florida State Non-Metropolitan Areas	20	146,834	-2.4%	-3.6%
Fort Collins, CO	11	109,958	8.4%	-17.7%
Fort Myers, FL	19	186,384	-4.6%	-7.9%
Fort Wayne, IN	8	52,443	11.0%	-7.9%
Foshan	9	432,186	30.1%	-9.3%
Fresno, CA	8	57,145	5.9%	-11.4%
Gainesville, FL	12	85,511	-9.3%	-5.8%
Georgia State Non-Metropolitan Areas	26	115,788	1.8%	1.0%
Glasgow	10	132,331	11.3%	-43.1%
Grand Rapids, MI	13	188,419	12.2%	-31.2%
Greater Manchester	8	114,812	17.9%	-37.7%
Greater Zhengzhou	11	399,159	1.0%	-19.1%
Greensboro, NC	14	114,671	10.3%	-11.3%
Greenville, SC	21	186,778	29.0%	6.7%
Guadalajara	10	193,335	8.3%	-33.8%
Guangzhou	21	1,044,561	9.2%	-14.3%
Gulfport-Biloxi, MS	9	60,985	-14.5%	-10.2%
Hangzhou	18	829,702	11.8%	-6.3%
Harrisburg, PA	12	80,423	17.0%	-8.5%
Hartford, CT	17	120,904	16.9%	-4.5%
Hefei	11	419,693	1.7%	-9.5%
Hong Kong	23	767,646	52.6%	-11.5%
Honolulu, HI	12	534,881	7.1%	-29.7%
Houston, TX	131	1,685,146	7.7%	-15.8%

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All Hotels (cont'd)

Metro Area	ALL			
	Count	SqM	Measure 8	Measure 9
Huntsville, AL	18	177,744	7.4%	-6.4%
IllinoisState Non-Metropolitan Areas	16	77,270	-2.1%	-7.7%
Indiana State Non-Metropolitan Areas	9	39,896	-14.7%	-24.4%
Indianapolis, IN	39	364,913	2.6%	-12.7%
Iowa State Non-Metropolitan Areas	10	54,015	15.9%	19.7%
Istanbul	36	1,179,211	5.2%	-23.8%
Jackson, MS	13	96,776	-5.8%	-10.0%
Jacksonville, FL	56	529,843	8.9%	1.5%
Jakarta	21	645,893	-3.7%	-25.1%
Kansas City, MO	59	728,012	6.8%	-23.6%
Kansas State Non-Metropolitan Areas	13	68,138	-9.2%	-12.5%
Kennewick, WA	10	63,469	-5.3%	-15.9%
Kentucky State Non-Metropolitan Areas	23	105,870	-6.0%	-4.9%
Knoxville, TN	28	214,904	4.6%	-6.0%
Kuala Lumpur	12	707,806	43.1%	-45.7%
Lafayette, LA	13	92,783	-1.8%	2.9%
Lakeland, FL	12	60,628	6.1%	5.9%
Lancaster, PA	8	60,966	-1.9%	-15.9%
Lansing, MI	10	65,188	-10.0%	-28.7%
Las Vegas, NV	31	5,419,404	15.4%	-12.1%
Lexington, KY	27	216,802	8.4%	-13.3%
Little Rock, AR	24	222,343	-2.8%	-13.8%
Liverpool–Birkenhead	10	142,903	20.5%	-24.4%
London, UK	61	917,682	10.6%	-46.8%
Los Angeles, CA	163	2,760,478	11.5%	-16.8%
Louisiana State Non-Metropolitan Areas	9	48,402	4.4%	2.0%
Louisville, KY	31	349,714	12.3%	-22.9%
Macon, GA	10	52,311	11.4%	7.5%
Madison, WI	22	201,299	20.8%	-12.9%
Madrid	11	155,967	30.6%	-42.1%
Manila	9	444,365	-40.8%	-42.3%
Memphis, TN	32	343,293	4.5%	-14.8%
Mexico City	17	354,189	-1.0%	-48.9%
Miami, FL	119	1,612,571	13.2%	0.1%
Michigan State Non-Metropolitan Areas	12	77,956	-13.7%	-22.1%
Milwaukee, WI	25	220,534	9.6%	-16.5%
Minneapolis, MN	60	687,267	32.8%	-21.3%
Mississippi State Non-Metropolitan Areas	22	107,114	-1.4%	-6.0%
Missouri State Non-Metropolitan Areas	19	131,517	3.2%	9.0%
Mobile, AL	10	81,786	25.3%	12.5%
Montana State Non-Metropolitan Areas	14	78,142	-12.8%	-13.2%
Monterrey	10	156,230	-8.3%	-42.9%
Montgomery, AL	15	103,473	-0.3%	-15.7%
Munich	8	197,278	40.3%	-46.3%
Myrtle Beach, FL	11	136,761	13.7%	1.8%
Nanjing	10	546,431	13.0%	-12.9%
Naples, FL	10	130,046	8.6%	15.2%
Nashville, TN	76	783,961	4.8%	-17.8%

All Hotels (cont'd)

Metro Area	ALL			
	Count	SqM	Measure 8	Measure 9
Nebraska State Non-Metropolitan Areas	22	138,343	-7.6%	-8.6%
New Mexico State Non-Metropolitan Areas	16	66,221	10.6%	0.4%
New Orleans, LA	25	531,368	12.5%	-30.0%
New York State Non-Metropolitan Areas	18	109,885	9.8%	-1.8%
New York, NY	127	1,757,327	12.6%	-21.4%
Ningbo	9	486,187	21.5%	-4.3%
North Carolina State Non-Metropolitan Areas	43	231,766	4.2%	-2.4%
Norwich, CT	8	70,216	0.7%	-11.3%
Ocala, FL	8	75,947	2.1%	-4.1%
Ohio State Non-Metropolitan Areas	21	99,699	-3.7%	-5.7%
Oklahoma City, OK	35	273,363	3.1%	-9.4%
Oklahoma State Non-Metropolitan Areas	25	127,762	8.6%	10.5%
Omaha, NE	27	270,708	14.3%	-6.5%
Orlando, FL	91	1,549,919	17.5%	-9.7%
Palm Bay, FL	10	94,542	15.7%	5.6%
Panama City	8	166,200	-6.6%	-27.9%
Paris	15	156,060	36.6%	-45.8%
Pennsylvania State Non-Metropolitan Areas	30	157,293	-1.1%	-11.3%
Pensacola, FL	15	98,447	5.3%	0.9%
Philadelphia, PA	78	822,664	7.9%	-17.9%
Phoenix, AZ	99	1,189,387	15.7%	-3.3%
Pittsburgh, PA	61	621,516	9.4%	-21.1%
Portland, ME	15	86,513	12.7%	6.3%
Portland, OR	46	507,411	19.5%	-21.5%
Prague	8	215,608	40.1%	-53.7%
Providence, RI	21	190,792	-8.1%	-20.0%
Qingdao	17	914,333	-1.7%	-17.4%
Queretaro	10	102,561	33.3%	-31.4%
Raleigh, NC	46	424,670	17.1%	-13.0%
Reno, NV	9	91,254	13.7%	10.9%
Richmond, VA	23	149,646	8.8%	-8.5%
Riyadh	14	540,058	-5.2%	-13.8%
Roanoke, VA	10	80,112	6.6%	-11.4%
Rochester, NY	14	100,176	6.5%	-13.3%
Sacramento, CA	39	381,207	16.2%	-9.0%
Salt Lake City, UT	24	248,470	-4.2%	-21.0%
San Antonio, TX	70	979,509	18.2%	-0.8%
San Bernardino, CA	46	678,918	7.9%	-1.5%
San Diego, CA	66	1,138,584	17.6%	-14.3%
San Francisco, CA	70	1,091,225	23.1%	-27.5%
San Jose	10	212,062	-12.3%	-48.6%
San José, CA	33	390,890	27.4%	-19.1%
San Juan–Caguas–Guaynabo	10	186,694	13.0%	-5.3%
Sanya	12	785,832	26.3%	12.3%
Sarasota, FL	14	143,145	19.0%	16.1%
Savannah, GA	16	154,393	10.6%	0.4%
Scranton, PA	13	76,401	2.8%	-5.4%
Seattle, WA	60	987,005	8.1%	-29.6%

All Hotels (cont'd)

Metro Area	ALL			
	Count	SqM	Measure 8	Measure 9
Seoul	13	721,206	19.9%	-20.6%
Shanghai	67	2,992,782	12.0%	-10.7%
Shenzhen	21	846,717	12.2%	-10.6%
Shreveport, LA	11	80,750	-9.2%	-6.1%
Singapore	46	1,332,245	-23.1%	-40.3%
Sioux Falls, SD	14	98,378	3.3%	-9.6%
South Carolina State Non-Metropolitan Areas	16	80,233	-6.2%	-9.2%
South Dakota State Non-Metropolitan Areas	8	47,860	11.0%	8.6%
Spokane, WA	10	198,292	-0.3%	-26.4%
Springfield, MO	13	114,016	-3.0%	-10.6%
St. Louis, MO	37	397,055	12.2%	-20.8%
Suzhou-Wuxi-Changzhou	29	1,343,896	18.0%	-7.8%
Sydney	13	327,784	14.4%	-56.0%
Syracuse, NY	13	118,152	6.7%	-17.6%
Tallahassee, FL	15	108,897	9.2%	-9.8%
Tampa Bay, FL	69	742,590	10.0%	-2.7%
Temple, TX	10	52,881	12.5%	20.7%
Tennessee State Non-Metropolitan Areas	21	128,302	-2.7%	-2.2%
Texas State Non-Metropolitan Areas	41	173,369	-10.0%	-8.0%
Tianjin	18	833,454	4.4%	-20.7%
Tokyo	22	711,612	49.4%	-37.7%
Toledo, OH	11	64,926	2.9%	-15.1%
Toronto	46	751,555	20.5%	-34.0%
Tucson, AZ	18	188,172	17.8%	-1.2%
Tulsa, OK	16	181,465	12.3%	-5.4%
Utah State Non-Metropolitan Areas	9	42,693	-5.1%	1.9%
Vancouver	18	367,171	7.7%	-41.0%
Ventura, CA	17	270,936	12.4%	-1.7%
Virginia Beach, VA	57	560,932	2.6%	-7.6%
Virginia State Non-Metropolitan Areas	20	87,415	-2.8%	-4.0%
Waco, TX	8	54,027	-7.5%	-10.7%
Washington DC	158	2,313,958	8.9%	-29.2%
West Virginia State Non-Metropolitan Areas	11	49,227	24.2%	8.3%
Wichita, KS	18	160,529	6.5%	-10.4%
Winston-Salem, NC	12	98,891	7.8%	-19.2%
Wyoming State Non-Metropolitan Areas	16	90,166	17.8%	8.3%
Xiamen	11	489,256	8.4%	-10.1%
Xian	17	717,156	4.6%	-19.2%
Youngstown, OH	16	94,286	-5.1%	4.5%
Zhuhai-Zhongshan-Jiangmen	9	455,548	3.7%	-24.6%

All Non-Resorts

Metro Area	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Abu Dhabi	12	614,504	-3.2%	-11.7%
Akron, OH	17	107,555	3.5%	-15.9%
Alabama State Non-Metropolitan Areas	30	187,946	-9.5%	-6.2%
Albany, NY	12	96,149	0.3%	-17.4%
Albuquerque, NM	28	229,017	2.8%	-17.2%
Allentown, PA	12	68,952	-15.2%	-12.1%
Amarillo, TX	8	40,743	4.2%	9.4%
Amsterdam	12	196,827	51.3%	-57.5%
Anchorage, AK	9	127,040	-8.0%	-10.9%
Arkansas State Non-Metropolitan Areas	14	60,283	-8.9%	-5.4%
Asheville, NC	14	112,328	7.3%	-3.4%
Atlanta, GA	141	2,443,415	13.4%	-15.6%
Augusta, GA	11	64,360	-4.1%	0.3%
Austin, TX	57	618,638	8.2%	-12.6%
Bakersfield, CA	9	85,149	1.3%	-6.4%
Baltimore, MD	31	328,875	6.6%	-15.1%
Bangkok	36	1,302,096	81.9%	-46.3%
Baton Rouge, LA	13	136,389	-20.4%	-13.1%
Beijing	25	1,167,417	16.4%	-21.7%
Bengaluru	11	226,828	18.0%	-31.7%
Berlin	12	359,541	40.7%	-48.9%
Billings, MT	8	55,988	-2.9%	-6.2%
Birmingham	10	97,914	4.6%	-43.8%
Birmingham, AL	32	262,282	8.6%	-4.3%
Boise City, ID	13	81,721	-10.0%	-13.2%
Boston, MA	63	931,743	17.3%	-24.4%
Boulder, CO	11	84,924	15.4%	-11.9%
Bridgeport, CT	18	225,252	16.3%	-9.1%
Buffalo, NY	15	118,045	10.9%	-10.4%
Cairo	12	736,503	17.8%	-19.3%
Calgary	16	178,256	20.9%	-32.3%
Charleston, SC	34	262,346	7.5%	-6.0%
Charleston, WV	10	84,778	-12.0%	-26.7%
Charlotte, NC	61	618,556	13.1%	-21.5%
Charlottesville, VA	11	86,618	-22.3%	-28.1%
Chattanooga, TN	17	108,655	-2.3%	-10.2%
Chengdu	17	730,745	2.9%	-13.5%
Chicago, IL	125	1,460,168	10.4%	-21.0%
Chongqing	12	545,341	5.0%	-17.9%
Cincinnati, OH	44	354,210	11.2%	-11.2%
Cleveland, OH	30	308,241	18.2%	-5.6%
College Station, TX	8	52,249	29.2%	22.1%
Colorado Springs, CO	15	137,009	2.4%	-10.7%
Colorado State Non-Metropolitan Areas	21	109,506	-3.7%	-1.5%
Columbia, MO	9	66,215	8.6%	-2.7%
Columbia, SC	18	160,042	16.5%	-4.5%
Columbus, GA	11	60,898	13.8%	0.6%
Columbus, OH	43	403,238	4.9%	-28.4%

Appendix 7 (continued)

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Corpus Christi, TX	13	68,548	11.9%	1.5%
Dallas-Fort Worth, TX	162	1,931,214	7.3%	-14.7%
Dayton, OH	12	81,776	1.1%	-19.8%
Daytona Beach, FL	13	81,027	1.5%	-2.5%
Delhi	14	424,011	-7.0%	-26.9%
Denver, CO	90	1,168,558	4.6%	-20.3%
Des Moines, IA	23	216,968	26.3%	-4.8%
Destin, FL	11	67,509	15.7%	8.6%
Detroit, MI	50	511,995	9.9%	-19.7%
Doha	11	690,394	-22.9%	-20.2%
Dubai-Sharjah-Ajman	38	2,066,896	6.7%	-10.9%
Durham, NC	23	203,241	6.6%	-27.3%
Edmonton	13	151,582	29.0%	-23.0%
El Paso, TX	20	135,871	-7.6%	-7.6%
Evansville, IN-KY	9	62,296	-2.6%	-11.8%
Fargo, ND	9	64,858	-16.6%	-21.8%
Fayetteville, AR	19	122,817	18.0%	-9.1%
Fayetteville, NC	11	78,219	-4.0%	-1.1%
Flagstaff, AZ	9	61,698	7.5%	-6.7%
Florida State Non-Metropolitan Areas	16	83,707	4.5%	2.4%
Fort Collins, CO	11	109,958	8.4%	-17.7%
Fort Myers, FL	17	119,107	-4.4%	-2.3%
Fort Wayne, IN	8	52,443	11.0%	-7.9%
Foshan	9	432,186	30.1%	-9.3%
Fresno, CA	8	57,145	5.9%	-11.4%
Gainesville, FL	12	85,511	-9.3%	-5.8%
Georgia State Non-Metropolitan Areas	26	115,788	1.8%	1.0%
Glasgow	10	132,331	11.3%	-43.1%
Grand Rapids, MI	13	188,419	12.2%	-31.2%
Greater Zhengzhou	11	399,159	1.0%	-19.1%
Greensboro, NC	14	114,671	10.3%	-11.3%
Greenville, SC	19	145,391	7.8%	-7.3%
Guadalajara	10	193,335	8.3%	-33.8%
Guangzhou	19	948,824	11.4%	-13.4%
Gulfport-Biloxi, MS	9	60,985	-14.5%	-10.2%
Hangzhou	14	619,960	9.9%	-10.3%
Harrisburg, PA	12	80,423	17.0%	-8.5%
Hartford, CT	17	120,904	16.9%	-4.5%
Hefei	11	419,693	1.7%	-9.5%
Hong Kong	18	499,151	42.5%	-18.7%
Honolulu, HI	9	209,085	2.7%	-28.1%
Houston, TX	127	1,516,954	9.1%	-13.0%
Huntsville, AL	18	177,744	7.4%	-6.4%
IllinoisState Non-Metropolitan Areas	16	77,270	-2.1%	-7.7%
Indiana State Non-Metropolitan Areas	9	39,896	-14.7%	-24.4%
Indianapolis, IN	39	364,913	2.6%	-12.7%
Iowa State Non-Metropolitan Areas	10	54,015	15.9%	19.7%
Istanbul	33	1,067,836	4.5%	-23.8%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Jackson, MS	13	96,776	-5.8%	-10.0%
Jacksonville, FL	52	368,516	5.5%	-1.2%
Jakarta	19	531,973	-0.2%	-21.5%
Kansas City, MO	59	728,012	6.8%	-23.6%
Kansas State Non-Metropolitan Areas	13	68,138	-9.2%	-12.5%
Kennewick, WA	10	63,469	-5.3%	-15.9%
Kentucky State Non-Metropolitan Areas	23	105,870	-6.0%	-4.9%
Knoxville, TN	28	214,904	4.6%	-6.0%
Kuala Lumpur	10	539,240	32.2%	-45.9%
Lafayette, LA	13	92,783	-1.8%	2.9%
Lakeland, FL	11	56,474	7.7%	8.3%
Lansing, MI	10	65,188	-10.0%	-28.7%
Las Vegas, NV	21	214,243	27.2%	13.8%
Lexington, KY	27	216,802	8.4%	-13.3%
Little Rock, AR	24	222,343	-2.8%	-13.8%
Liverpool–Birkenhead	10	142,903	20.5%	-24.4%
London, UK	59	871,058	9.4%	-46.6%
Los Angeles, CA	159	2,633,455	12.3%	-15.7%
Louisiana State Non-Metropolitan Areas	9	48,402	4.4%	2.0%
Louisville, KY	30	315,551	10.8%	-22.4%
Macon, GA	10	52,311	11.4%	7.5%
Madison, WI	22	201,299	20.8%	-12.9%
Madrid	11	155,967	30.6%	-42.1%
Memphis, TN	32	343,293	4.5%	-14.8%
Mexico City	16	276,615	-4.0%	-48.2%
Miami, FL	109	1,258,822	10.7%	-1.4%
Michigan State Non-Metropolitan Areas	11	66,698	-14.8%	-21.2%
Milwaukee, WI	24	183,476	5.9%	-17.8%
Minneapolis, MN	60	687,267	32.8%	-21.3%
Mississippi State Non-Metropolitan Areas	22	107,114	-1.4%	-6.0%
Missouri State Non-Metropolitan Areas	19	131,517	3.2%	9.0%
Mobile, AL	10	81,786	25.3%	12.5%
Montana State Non-Metropolitan Areas	14	78,142	-12.8%	-13.2%
MONTERREY	10	156,230	-8.3%	-42.9%
Montgomery, AL	15	103,473	-0.3%	-15.7%
Myrtle Beach, FL	10	121,636	19.1%	3.9%
Nanjing	9	492,472	8.6%	-14.9%
Nashville, TN	76	783,961	4.8%	-17.8%
Nebraska State Non-Metropolitan Areas	22	138,343	-7.6%	-8.6%
New Mexico State Non-Metropolitan Areas	16	66,221	10.6%	0.4%
New Orleans, LA	24	427,285	7.9%	-29.6%
New York State Non-Metropolitan Areas	18	109,885	9.8%	-1.8%
New York, NY	124	1,684,325	13.6%	-19.9%
Ningbo	8	406,187	13.6%	-11.5%
North Carolina State Non-Metropolitan Areas	43	231,766	4.2%	-2.4%
Norwich, CT	8	70,216	0.7%	-11.3%
Ocala, FL	8	75,947	2.1%	-4.1%
Ohio State Non-Metropolitan Areas	21	99,699	-3.7%	-5.7%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Oklahoma City, OK	35	273,363	3.1%	-9.4%
Oklahoma State Non-Metropolitan Areas	25	127,762	8.6%	10.5%
Omaha, NE	27	270,708	14.3%	-6.5%
Orlando, FL	80	1,005,883	21.7%	-3.6%
Palm Bay, FL	10	94,542	15.7%	5.6%
Panama City	8	166,200	-6.6%	-27.9%
Paris	13	115,640	31.2%	-45.6%
Pennsylvania State Non-Metropolitan Areas	30	157,293	-1.1%	-11.3%
Pensacola, FL	15	98,447	5.3%	0.9%
Philadelphia, PA	78	822,664	7.9%	-17.9%
Phoenix, AZ	90	866,446	10.1%	-5.6%
Pittsburgh, PA	60	576,272	9.4%	-19.4%
Portland, ME	15	86,513	12.7%	6.3%
Portland, OR	46	507,411	19.5%	-21.5%
Providence, RI	21	190,792	-8.1%	-20.0%
Qingdao	14	734,693	8.5%	-14.5%
Queretaro	10	102,561	33.3%	-31.4%
Raleigh, NC	46	424,670	17.1%	-13.0%
Reno, NV	8	49,602	8.8%	11.2%
Richmond, VA	23	149,646	8.8%	-8.5%
Riyadh	13	515,468	-8.6%	-16.1%
Roanoke, VA	10	80,112	6.6%	-11.4%
Rochester, NY	14	100,176	6.5%	-13.3%
Sacramento, CA	38	340,684	13.6%	-8.2%
Salt Lake City, UT	24	248,470	-4.2%	-21.0%
San Antonio, TX	66	655,868	5.4%	-7.3%
San Bernardino, CA	41	346,986	9.0%	5.9%
San Diego, CA	61	962,604	11.3%	-18.3%
San Francisco, CA	68	1,016,599	22.7%	-26.8%
San Jose	10	212,062	-12.3%	-48.6%
San José, CA	32	359,737	27.1%	-16.2%
Sarasota, FL	12	74,530	16.6%	11.3%
Savannah, GA	15	124,338	8.8%	0.9%
Scranton, PA	13	76,401	2.8%	-5.4%
Seattle, WA	56	770,680	4.8%	-27.8%
Seoul	10	530,117	16.9%	-26.5%
Shanghai	59	2,571,422	10.7%	-13.8%
Shenzhen	19	718,864	13.3%	-8.7%
Shreveport, LA	11	80,750	-9.2%	-6.1%
Singapore	43	1,171,184	-25.5%	-40.9%
Sioux Falls, SD	14	98,378	3.3%	-9.6%
South Carolina State Non-Metropolitan Areas	16	80,233	-6.2%	-9.2%
South Dakota State Non-Metropolitan Areas	8	47,860	11.0%	8.6%
Spokane, WA	10	198,292	-0.3%	-26.4%
Springfield, MO	13	114,016	-3.0%	-10.6%
St. Louis, MO	37	397,055	12.2%	-20.8%
Suzhou-Wuxi-Changzhou	24	1,092,917	23.5%	-2.0%
Sydney	11	266,584	3.0%	-56.4%

All Non-Resorts (cont'd)

Metro Area	ALL NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Syracuse, NY	13	118,152	6.7%	-17.6%
Tallahassee, FL	15	108,897	9.2%	-9.8%
Tampa Bay, FL	64	602,953	9.8%	-3.3%
Temple, TX	10	52,881	12.5%	20.7%
Tennessee State Non-Metropolitan Areas	20	121,357	-2.9%	-2.4%
Texas State Non-Metropolitan Areas	41	173,369	-10.0%	-8.0%
Tianjin	17	781,785	5.8%	-20.8%
Tokyo	19	561,383	38.9%	-42.5%
Toledo, OH	11	64,926	2.9%	-15.1%
Toronto	46	751,555	20.5%	-34.0%
Tucson, AZ	18	188,172	17.8%	-1.2%
Tulsa, OK	15	150,029	12.3%	-4.5%
Utah State Non-Metropolitan Areas	9	42,693	-5.1%	1.9%
Vancouver	16	279,586	1.7%	-41.4%
Ventura, CA	16	253,874	10.6%	-1.0%
Virginia Beach, VA	53	524,247	2.0%	-8.6%
Virginia State Non-Metropolitan Areas	20	87,415	-2.8%	-4.0%
Waco, TX	8	54,027	-7.5%	-10.7%
Washington DC	153	2,120,704	10.3%	-27.9%
West Virginia State Non-Metropolitan Areas	11	49,227	24.2%	8.3%
Wichita, KS	18	160,529	6.5%	-10.4%
Winston-Salem, NC	12	98,891	7.8%	-19.2%
Wyoming State Non-Metropolitan Areas	16	90,166	17.8%	8.3%
Xiamen	9	397,800	3.9%	-11.5%
Xian	16	687,102	1.7%	-21.6%
Youngstown, OH	16	94,286	-5.1%	4.5%
Zhuhai-Zhongshan-Jiangmen	9	455,548	3.7%	-24.6%

All Resorts

Metro Area	ALL RESORTS			
	Count	SqM	Measure 8	Measure 9
Dubai-Sharjah-Ajman	13	775,583	7.2%	-10.8%
Las Vegas, NV	10	5,205,161	15.8%	-13.3%
Miami, FL	10	353,749	23.6%	5.2%
Orlando, FL	11	544,036	8.6%	-24.7%
Phoenix, AZ	9	322,941	35.7%	0.3%
Sanya	9	649,361	34.3%	17.3%
Shanghai	8	421,360	12.5%	5.7%

Full-Service Non-Resorts

Metro Area	FULL SERVICE NONRESORTS			
	Count	SqM	Measure 8	Measure 9
Abu Dhabi	11	575,841	-3.6%	-12.1%
Albuquerque, NM	9	120,478	4.8%	-25.7%
Amsterdam	9	176,740	47.5%	-61.1%
Atlanta, GA	39	1,772,939	23.9%	-19.0%
Austin, TX	15	345,289	15.2%	-19.8%
Baltimore, MD	9	161,168	2.7%	-21.7%
Bangkok	31	1,231,854	82.8%	-45.8%
Beijing	20	1,046,179	14.4%	-22.9%
Bengaluru	9	209,018	22.8%	-30.6%
Berlin	9	256,574	44.6%	-48.3%
Birmingham, AL	8	121,797	15.0%	-0.6%
Boston, MA	22	612,787	22.2%	-28.4%
Cairo	12	736,503	17.8%	-19.3%
Charleston, SC	10	102,728	8.5%	-10.4%
Charlotte, NC	15	289,599	24.9%	-24.7%
Chengdu	11	641,450	1.9%	-13.1%
Chicago, IL	41	838,355	11.8%	-26.4%
Chongqing	12	545,341	5.0%	-17.9%
Cincinnati, OH	10	139,360	6.9%	-21.2%
Columbus, OH	16	225,366	3.6%	-33.9%
Dallas-Fort Worth, TX	47	1,152,180	10.7%	-21.8%
Delhi	10	391,657	-6.5%	-27.3%
Denver, CO	27	672,725	5.2%	-28.1%
Des Moines, IA	8	128,361	44.4%	-3.2%
Detroit, MI	16	291,235	15.6%	-23.5%
Doha	11	690,394	-22.9%	-20.2%
Dubai-Sharjah-Ajman	28	1,885,510	7.3%	-11.8%
Durham, NC	8	100,405	-4.6%	-41.1%
Greater Zhengzhou	8	341,226	4.7%	-17.2%
Guangzhou	17	866,424	14.8%	-12.4%
Hangzhou	10	540,496	10.6%	-9.8%
Hong Kong	11	413,877	76.4%	-20.6%
Houston, TX	38	963,613	9.2%	-23.0%
Indianapolis, IN	10	163,102	5.7%	-17.3%
Istanbul	26	992,605	4.2%	-23.6%
Jacksonville, FL	9	111,978	6.6%	-1.4%
Jakarta	14	480,976	3.8%	-21.9%
Kansas City, MO	17	410,158	13.2%	-31.0%
Lexington, KY	9	115,449	16.0%	-18.9%
Liverpool–Birkenhead	8	127,790	19.2%	-24.3%
London, UK	45	792,134	16.5%	-46.1%
Los Angeles, CA	73	1,907,538	17.7%	-18.1%
Memphis, TN	12	210,375	12.0%	-16.3%
Mexico City	12	228,461	-1.6%	-49.7%
Miami, FL	27	668,388	19.1%	-5.9%
Minneapolis, MN	22	430,488	45.0%	-25.8%
Nanjing	9	492,472	8.6%	-14.9%
Nashville, TN	17	319,646	3.1%	-24.6%

Full-Service Non-Resorts (cont'd)

Metro Area	FULL SERVICE NONRESORTS			
	Count	SqM	Measure 8	Measure 9
New Orleans, LA	10	286,381	18.2%	-31.8%
New York, NY	35	989,619	16.2%	-27.5%
Orlando, FL	28	581,402	20.6%	-7.9%
Paris	10	96,990	26.8%	-45.6%
Philadelphia, PA	29	441,860	9.0%	-24.5%
Phoenix, AZ	24	389,664	16.7%	-6.6%
Pittsburgh, PA	13	270,469	22.7%	-24.4%
Portland, OR	17	288,872	22.6%	-26.3%
Qingdao	12	685,014	9.4%	-13.0%
Raleigh, NC	9	151,282	22.2%	-20.2%
Riyadh	10	467,710	-12.4%	-19.8%
San Antonio, TX	17	308,770	8.5%	-11.9%
San Bernardino, CA	9	146,856	4.6%	-6.1%
San Diego, CA	24	616,122	19.6%	-21.4%
San Francisco, CA	29	722,522	26.1%	-36.3%
San José, CA	10	193,908	20.0%	-27.8%
Seattle, WA	21	451,252	5.2%	-35.2%
Seoul	8	487,250	24.4%	-27.3%
Shanghai	41	2,230,084	13.6%	-13.4%
Shenzhen	12	597,511	16.5%	-6.5%
Singapore	34	1,033,961	-24.1%	-40.8%
St. Louis, MO	11	230,614	12.1%	-27.1%
Suzhou-Wuxi-Changzhou	18	966,043	28.0%	0.0%
Sydney	9	242,179	1.8%	-56.7%
Tampa Bay, FL	16	307,605	15.5%	-2.0%
Tianjin	14	736,489	4.4%	-20.2%
Tokyo	14	542,916	38.8%	-42.3%
Toronto	21	512,500	27.0%	-37.1%
Vancouver	10	240,816	7.2%	-41.2%
Virginia Beach, VA	14	253,218	-1.1%	-17.5%
Washington DC	51	1,283,201	15.4%	-33.9%
Xiamen	8	385,848	5.4%	-11.5%
Xian	13	630,792	3.2%	-22.2%

Full-Service Resorts

Metro Area	FULL SERVICE RESORTS			
	Count	SqM	Measure 8	Measure 9
Dubai-Sharjah-Ajman	13	775,583	7.2%	-10.8%
Las Vegas, NV	10	5,205,161	15.8%	-13.3%
Miami, FL	9	338,367	22.9%	5.0%
Orlando, FL	8	497,775	7.0%	-27.5%
Phoenix, AZ	9	322,941	35.7%	0.3%
Sanya	9	649,361	34.3%	17.3%
Shanghai	8	421,360	12.5%	5.7%

Limited-Service

Metro Area	LIMITED SERVICE			
	Count	SqM	Measure 8	Measure 9
Akron, OH	14	72,644	9.0%	-8.4%
Alabama State Non-Metropolitan Areas	27	142,288	-15.3%	-11.7%
Albany, NY	10	82,420	2.5%	-19.0%
Albuquerque, NM	19	108,539	6.1%	-5.6%
Allentown, PA	11	61,721	-13.9%	-12.2%
Arkansas State Non-Metropolitan Areas	13	50,993	-10.4%	-8.4%
Asheville, NC	8	57,174	5.6%	-5.7%
Atlanta, GA	102	670,476	5.4%	-9.6%
Augusta, GA	11	64,360	-4.1%	0.3%
Austin, TX	42	273,349	5.5%	-4.1%
Baltimore, MD	22	167,707	11.4%	-7.9%
Baton Rouge, LA	8	51,904	-10.6%	-3.5%
Birmingham, AL	24	140,485	4.4%	-6.9%
Boise City, ID	12	74,548	-8.1%	-12.2%
Boston, MA	41	318,956	14.5%	-17.0%
Boulder, CO	8	48,752	33.5%	1.1%
Bridgeport, CT	13	97,897	12.9%	-2.8%
Buffalo, NY	10	60,146	6.5%	-6.2%
Calgary	10	84,723	14.7%	-32.8%
Charleston, SC	24	159,618	7.1%	-3.4%
Charleston, WV	8	38,538	1.7%	-6.8%
Charlotte, NC	46	328,957	8.0%	-17.9%
Charlottesville, VA	8	48,167	-23.3%	-25.1%
Chattanooga, TN	15	85,922	0.4%	-7.8%
Chicago, IL	84	621,813	11.6%	-13.0%
Cincinnati, OH	34	214,850	16.1%	-3.2%
Cleveland, OH	23	150,753	18.2%	-4.9%
Colorado Springs, CO	11	75,784	-2.4%	-12.6%
Colorado State Non-Metropolitan Areas	19	91,705	-8.6%	-6.9%
Columbia, MO	8	57,608	8.9%	-2.6%
Columbia, SC	14	88,291	33.6%	20.3%
Columbus, GA	9	44,353	17.5%	4.2%
Columbus, OH	27	177,872	8.4%	-21.0%
Corpus Christi, TX	11	50,074	20.8%	10.2%
Dallas-Fort Worth, TX	115	779,034	9.9%	-3.4%
Dayton, OH	11	61,152	3.7%	-8.8%
Daytona Beach, FL	10	59,403	-6.0%	-9.8%
Denver, CO	63	495,833	6.6%	-9.6%
Des Moines, IA	15	88,607	10.0%	-7.2%
Destin, FL	12	67,062	17.6%	8.2%
Detroit, MI	34	220,760	7.5%	-14.7%
Dubai-Sharjah-Ajman	10	181,386	9.4%	-2.8%
Durham, NC	15	102,836	17.5%	-13.5%
Edmonton	9	67,347	25.2%	-14.4%
El Paso, TX	15	89,744	-7.2%	-4.2%
Evansville, IN-KY	8	48,361	-2.0%	-10.1%
Fayetteville, AR	15	89,754	10.6%	-14.6%
Fayetteville, NC	9	52,043	-5.3%	-0.5%

Limited-Service (cont'd)

Metro Area	LIMITED SERVICE			
	Count	SqM	Measure 8	Measure 9
Florida State Non-Metropolitan Areas	16	83,707	4.5%	2.4%
Fort Myers, FL	12	69,874	3.8%	3.1%
Gainesville, FL	9	60,161	-8.4%	-0.8%
Georgia State Non-Metropolitan Areas	26	115,788	1.8%	1.0%
Grand Rapids, MI	8	45,766	14.7%	-18.4%
Greensboro, NC	9	51,951	0.9%	-5.9%
Greenville, SC	16	96,498	19.7%	7.1%
Gulfport-Biloxi, MS	8	50,455	-16.7%	-11.0%
Harrisburg, PA	10	65,225	11.4%	-13.3%
Hartford, CT	12	72,795	20.9%	0.9%
Houston, TX	89	553,341	16.6%	6.9%
Huntsville, AL	12	73,428	15.7%	5.2%
IllinoisState Non-Metropolitan Areas	15	64,264	0.7%	-3.2%
Indiana State Non-Metropolitan Areas	9	39,896	-14.7%	-24.4%
Indianapolis, IN	29	201,811	2.7%	-8.0%
Iowa State Non-Metropolitan Areas	10	54,015	15.9%	19.7%
Jackson, MS	11	64,910	0.4%	-1.1%
Jacksonville, FL	44	264,992	5.3%	-0.9%
Kansas City, MO	42	317,854	8.0%	-10.7%
Kansas State Non-Metropolitan Areas	13	68,138	-9.2%	-12.5%
Kennewick, WA	9	55,029	6.1%	-7.5%
Kentucky State Non-Metropolitan Areas	22	98,809	-6.8%	-6.4%
Knoxville, TN	22	132,482	4.3%	-3.4%
Lafayette, LA	10	48,975	1.2%	9.4%
Lakeland, FL	12	60,628	6.1%	5.9%
Lansing, MI	9	49,162	-13.9%	-25.2%
Las Vegas, NV	16	147,271	22.2%	12.1%
Lexington, KY	18	101,353	5.8%	-6.4%
Little Rock, AR	19	119,424	3.5%	-3.5%
London, UK	14	78,924	-26.0%	-50.5%
Los Angeles, CA	86	725,917	4.5%	-10.4%
Louisiana State Non-Metropolitan Areas	9	48,402	4.4%	2.0%
Louisville, KY	23	135,204	13.8%	-7.4%
Macon, GA	9	45,436	12.2%	7.9%
Madison, WI	16	110,454	23.0%	-6.2%
Memphis, TN	20	132,918	-1.9%	-12.0%
Miami, FL	83	605,816	8.5%	3.5%
Michigan State Non-Metropolitan Areas	9	47,495	-13.4%	-17.8%
Milwaukee, WI	18	119,413	13.3%	-9.8%
Minneapolis, MN	38	256,779	24.1%	-14.5%
Mississippi State Non-Metropolitan Areas	22	107,114	-1.4%	-6.0%
Missouri State Non-Metropolitan Areas	17	88,703	7.6%	17.6%
Mobile, AL	8	46,995	14.5%	10.6%
Montana State Non-Metropolitan Areas	13	70,710	-14.8%	-15.5%
Montgomery, AL	10	49,101	10.0%	-8.4%
Nashville, TN	59	464,315	8.8%	-10.6%
Nebraska State Non-Metropolitan Areas	22	138,343	-7.6%	-8.6%
New Mexico State Non-Metropolitan Areas	15	61,678	1.3%	-7.5%

Limited-Service (cont'd)

Metro Area	LIMITED SERVICE			
	Count	SqM	Measure 8	Measure 9
New Orleans, LA	14	140,904	-6.2%	-24.4%
New York State Non-Metropolitan Areas	16	83,960	14.6%	5.0%
New York, NY	89	694,706	13.0%	-10.1%
North Carolina State Non-Metropolitan Areas	42	225,071	4.7%	-2.1%
Ohio State Non-Metropolitan Areas	21	99,699	-3.7%	-5.7%
Oklahoma City, OK	29	191,273	4.3%	-7.0%
Oklahoma State Non-Metropolitan Areas	24	123,117	8.5%	11.0%
Omaha, NE	21	135,821	14.5%	-1.2%
Orlando, FL	55	470,742	25.0%	2.7%
Pennsylvania State Non-Metropolitan Areas	30	157,293	-1.1%	-11.3%
Pensacola, FL	13	74,649	0.8%	-1.0%
Philadelphia, PA	49	380,804	9.7%	-8.9%
Phoenix, AZ	66	476,782	7.0%	-4.9%
Pittsburgh, PA	47	305,803	5.3%	-14.1%
Portland, ME	13	69,644	19.0%	10.2%
Portland, OR	29	218,539	19.1%	-15.7%
Providence, RI	16	99,778	1.8%	-3.7%
Raleigh, NC	37	273,388	16.4%	-8.5%
Richmond, VA	19	96,669	2.5%	-8.2%
Roanoke, VA	9	49,454	4.4%	-9.4%
Rochester, NY	9	52,727	1.6%	-15.8%
Sacramento, CA	31	179,214	19.1%	6.7%
Salt Lake City, UT	19	138,631	6.6%	-1.0%
San Antonio, TX	49	347,098	4.7%	-2.2%
San Bernardino, CA	32	200,130	14.2%	15.8%
San Diego, CA	37	346,482	1.8%	-13.1%
San Francisco, CA	39	294,077	21.1%	-6.5%
San José, CA	22	165,829	33.8%	-4.5%
Sarasota, FL	10	60,201	18.3%	11.3%
Savannah, GA	11	76,693	3.2%	-4.2%
Scranton, PA	12	61,301	3.4%	-6.7%
Seattle, WA	35	319,428	7.4%	-16.4%
Shanghai	18	341,338	-0.4%	-16.5%
Shreveport, LA	8	44,201	-10.3%	-3.1%
Singapore	9	137,223	-31.5%	-41.3%
Sioux Falls, SD	11	62,206	-2.7%	-12.7%
South Carolina State Non-Metropolitan Areas	16	80,233	-6.2%	-9.2%
Springfield, MO	12	101,344	-3.3%	-8.0%
St. Louis, MO	26	166,441	17.7%	-9.9%
Syracuse, NY	10	79,938	4.4%	-15.5%
Tallahassee, FL	12	74,664	8.2%	-4.0%
Tampa Bay, FL	49	304,346	6.0%	-3.8%
Temple, TX	9	46,484	19.6%	27.8%
Tennessee State Non-Metropolitan Areas	19	87,894	-10.1%	-9.5%
Texas State Non-Metropolitan Areas	41	173,369	-10.0%	-8.0%
Toledo, OH	10	59,621	-0.7%	-18.3%
Toronto	25	239,055	11.8%	-27.5%
Tucson, AZ	13	84,565	27.4%	18.0%

Limited-Service (cont'd)

Metro Area	LIMITED SERVICE			
	Count	SqM	Measure 8	Measure 9
Tulsa, OK	11	60,390	2.7%	-0.7%
Utah State Non-Metropolitan Areas	8	36,266	-7.2%	0.7%
Ventura, CA	13	96,138	4.5%	-5.8%
Virginia Beach, VA	42	296,637	7.8%	0.6%
Virginia State Non-Metropolitan Areas	20	87,415	-2.8%	-4.0%
Washington DC	102	837,503	8.4%	-18.5%
West Virginia State Non-Metropolitan Areas	11	49,227	24.2%	8.3%
Wichita, KS	14	105,308	8.9%	-6.9%
Winston-Salem, NC	9	47,391	5.8%	-8.8%
Wyoming State Non-Metropolitan Areas	13	75,941	12.4%	2.7%
Youngstown, OH	14	76,491	-14.6%	-4.2%

Luxury Segment

Metro Area	LUXURY			
	Count	SqM	Measure 8	Measure 9
Bangkok	8	432,410	112.0%	-45.3%
Beijing	10	527,810	30.5%	-19.3%
Dubai-Sharjah-Ajman	12	1,257,456	9.2%	-13.0%
Hong Kong	8	362,934	105.7%	-7.1%
Las Vegas, NV	9	5,160,587	14.8%	-14.1%
Los Angeles, CA	9	398,063	-1.4%	-38.0%
San Francisco, CA	11	260,512	39.4%	-38.3%
Shanghai	18	1,008,462	13.0%	-8.6%
Singapore	14	615,676	-15.4%	-40.3%
Tokyo	8	426,706	68.8%	-33.3%

Upper Upscale Segment

Metro Area	UPPER UPSCALE			
	Count	SqM	Measure 8	Measure 9
Atlanta, GA	24	1,009,625	24.4%	-22.3%
Austin, TX	11	346,981	18.7%	-23.6%
Bangkok	17	658,533	73.1%	-45.4%
Beijing	10	555,410	13.3%	-22.7%
Boston, MA	14	354,119	18.1%	-30.5%
Charlotte, NC	11	252,159	24.4%	-26.2%
Chicago, IL	30	1,018,131	26.3%	-30.5%
Columbus, OH	10	179,746	2.8%	-37.2%
Dallas-Fort Worth, TX	27	1,047,527	15.9%	-23.6%
Denver, CO	15	462,670	0.8%	-32.2%
Detroit, MI	10	214,007	17.2%	-27.2%
Dubai-Sharjah-Ajman	20	1,035,627	8.9%	-8.9%
Houston, TX	29	921,783	5.3%	-29.1%
Istanbul	12	625,433	5.1%	-22.6%
Kansas City, MO	11	326,876	15.1%	-32.8%
London, UK	20	464,310	34.5%	-46.7%
Los Angeles, CA	46	1,341,994	19.7%	-17.3%
Miami, FL	23	577,873	26.0%	1.8%
Minneapolis, MN	13	278,096	42.8%	-25.1%
Nashville, TN	10	229,818	-3.4%	-32.4%
New York, NY	21	815,503	11.2%	-36.8%
Orlando, FL	16	701,288	32.2%	-12.5%
Paris	8	100,341	47.1%	-46.2%
Philadelphia, PA	13	246,041	6.0%	-26.9%
Phoenix, AZ	13	358,650	31.4%	-9.2%
Qingdao	8	380,769	2.1%	-12.2%
San Antonio, TX	10	336,113	19.2%	-13.5%
San Diego, CA	20	610,843	33.4%	-13.8%
San Francisco, CA	13	428,328	18.2%	-38.0%
San José, CA	8	197,478	29.4%	-33.6%
Seattle, WA	14	500,655	10.4%	-39.6%
Shanghai	18	907,814	11.4%	-11.7%
Shenzhen	8	327,814	3.8%	-11.7%
Singapore	12	323,098	-19.9%	-37.8%
Suzhou-Wuxi-Changzhou	12	582,636	26.2%	0.4%
Tampa Bay, FL	14	381,525	19.5%	-2.6%
Tokyo	8	218,555	26.4%	-46.2%
Toronto	9	318,377	39.1%	-39.3%
Washington DC	33	971,336	24.3%	-33.3%
Xian	9	392,614	12.2%	-12.1%

Upscale Segment

Metro Area	UPSCALE			
	Count	SqM	Measure 8	Measure 9
Albany, NY	8	68,565	-8.5%	-21.3%
Albuquerque, NM	12	102,496	-1.7%	-24.1%
Atlanta, GA	48	1,082,336	13.2%	-7.4%
Austin, TX	16	158,050	-4.4%	-13.3%
Baltimore, MD	17	149,986	9.1%	-11.5%
Birmingham, AL	11	95,656	2.6%	-12.7%
Boston, MA	26	315,444	18.7%	-23.7%
Bridgeport, CT	12	98,741	14.8%	-1.7%
Charleston, SC	17	122,332	11.2%	0.6%
Charlotte, NC	23	194,910	13.6%	-17.4%
Chicago, IL	46	434,207	18.4%	-10.3%
Cincinnati, OH	16	130,919	3.2%	-18.0%
Cleveland, OH	14	118,178	25.8%	3.8%
Columbus, OH	19	132,443	9.3%	-17.0%
Dallas-Fort Worth, TX	72	606,209	9.5%	-8.3%
Delhi	8	171,586	-5.5%	-20.1%
Denver, CO	47	484,213	5.7%	-16.1%
Detroit, MI	22	203,402	13.0%	-17.3%
Dubai-Sharjah-Ajman	16	470,933	4.7%	-9.1%
Durham, NC	12	106,593	-2.5%	-28.3%
El Paso, TX	9	65,178	-12.9%	-13.8%
Fayetteville, AR	11	76,472	31.4%	-4.1%
Fort Myers, FL	9	69,899	-7.9%	-3.1%
Greenville, SC	8	61,215	4.5%	-6.5%
Hartford, CT	8	65,484	9.5%	-8.7%
Houston, TX	56	459,398	22.7%	5.8%
Huntsville, AL	8	58,746	22.5%	10.9%
Indianapolis, IN	15	110,564	5.9%	-7.5%
Istanbul	12	276,577	8.7%	-24.6%
Jacksonville, FL	20	165,374	-0.2%	-5.8%
Kansas City, MO	19	172,655	10.2%	-17.1%
Knoxville, TN	8	74,848	-0.9%	-13.7%
Las Vegas, NV	13	138,760	30.9%	20.4%
Lexington, KY	13	85,213	6.2%	-9.4%
Little Rock, AR	10	87,264	11.5%	-5.2%
London, UK	11	155,127	0.5%	-48.7%
Los Angeles, CA	71	760,796	13.7%	-6.3%
Louisville, KY	10	103,061	16.5%	-13.8%
Madison, WI	9	68,317	15.0%	-12.5%
Memphis, TN	16	153,313	-12.4%	-25.0%
Miami, FL	41	385,317	10.4%	6.5%
Milwaukee, WI	13	110,286	5.1%	-18.1%
Minneapolis, MN	22	212,917	32.1%	-20.4%
Nashville, TN	27	244,863	9.5%	-12.9%
New Orleans, LA	8	80,432	0.2%	-26.7%
New York, NY	64	574,869	11.1%	-10.9%
Oklahoma City, OK	15	121,231	3.1%	-7.7%
Omaha, NE	11	93,231	31.9%	6.7%

Appendix 7 (continued)

Upscale Segment (cont'd)

Metro Area	UPSCALE			
	Count	SqM	Measure 8	Measure 9
Orlando, FL	36	450,546	20.6%	-0.6%
Philadelphia, PA	43	426,962	9.4%	-17.4%
Phoenix, AZ	48	391,333	8.7%	-3.8%
Pittsburgh, PA	24	273,545	6.9%	-22.1%
Portland, OR	23	253,479	14.8%	-19.8%
Raleigh, NC	18	144,996	17.7%	-12.9%
Riyadh	8	307,711	-9.7%	-14.0%
Sacramento, CA	18	173,442	14.3%	-7.0%
Salt Lake City, UT	11	107,028	9.2%	-4.0%
San Antonio, TX	27	215,558	6.7%	-5.8%
San Bernardino, CA	19	171,687	18.7%	17.4%
San Diego, CA	25	260,320	6.8%	-10.8%
San Francisco, CA	30	308,345	25.2%	-15.9%
San José, CA	17	151,579	28.8%	-5.4%
Seattle, WA	25	280,783	9.5%	-20.4%
Shanghai	17	708,820	9.1%	-15.0%
Shenzhen	8	178,424	10.7%	-15.3%
Singapore	10	215,020	-12.4%	-38.8%
St. Louis, MO	18	194,602	14.3%	-22.4%
Tallahassee, FL	8	74,406	1.6%	-18.7%
Tampa Bay, FL	23	173,972	4.7%	-0.1%
Toronto	27	283,711	11.7%	-30.4%
Tucson, AZ	8	84,684	8.4%	-6.9%
Virginia Beach, VA	26	259,628	6.8%	-2.0%
Washington DC	77	774,709	4.6%	-24.9%

Upper Midscale Segment

Metro Area	UPPER MIDSCALE			
	Count	SqM	Measure 8	Measure 9
Akron, OH	11	54,682	7.0%	-6.6%
Alabama State Non-Metropolitan Areas	21	99,631	-20.1%	-16.9%
Albuquerque, NM	13	68,396	10.0%	2.5%
Arkansas State Non-Metropolitan Areas	13	55,414	-7.2%	-4.9%
Asheville, NC	8	51,871	4.0%	-5.2%
Atlanta, GA	65	363,026	2.7%	-8.5%
Augusta, GA	9	50,520	-2.3%	1.9%
Austin, TX	30	178,852	12.8%	2.3%
Bangkok	8	208,340	101.5%	-57.2%
Birmingham, AL	17	96,671	8.1%	-0.6%
Boston, MA	22	154,810	12.3%	-13.4%
Calgary	9	61,578	15.7%	-25.3%
Charleston, SC	13	87,391	-4.3%	-14.7%
Charleston, WV	8	38,538	1.7%	-6.8%
Charlotte, NC	26	175,942	9.5%	-13.1%
Chattanooga, TN	9	47,394	-7.7%	-13.6%
Chicago, IL	52	347,669	-4.0%	-20.4%
Cincinnati, OH	23	135,772	15.3%	1.3%
Cleveland, OH	12	64,631	12.6%	-8.5%
Colorado Springs, CO	8	53,853	10.5%	-1.0%
Colorado State Non-Metropolitan Areas	16	74,940	-12.5%	-12.1%
Columbia, SC	8	43,887	39.6%	26.2%
Columbus, OH	14	91,049	6.7%	-26.3%
Dallas-Fort Worth, TX	63	392,791	7.8%	-4.2%
Dayton, OH	8	37,144	5.6%	-4.5%
Denver, CO	25	174,535	14.3%	-1.4%
Des Moines, IA	11	70,100	13.0%	-3.4%
Destin, FL	8	43,887	18.7%	12.2%
Detroit, MI	17	89,657	1.0%	-11.2%
El Paso, TX	8	45,966	-1.4%	-2.3%
Florida State Non-Metropolitan Areas	15	76,118	2.9%	0.6%
Georgia State Non-Metropolitan Areas	25	109,114	-5.7%	-6.9%
Greenville, SC	8	42,053	21.1%	1.5%
Hartford, CT	8	49,521	40.1%	7.3%
Houston, TX	41	213,660	10.3%	3.6%
IllinoisState Non-Metropolitan Areas	15	64,264	0.7%	-3.2%
Indiana State Non-Metropolitan Areas	9	39,896	-14.7%	-24.4%
Indianapolis, IN	16	101,124	-8.4%	-19.4%
Iowa State Non-Metropolitan Areas	10	54,015	15.9%	19.7%
Jacksonville, FL	28	157,551	10.4%	2.8%
Kansas City, MO	26	191,907	5.2%	-10.1%
Kansas State Non-Metropolitan Areas	13	68,138	-9.2%	-12.5%
Kentucky State Non-Metropolitan Areas	21	93,913	-7.1%	-8.1%
Knoxville, TN	17	94,925	5.1%	-0.9%
Lakeland, FL	8	40,400	17.9%	18.6%
Lexington, KY	10	52,981	1.5%	-9.2%
Little Rock, AR	11	73,855	-14.7%	-17.0%
London, UK	28	198,821	-4.6%	-38.5%

Upper Midscale Segment (cont'd)

Metro Area	UPPER MIDSCALE			
	Count	SqM	Measure 8	Measure 9
Los Angeles, CA	35	238,871	-8.1%	-21.9%
Louisiana State Non-Metropolitan Areas	9	48,402	4.4%	2.0%
Louisville, KY	14	74,933	10.4%	-10.0%
Madison, WI	10	71,784	19.9%	-13.3%
Memphis, TN	11	66,332	3.8%	-2.0%
Miami, FL	47	302,804	9.9%	4.0%
Michigan State Non-Metropolitan Areas	9	53,884	-17.5%	-23.7%
Milwaukee, WI	8	42,416	1.9%	-16.6%
Minneapolis, MN	21	131,364	24.2%	-18.5%
Mississippi State Non-Metropolitan Areas	19	86,241	-5.8%	-9.2%
Missouri State Non-Metropolitan Areas	16	84,414	6.0%	15.4%
Montana State Non-Metropolitan Areas	9	43,698	-23.4%	-20.6%
Montgomery, AL	8	38,959	8.4%	-15.6%
Nashville, TN	35	259,714	4.9%	-11.4%
Nebraska State Non-Metropolitan Areas	19	110,715	-9.0%	-12.3%
New Mexico State Non-Metropolitan Areas	16	66,221	10.6%	0.4%
New Orleans, LA	9	87,551	-26.0%	-31.5%
New York State Non-Metropolitan Areas	13	66,345	17.5%	6.4%
New York, NY	39	261,217	18.7%	-4.5%
North Carolina State Non-Metropolitan Areas	37	189,380	3.4%	-2.2%
Ohio State Non-Metropolitan Areas	19	89,311	-3.5%	-4.2%
Oklahoma City, OK	15	82,895	4.0%	-9.3%
Oklahoma State Non-Metropolitan Areas	20	97,675	13.2%	12.4%
Omaha, NE	10	51,098	10.0%	3.2%
Orlando, FL	32	251,763	19.1%	0.1%
Pennsylvania State Non-Metropolitan Areas	27	136,263	-3.6%	-12.8%
Pensacola, FL	12	79,287	8.9%	3.0%
Philadelphia, PA	22	149,661	9.9%	-4.5%
Phoenix, AZ	32	219,212	10.1%	-1.8%
Pittsburgh, PA	29	163,641	3.7%	-12.2%
Portland, OR	15	100,203	5.9%	-23.6%
Providence, RI	13	76,351	3.9%	3.2%
Raleigh, NC	19	125,146	14.2%	-9.8%
Richmond, VA	16	77,218	6.0%	-2.6%
Sacramento, CA	16	71,106	13.8%	4.0%
Salt Lake City, UT	10	62,660	7.8%	0.3%
San Antonio, TX	27	184,245	-7.6%	-6.6%
San Bernardino, CA	19	108,654	1.1%	0.4%
San Diego, CA	17	159,468	-1.3%	-13.7%
San Francisco, CA	16	94,040	9.8%	-7.9%
San José, CA	8	41,833	20.1%	-10.4%
Scranton, PA	8	38,393	5.0%	-3.5%
Seattle, WA	19	155,241	2.2%	-14.4%
Shanghai	14	367,686	17.3%	-4.6%
Singapore	9	163,469	-46.8%	-47.3%
Sioux Falls, SD	8	50,580	16.2%	-1.8%
South Carolina State Non-Metropolitan Areas	15	74,635	-6.6%	-9.1%
South Dakota State Non-Metropolitan Areas	8	47,860	11.0%	8.6%

Upper Midscale Segment (cont'd)

Metro Area	UPPER MIDSCALE			
	Count	SqM	Measure 8	Measure 9
Springfield, MO	8	73,935	-14.5%	-18.8%
St. Louis, MO	13	71,919	11.0%	-6.1%
Suzhou-Wuxi-Changzhou	8	216,065	-4.5%	-20.0%
Tampa Bay, FL	30	170,213	2.3%	-6.1%
Tennessee State Non-Metropolitan Areas	17	73,915	-12.0%	-10.8%
Texas State Non-Metropolitan Areas	39	161,883	-10.7%	-8.4%
Toledo, OH	8	40,406	-5.6%	-20.2%
Toronto	9	100,228	19.2%	-20.1%
Tucson, AZ	8	45,049	21.7%	9.5%
Vancouver	8	62,771	-17.0%	-43.0%
Ventura, CA	8	46,187	-4.6%	-12.4%
Virginia Beach, VA	21	142,525	-7.9%	-13.7%
Virginia State Non-Metropolitan Areas	20	87,415	-2.8%	-4.0%
Washington DC	41	330,638	7.0%	-19.0%
West Virginia State Non-Metropolitan Areas	10	42,641	27.6%	11.9%
Winston-Salem, NC	8	40,795	12.5%	-2.8%
Wyoming State Non-Metropolitan Areas	11	59,428	16.9%	5.4%
Youngstown, OH	13	72,356	-2.0%	6.2%

5-Stars Segment

Metro Area	5 STARS			
	Count	SqM	Measure 8	Measure 9
Abu Dhabi	10	611,030	4.4%	-10.8%
Bangkok	19	860,620	95.0%	-42.2%
Beijing	11	598,294	31.6%	-19.4%
Doha	9	730,132	-18.9%	-23.7%
Dubai-Sharjah-Ajman	21	1,661,892	6.1%	-12.9%
Hong Kong	8	362,934	105.7%	-7.1%
Istanbul	17	742,208	9.6%	-20.5%
Shanghai	19	1,151,676	18.9%	-9.8%
Singapore	17	746,044	-9.3%	-39.8%
Tokyo	8	426,706	68.8%	-33.3%

Appendix 7 (continued)

4-Stars Segment

Metro Area	4 STARS			
	Count	SqM	Measure 8	Measure 9
Atlanta, GA	14	759,014	25.8%	-23.4%
Austin, TX	8	277,828	16.5%	-28.9%
Bangkok	15	510,228	92.8%	-53.2%
Beijing	12	714,461	10.2%	-22.6%
Boston, MA	15	448,886	25.6%	-31.1%
Chicago, IL	18	752,407	21.3%	-35.2%
Chongqing	9	427,192	-0.4%	-20.9%
Dallas-Fort Worth, TX	16	827,489	19.8%	-25.1%
Denver, CO	13	473,211	-0.2%	-34.0%
Dubai-Sharjah-Ajman	20	981,056	11.0%	-8.6%
Guangzhou	9	448,714	18.7%	-8.3%
Houston, TX	22	827,705	3.9%	-29.2%
Istanbul	12	368,470	-6.9%	-32.0%
Jakarta	8	208,366	5.2%	-19.0%
London, UK	27	511,931	20.1%	-47.4%
Los Angeles, CA	31	1,239,891	15.3%	-23.4%
Miami, FL	17	469,422	32.1%	6.3%
Minneapolis, MN	10	151,342	43.2%	-21.8%
New York, NY	15	648,121	18.0%	-34.7%
Orlando, FL	11	596,649	36.9%	-11.8%
Paris	9	106,297	32.6%	-55.3%
Philadelphia, PA	9	178,537	4.5%	-31.2%
Phoenix, AZ	10	252,309	14.4%	-16.3%
Qingdao	10	577,273	-7.9%	-17.5%
San Diego, CA	18	589,510	35.3%	-13.5%
San Francisco, CA	14	410,637	15.8%	-41.0%
Seattle, WA	11	463,173	13.4%	-43.9%
Shanghai	27	1,349,662	10.6%	-9.6%
Shenzhen	9	380,482	6.7%	-10.7%
Singapore	25	525,153	-26.3%	-39.6%
Suzhou-Wuxi-Changzhou	14	692,191	23.6%	-2.9%
Tianjin	8	485,028	15.5%	-15.5%
Tokyo	11	264,780	21.3%	-45.0%
Toronto	11	397,327	37.2%	-42.4%
Washington DC	25	887,385	18.4%	-34.1%
Xian	12	566,333	12.0%	-16.2%

3-Stars Segment

Metro Area	3 STARS			
	Count	SqM	Measure 8	Measure 9
Albany, NY	8	68,565	-8.5%	-21.3%
Albuquerque, NM	14	126,504	-0.1%	-25.2%
Atlanta, GA	58	1,297,076	15.5%	-9.7%
Austin, TX	21	244,726	5.9%	-8.4%
Baltimore, MD	18	170,744	10.4%	-13.2%
Birmingham	8	77,114	-12.6%	-49.9%
Birmingham, AL	15	149,138	19.8%	-2.6%
Boston, MA	33	394,800	14.8%	-21.7%
Bridgeport, CT	13	145,193	16.0%	-4.2%
Buffalo, NY	8	65,486	5.9%	-14.0%
Calgary	10	144,932	18.9%	-33.3%
Charleston, SC	23	190,768	14.6%	-0.3%
Charlotte, NC	28	298,862	17.9%	-18.0%
Chattanooga, TN	9	65,977	2.4%	-5.7%
Chicago, IL	65	723,639	13.8%	-16.8%
Cincinnati, OH	18	149,778	0.3%	-19.0%
Cleveland, OH	14	107,494	19.6%	-0.6%
Colorado Springs, CO	9	92,167	0.5%	-14.9%
Columbia, SC	8	77,878	16.0%	-4.8%
Columbus, OH	25	255,232	9.5%	-27.2%
Corpus Christi, TX	8	47,412	-2.4%	-11.9%
Dallas-Fort Worth, TX	88	846,875	8.3%	-11.3%
Denver, CO	50	518,244	6.4%	-16.4%
Des Moines, IA	13	129,331	30.3%	0.7%
Detroit, MI	29	297,377	11.7%	-17.7%
Dubai-Sharjah-Ajman	8	163,368	-2.1%	-10.4%
Durham, NC	15	145,775	4.1%	-31.4%
El Paso, TX	12	93,512	-8.8%	-9.6%
Fayetteville, AR	11	76,472	31.4%	-4.1%
Fort Myers, FL	10	81,554	-7.1%	-3.5%
Greenville, SC	11	114,389	36.1%	12.9%
Hartford, CT	9	77,656	9.1%	-12.4%
Houston, TX	67	616,730	19.5%	-1.9%
Huntsville, AL	10	112,582	12.9%	-3.3%
Indianapolis, IN	19	199,299	8.9%	-14.6%
Jacksonville, FL	24	221,890	3.1%	-3.1%
Kansas City, MO	27	374,342	4.3%	-29.9%
Knoxville, TN	10	89,154	5.0%	-8.0%
Las Vegas, NV	17	1,255,786	-1.0%	-24.1%
Lexington, KY	17	143,327	3.1%	-18.0%
Little Rock, AR	12	125,250	3.2%	-11.1%
London, UK	25	206,834	4.1%	-38.7%
Los Angeles, CA	93	1,128,185	14.6%	-9.0%
Louisville, KY	9	86,230	10.7%	-16.7%
Madison, WI	12	92,219	13.7%	-16.4%
Memphis, TN	19	194,900	-8.4%	-21.8%
Miami, FL	48	544,790	10.9%	4.0%
Milwaukee, WI	12	97,280	4.3%	-17.0%

Appendix 7 (continued)

3-Stars Segment (cont'd)

Metro Area	Count	SqM	Measure 8	Measure 9
Minneapolis, MN	28	363,143	35.2%	-24.3%
Nashville, TN	31	299,134	10.8%	-14.0%
New Orleans, LA	11	96,051	-6.8%	-30.1%
New York, NY	80	851,157	9.8%	-14.6%
Oklahoma City, OK	17	144,524	2.4%	-9.1%
Omaha, NE	12	102,596	28.0%	5.8%
Orlando, FL	49	701,769	11.6%	-10.9%
Philadelphia, PA	47	490,046	7.7%	-17.6%
Phoenix, AZ	51	502,611	17.7%	-0.3%
Pittsburgh, PA	26	338,088	8.1%	-25.3%
Portland, ME	8	55,378	2.4%	-1.1%
Portland, OR	25	286,277	15.6%	-21.1%
Raleigh, NC	22	225,694	18.2%	-16.6%
Rochester, NY	8	67,813	17.9%	-7.4%
Sacramento, CA	20	199,370	16.2%	-7.3%
Salt Lake City, UT	15	189,234	-3.6%	-24.2%
San Antonio, TX	34	301,240	0.7%	-7.5%
San Bernardino, CA	22	218,843	12.0%	9.3%
San Diego, CA	29	299,651	7.3%	-10.4%
San Francisco, CA	38	422,219	26.3%	-22.1%
San José, CA	18	180,615	32.3%	-3.6%
Seattle, WA	27	319,875	7.7%	-20.0%
Shanghai	14	390,982	6.2%	-18.1%
St. Louis, MO	24	267,106	11.1%	-24.0%
Suzhou-Wuxi-Changzhou	9	365,508	4.6%	-13.9%
Tallahassee, FL	8	74,406	1.6%	-18.7%
Tampa Bay, FL	34	406,682	10.9%	-1.6%
Toronto	28	289,074	10.2%	-27.6%
Tucson, AZ	8	84,684	8.4%	-6.9%
Virginia Beach, VA	34	369,403	3.8%	-6.6%
Washington DC	92	1,054,808	7.1%	-27.1%

2-Stars Segment

Metro Area	Count	SqM	Measure 8	Measure 9
Akron, OH	10	48,943	15.0%	3.1%
Alabama State Non-Metropolitan Areas	22	106,389	-21.2%	-18.2%
Albuquerque, NM	13	87,630	7.3%	-2.4%
Arkansas State Non-Metropolitan Areas	12	46,124	-8.5%	-8.0%
Atlanta, GA	67	418,630	3.9%	-8.7%
Augusta, GA	9	50,520	-2.3%	1.9%
Austin, TX	30	182,517	9.2%	-1.0%
Baltimore, MD	9	69,513	7.7%	-3.6%
Birmingham, AL	15	81,774	5.2%	0.3%
Boston, MA	16	95,440	9.2%	-13.3%
Charleston, SC	11	72,226	-2.8%	-13.9%
Charleston, WV	9	62,019	-11.4%	-17.5%
Charlotte, NC	30	255,762	7.6%	-17.9%
Chattanooga, TN	8	42,678	-11.2%	-18.6%
Chicago, IL	45	294,702	5.9%	-13.7%
Cincinnati, OH	22	133,845	13.2%	-3.7%
Cleveland, OH	12	64,631	12.6%	-8.5%
Colorado State Non-Metropolitan Areas	17	78,883	-11.1%	-9.3%
Columbia, SC	9	64,147	26.0%	10.9%
Columbus, OH	13	88,239	4.3%	-25.1%
Dallas-Fort Worth, TX	60	380,741	8.7%	-1.3%
Dayton, OH	8	37,144	5.6%	-4.5%
Denver, CO	27	193,225	11.4%	-1.4%
Des Moines, IA	8	43,156	7.2%	-8.3%
Destin, FL	8	38,863	6.3%	-0.6%
Detroit, MI	15	78,278	4.2%	-5.7%
El Paso, TX	8	42,359	-5.2%	-3.8%
Fayetteville, AR	8	46,345	-1.4%	-17.6%
Florida State Non-Metropolitan Areas	14	70,555	4.0%	1.1%
Georgia State Non-Metropolitan Areas	25	109,114	-5.7%	-6.9%
Greenville, SC	10	72,389	13.1%	-7.1%
Hartford, CT	8	43,248	29.6%	8.6%
Houston, TX	41	218,634	6.4%	0.7%
IllinoisState Non-Metropolitan Areas	14	58,895	2.4%	-2.4%
Indiana State Non-Metropolitan Areas	9	39,896	-14.7%	-24.4%
Indianapolis, IN	19	138,962	3.8%	-4.6%
Iowa State Non-Metropolitan Areas	9	49,512	20.3%	23.8%
Jackson, MS	8	53,559	-5.7%	-9.0%
Jacksonville, FL	28	148,811	9.6%	2.0%
Kansas City, MO	26	205,953	6.7%	-9.6%
Kansas State Non-Metropolitan Areas	13	68,138	-9.2%	-12.5%
Kentucky State Non-Metropolitan Areas	21	93,913	-7.1%	-8.1%
Knoxville, TN	17	101,116	4.7%	-2.1%
Lafayette, LA	9	40,798	-4.6%	8.0%
Lakeland, FL	9	44,554	14.0%	13.7%
Lexington, KY	10	73,475	18.8%	-3.8%
Little Rock, AR	11	62,021	-6.6%	-5.8%
Los Angeles, CA	35	284,794	-6.5%	-22.7%

Appendix 7 (concluded)

2-Stars Segment (cont'd)

Metro Area	2 STARS			
	Count	SqM	Measure 8	Measure 9
Louisiana State Non-Metropolitan Areas	9	48,402	4.4%	2.0%
Louisville, KY	17	95,435	10.5%	-10.3%
Madison, WI	8	52,223	25.1%	-5.4%
Memphis, TN	10	58,309	-2.3%	-8.8%
Miami, FL	48	314,313	9.2%	3.8%
Milwaukee, WI	9	46,925	6.0%	-13.6%
Minneapolis, MN	22	172,782	23.1%	-15.0%
Mississippi State Non-Metropolitan Areas	20	90,365	-4.1%	-6.8%
Missouri State Non-Metropolitan Areas	17	88,703	7.6%	17.6%
Montana State Non-Metropolitan Areas	9	43,698	-23.4%	-20.6%
Nashville, TN	39	321,078	-2.2%	-18.5%
Nebraska State Non-Metropolitan Areas	21	133,857	-5.0%	-6.0%
New Mexico State Non-Metropolitan Areas	15	61,678	1.3%	-7.5%
New York State Non-Metropolitan Areas	13	66,345	17.5%	6.4%
New York, NY	30	191,670	13.0%	-8.9%
North Carolina State Non-Metropolitan Areas	38	194,389	0.6%	-5.1%
Ohio State Non-Metropolitan Areas	19	89,311	-3.5%	-4.2%
Oklahoma City, OK	17	103,291	6.1%	-7.6%
Oklahoma State Non-Metropolitan Areas	20	97,357	11.7%	12.5%
Omaha, NE	13	100,672	6.3%	-4.1%
Orlando, FL	31	251,501	13.3%	-1.9%
Pennsylvania State Non-Metropolitan Areas	27	136,263	-3.6%	-12.8%
Pensacola, FL	11	62,606	4.0%	0.6%
Philadelphia, PA	22	154,081	13.5%	-4.4%
Phoenix, AZ	34	268,995	10.6%	-3.8%
Pittsburgh, PA	31	172,364	3.3%	-10.4%
Portland, OR	16	99,938	25.0%	-9.9%
Providence, RI	13	76,351	3.9%	3.2%
Raleigh, NC	23	179,598	15.8%	-5.6%
Richmond, VA	17	94,549	6.0%	-3.7%
Sacramento, CA	15	67,854	12.7%	4.0%
Salt Lake City, UT	9	59,236	-5.2%	-10.7%
San Antonio, TX	29	208,701	5.0%	-0.5%
San Bernardino, CA	18	98,447	3.7%	4.3%
San Diego, CA	16	145,759	-6.1%	-17.1%
San Francisco, CA	14	97,790	19.9%	3.8%
San José, CA	8	53,276	4.2%	-29.1%
Scranton, PA	8	38,393	5.0%	-3.5%
Seattle, WA	22	203,957	1.4%	-17.0%
Sioux Falls, SD	8	41,218	15.6%	3.4%
South Carolina State Non-Metropolitan Areas	15	74,635	-6.6%	-9.1%
Springfield, MO	8	35,953	-14.8%	-15.6%
St. Louis, MO	10	47,646	3.6%	-0.3%
Tampa Bay, FL	29	159,761	2.8%	-5.3%
Tennessee State Non-Metropolitan Areas	16	70,148	-10.4%	-9.5%
Texas State Non-Metropolitan Areas	40	166,993	-11.3%	-9.1%
Toledo, OH	8	40,406	-5.6%	-20.2%
Tucson, AZ	8	45,049	21.7%	9.5%

2-Stars Segment (cont'd)

Metro Area	2 STARS			
	Count	SqM	Measure 8	Measure 9
Ventura, CA	8	46,187	-4.6%	-12.4%
Virginia Beach, VA	21	143,880	-1.2%	-11.2%
Virginia State Non-Metropolitan Areas	20	87,415	-2.8%	-4.0%
Washington DC	37	242,743	8.3%	-13.0%
West Virginia State Non-Metropolitan Areas	10	42,641	27.6%	11.9%
Wichita, KS	10	72,767	15.4%	-1.4%
Winston-Salem, NC	9	60,666	14.7%	-5.7%
Wyoming State Non-Metropolitan Areas	12	68,490	11.8%	0.2%
Youngstown, OH	12	64,206	-14.1%	-5.4%

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