



Compression Study:

City, State

Prepared for

City Convention & Visitors Bureau

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Executive Summary

This study establishes that bookings placed by the City Convention & Visitors Bureau (CVB) significantly impact hotel performance in all geographic regions of the greater City, State market area. The study serves to quantify those impacts to the overall City, State hotel market, as well as the impacts to several submarkets. Moreover, the study also identifies which submarkets benefit most from the City Convention & Visitors Bureau bookings, as well as which types of events have the greatest overall impact to the City, State hotel market.

Some key findings are summarized below:

- The average number of room placements by the City Convention & Visitors Bureau for the two-year period studied was rooms per day. The entire City, State hotel market was significantly impacted by these room placements.
- Market RevPAR increased considerably for both events hosted in City Convention Center, as well as events that were hosted in other local events centers and hotels.
- When City Convention & Visitors Bureau books more than 824 daily room nights, the overall hotel market's RevPAR begins to surpass baseline RevPAR levels for that specific day of the year.
- For every 500 daily rooms that are placed by the City Convention & Visitors Bureau, there is an average RevPAR gain of roughly +3.8% for the market as a whole.
- As bookings increase, hotels in the Zone 1 show the greatest percentage increases in RevPAR over their daily baseline averages. Beyond the Zone 1 zone, hotels located in the Zone 3 experienced the next greatest increase in RevPAR.
- Days with room placements of approximately 1,400 rooms are a critical threshold in terms of overall market RevPAR impact (+8.4%), and especially impact the Zone 1 zone (+15.4%).
- The events with the greatest impact to the local hotel market were those related to the Group x segment and the Group z segment. The Group y Administration segment events yielded the least impact of the event types analyzed.

Introduction

This report was prepared for the City Convention & Visitors Bureau (CVB), and presents findings from a compression analysis conducted by STR. The study is designed to help the City Convention & Visitors Bureau understand, quantify, and illustrate how room placements by the City Convention & Visitors Bureau impact local hotels throughout the greater City, State market area.

Approach and Methodology

This compression study uses daily property-level data from STR's proprietary databases to explore how placed room nights generated by the City Convention & Visitors Bureau may impact hotels across the City, State market area. In addition to STR data, the City Convention & Visitors Bureau contributed event booking data for the analysis. The data covers the two-year period from January 1, 2014 to December 31, 2015 for a total of 730 days. Comparing this booking data with STR data allows for an exploration of the relationship between the City Convention & Visitors Bureau's room placements and hotel performance across the City, State market.

STR utilized daily hotel data containing the key performance indicators (KPIs) for the City, State market. Only daily-reporting hotels were used for this study. STR also receives monthly data from many other hotels, which may be used in other STR products or reports. The hotel performance data used includes occupancy (Occ), average daily rate (ADR), and revenue per available room (RevPAR). The market's daily KPIs were compared to their corresponding compression-modeled, long-term averages or daily baseline. The daily baselines are generated based on a four-year history of KPIs for that specific day of the year, as well as similar days of the year. The days are adjusted to account for the same day of the week, and for holidays. The KPIs are also adjusted to account for overall market improvement (or decline) during the four-year period. All ADR and RevPAR figures were normalized using a 2015 base year. Moreover, daily hotel data was excluded from the development of the daily baselines for days that included large, one-time events that would skew these baselines.

Daily event or booking data was supplied by the City Convention & Visitors Bureau. The data includes the name of the event, event date, event type, and the daily placed room nights among other fields. The daily placed rooms supplied by the City Convention & Visitors Bureau represents contract rooms, which is the number of rooms contracted in a room block with the City Convention & Visitors Bureau for a credited CVB event. STR accepts this data as reported and does not guarantee the accuracy or comprehensiveness of the data.

This report utilizes a total of 180 daily-reporting hotels. These hotels were divided into reporting zones identified by the City Convention & Visitors Bureau. A complete listing of the hotels used in this study and their associated zones are found in Appendix II.

The bulk of this study relies on the relationship of the event data and hotel market performance data. The actual performance of the market for this two-year period was compared to the daily baselines established for those days. The percentage changes from the daily baselines are then correlated to the room placement event data. This relationship is examined in detail throughout the study, and performance change or premium is always in comparison to the daily baselines.

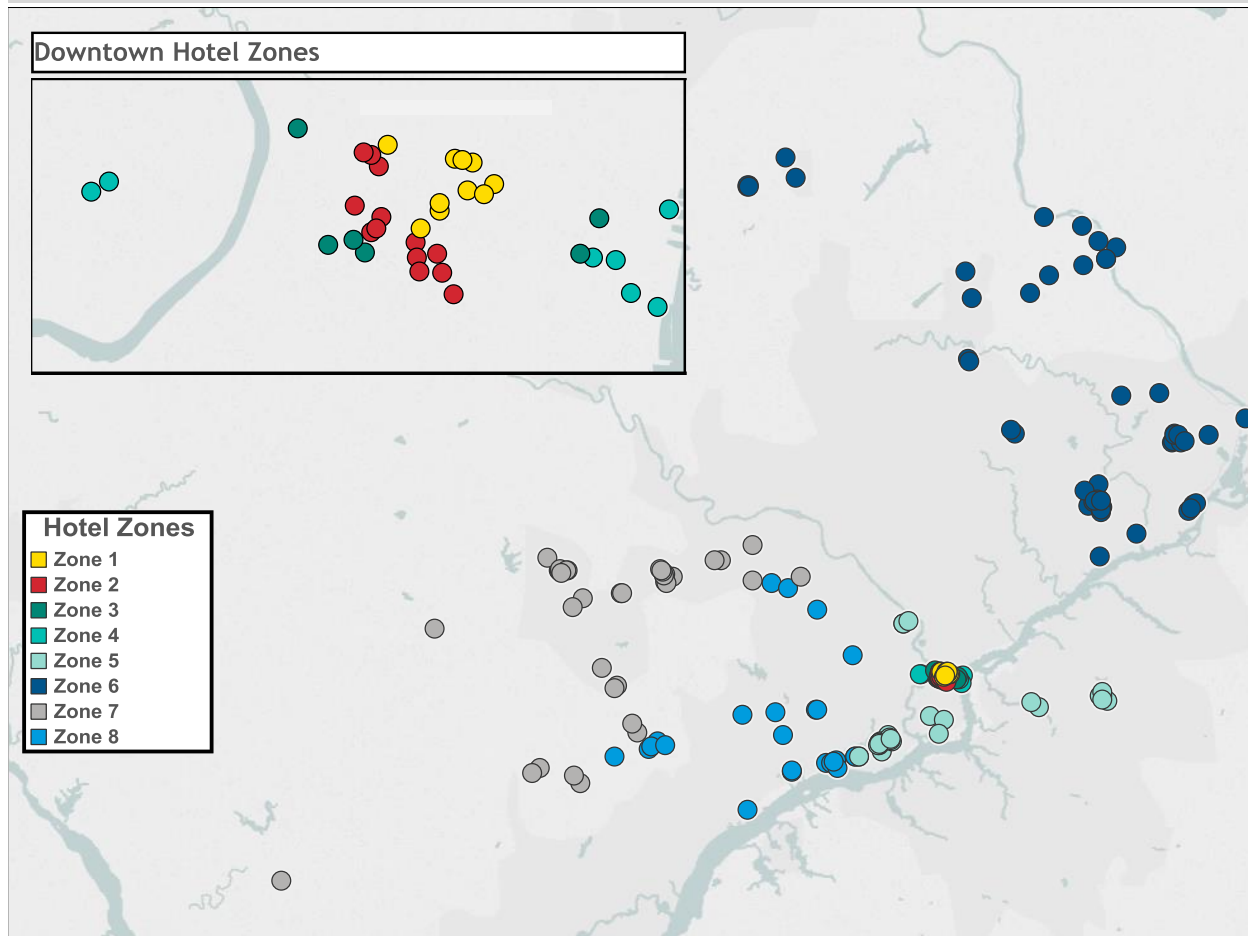
General Characteristics of the Market

STR and the City Convention & Visitors Bureau worked together to identify clusters of hotels across the greater City, State market that may be impacted similarly by event bookings. These hotel zones were formed so that they are consistent with how the local market operates and is marketed.

The following maps present the hotel zones identified across the City, State market. The zones are identified as follows:

1. Zone 1 (10 hotels)
2. Zone 2 (13 hotels)
3. Zone 3 (7 hotels)
4. Zone 4 (7 hotels)
5. Zone 5 (27 hotels)
6. Zone 6 (54 hotels)
7. Zone 7 (35 hotels)
8. Zone 8 (27 hotels)
9. Zone 8 (63 hotels)

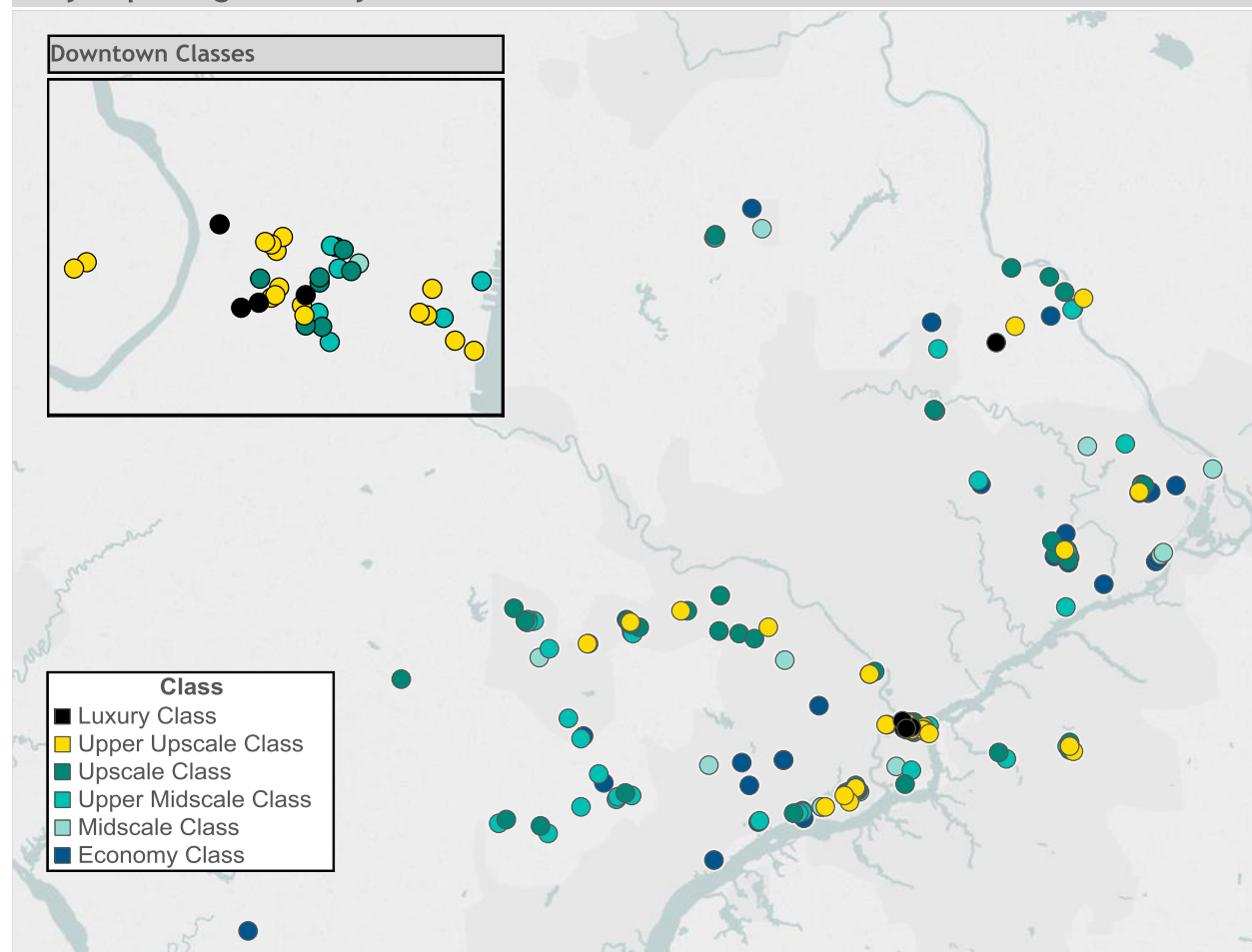
Daily Reporting Hotels by Market Zone



Source: STR, Inc. and City Convention & Visitors Bureau

The above map illustrates all of the daily-reporting hotels in the City, State market. Each of the hotel zones is color-coded to help identify the zones geographically. The City Convention Center is located downtown, which is shown in greater detail in the map insert above.

Daily Reporting Hotels by Class



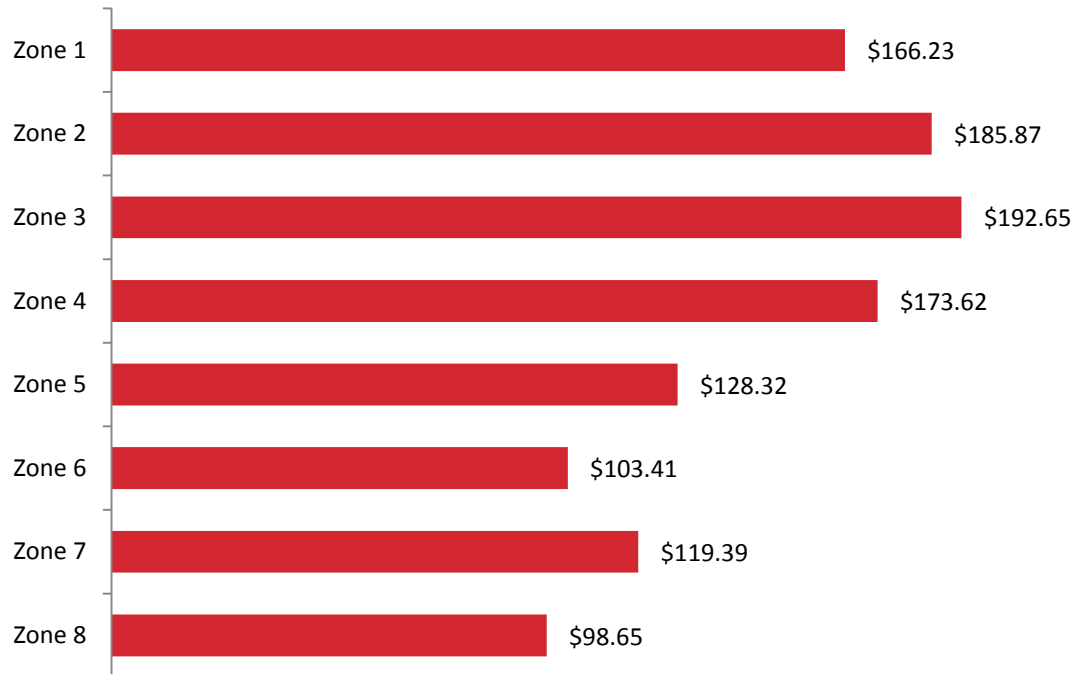
Source: STR, Inc.

This map identifies hotels by their class level.¹ In the downtown zones (Clusters 1-4), 20 of the 43 hotels are in the Upper Upscale Class. The hotels that typically accommodate convention attendees are hotels in the luxury and upper upscale classes. The Upscale Class dominates the market with 73 hotels, followed by Upper Midscale Class with 62 hotels and Economy Class with 56 hotels. The Luxury Class includes only 5 hotels.

¹ Hotel class segment definitions are defined in Appendix I.

The chart below presents the 2014-2015 average daily rates (ADR) for each of the hotel zones. Zone 3 and Zone 2s led all market zones with ADRs of \$194.13 and \$186.57, respectively. Zone 1 and Zone 4s followed with ADRs in the \$170 range. All other zones had ADRs in the lower \$100 range, except for Zone 8 that had the lowest ADR at \$99.53. These average rates are based on the daily-reporting hotels utilized in this report.

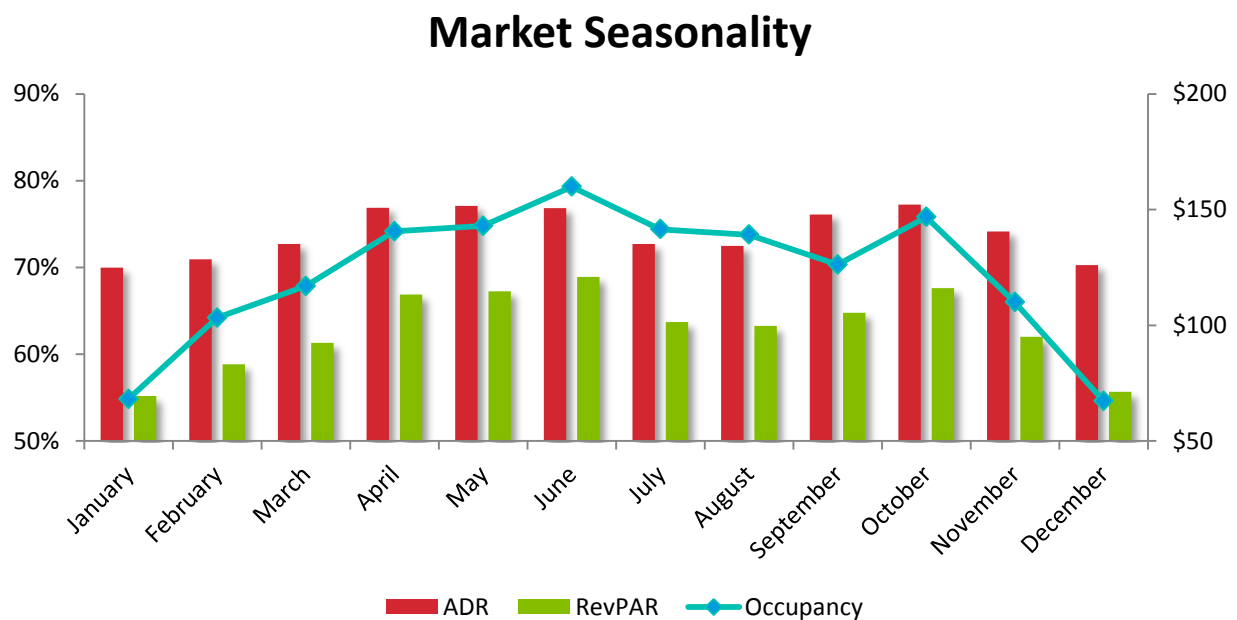
ADR by Market Zone



Source: STR, Inc.

Market Seasonality

An important consideration when examining the local market is the seasonality of the hotel market. Most hotel markets have clear peak, shoulder, and off-seasons. When large events or groups are booked in the off-season, typically the impact can be measured in increased occupancy. Conversely, events booked during the peak season will likely impact average rates. Most hoteliers would prefer to have large events come in the off-season when it is traditionally more difficult to fill the hotel; however, this may also be a difficult time for organizers to book events, as group business also has a seasonal pattern. The chart below illustrates the average monthly occupancy, ADR, and RevPAR for the City, State market during the two-year period examined.



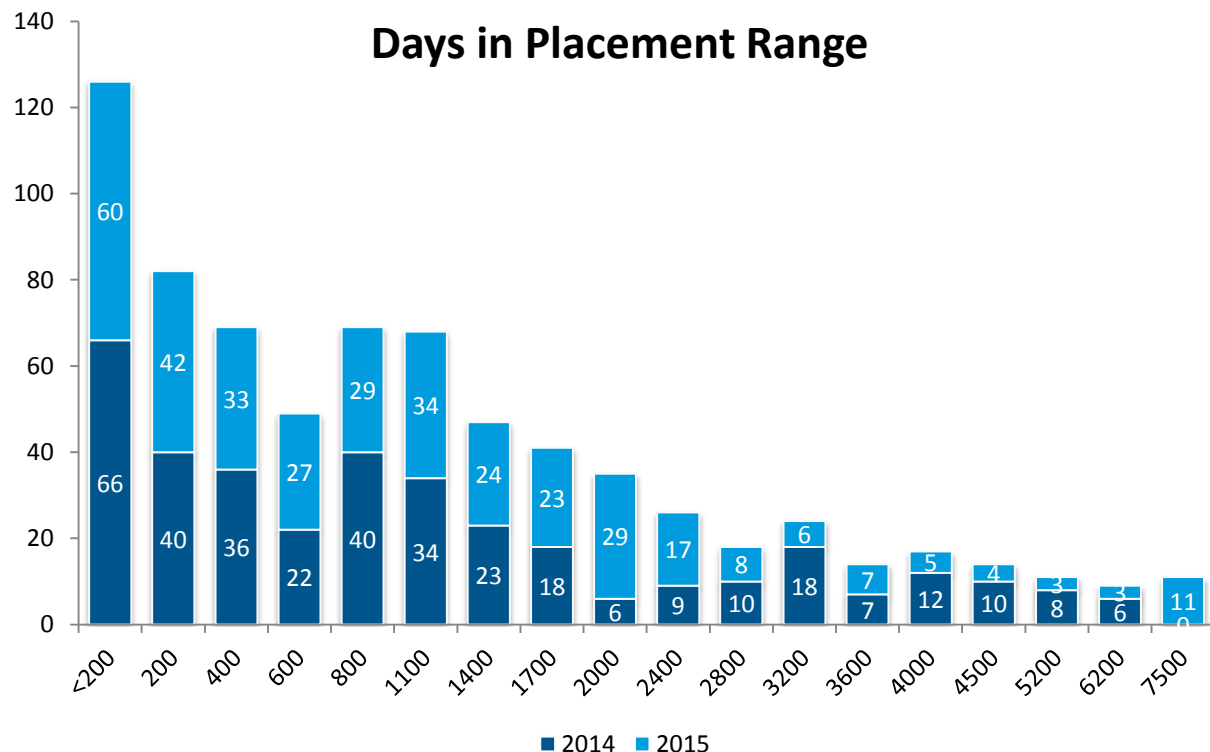
Source: STR, Inc.

The City, State hotel market is a seasonal market. As such, occupancy is very strong from April through October, and declines significantly during the winter months. December is the weakest month in occupancy, while January is the weakest in terms of ADR. The strongest months for the market are April through June, and October.

Credited Event/Room Night Placements

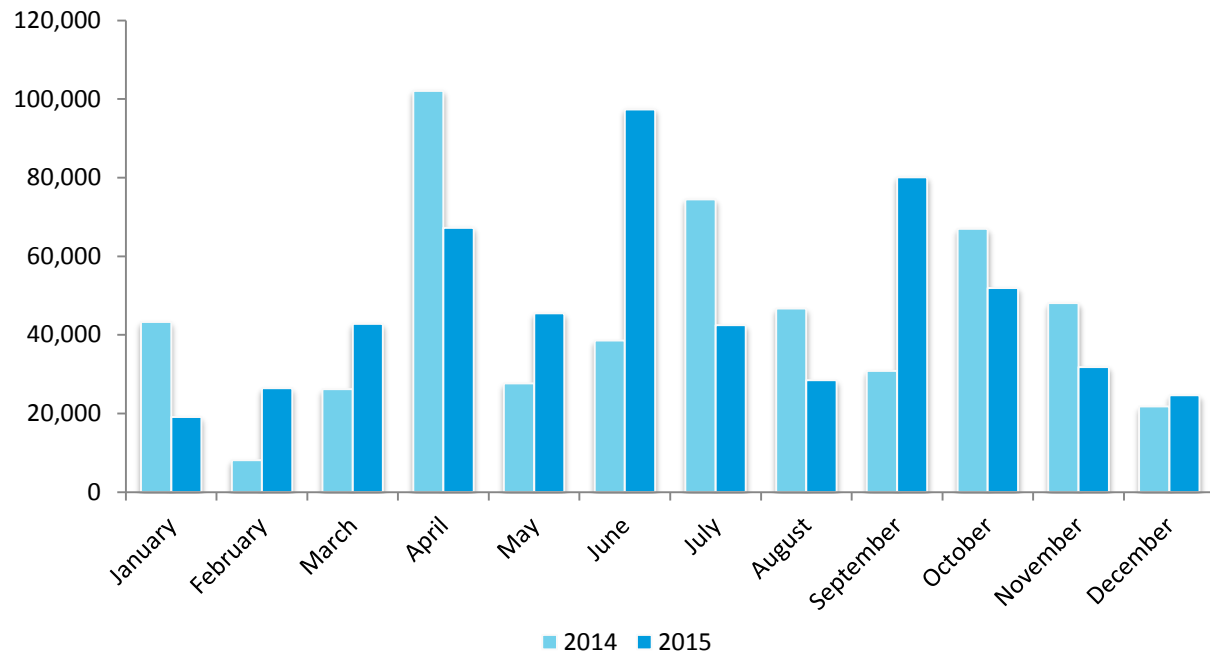
An important consideration in STR's compression analysis is relative changes in hotel performance when the City Convention & Visitors Bureau booked groups of various sizes. The following section describes the distribution of room placements based on the quantity and monthly patterns. The charts and tables aide in the understanding of how these generated room nights have been distributed throughout the two-year time period examined.

- The average number of placed room nights during the two-year period was per day, while the median was 975 per day.
- The top 10% of room placement days were days in which 3,600 or more room nights were placed.
- Larger daily room placements (2,000 or more placed rooms/night) increased 8.1% from 86 days in 2014 to 93 days in 2015.
- During the two-year period, the City Convention & Visitors Bureau placed a total of room nights.



Source: City Convention & Visitors Bureau

Room Placements by Month



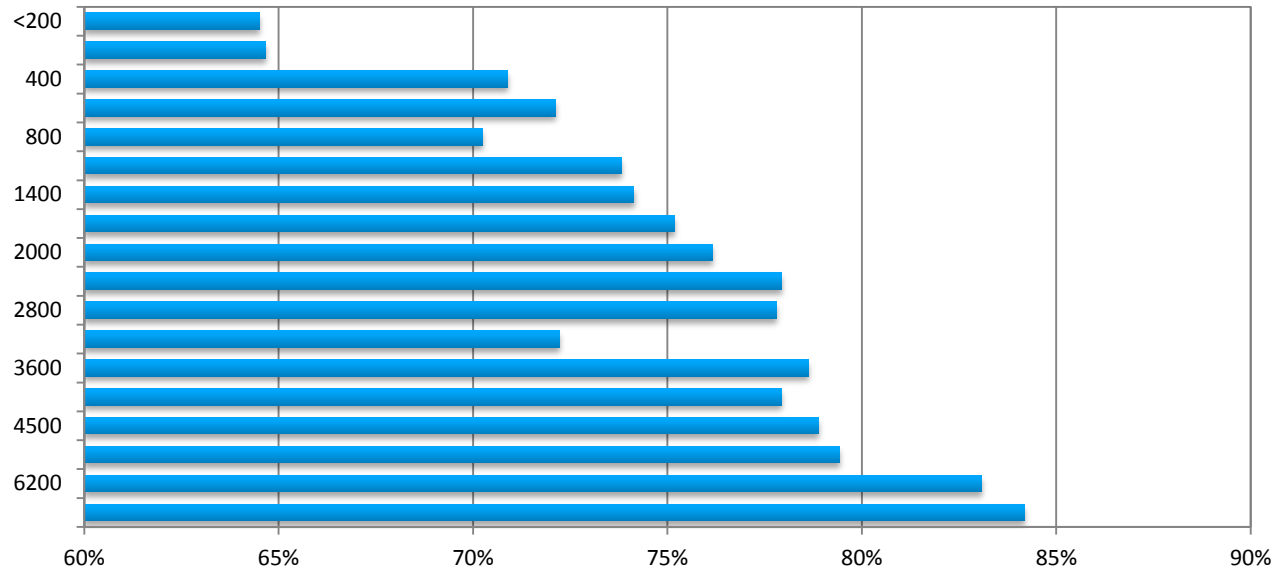
Source: City Convention & Visitors Bureau

- Based on this two-year period of bookings, there does appear to be a seasonal pattern in the City Convention & Visitors Bureau room placements.
- The greatest monthly total of placed rooms occurred in April of 2014 with 102,084 rooms. April, June, July, and October were typically the best months for bookings, while December and February were the months with the lowest levels of bookings.

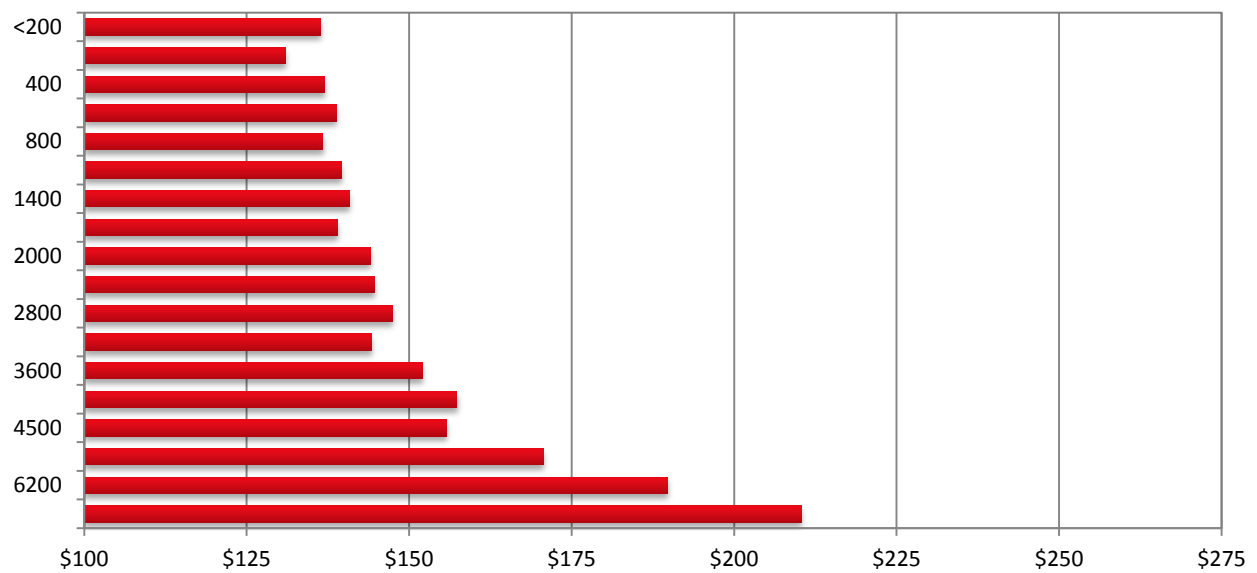
Summary of Market Findings

Room placements can impact a market in terms of occupancy or average daily rate. These impacts to the City, State market are illustrated in the two charts below. The event room night placements were divided into room placement ranges, and the average occupancy and ADR for each of these ranges is illustrated below.

Occupancy by CVB Room Placements



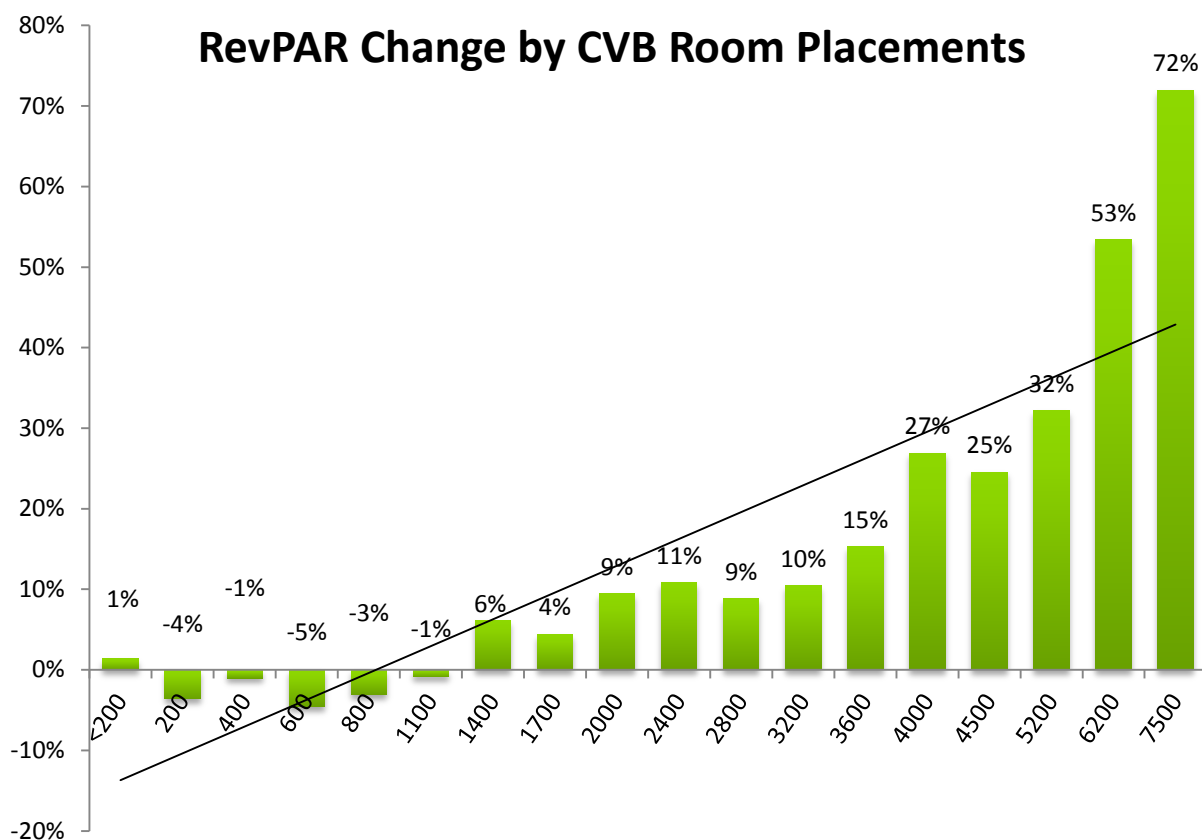
ADR by CVB Room Placements



Source: STR, Inc.

Market RevPAR Impacts

Typically, hotel markets experience occupancy growth first and then growth in rates. Because the complete impact of an event is a combination of the impacts to occupancy and rates, RevPAR (room revenue per available room) is the best indicator of hotel performance, since it captures both of these measures. The chart below illustrates the RevPAR impact of attributed room blocks by daily room placements. Average RevPAR for days with rooms placements within each placement range are compared to the daily baseline RevPARs for those days. The daily baseline RevPARs are calculated using four years of data, adjusting for day of the week and holidays, as discussed earlier in the methodology section. We have also illustrated the linear trend line generated by this RevPAR impact comparison.



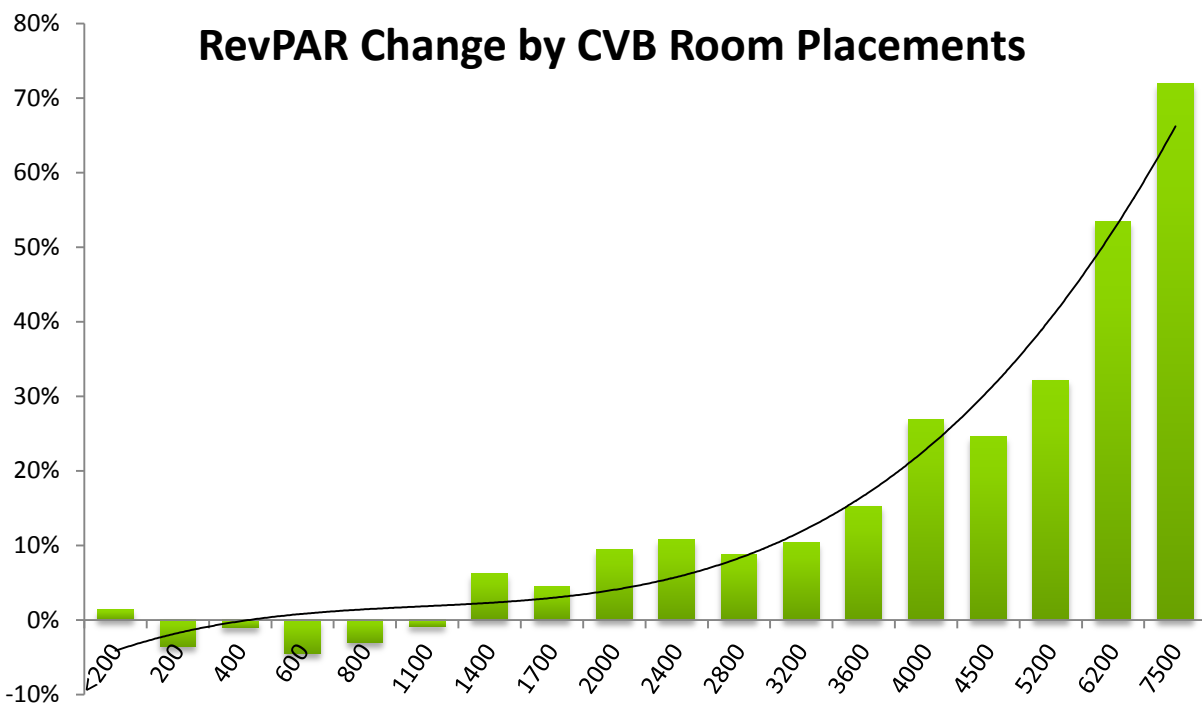
Source: STR, Inc.

The overall RevPAR impact of room placements by the City Convention & Visitors Bureau is very apparent from the chart on the previous page. Some key highlights of the RevPAR impacts are detailed below:

- The data suggests that the hotel market as a whole is dependent on the City Convention & Visitors Bureau room placements to meet its historical baselines.
 - When the City Convention & Visitors Bureau places less than 824 rooms, the overall market underperforms or performs at less than average RevPAR levels for that particular day. (Note: The zero percentage reference line represents baseline RevPAR performance.)
 - When more than 824 daily rooms are placed, the hotel market (as a whole) begins to perform above its long-term RevPAR averages.
- The linear trend line illustrates that there was an increase of roughly +3.8% in daily RevPAR for the entire City, State market for every 500 additional daily placed rooms.
- Double-digit increases in RevPAR market performance compared to the daily baselines begin to occur when the City Convention & Visitors Bureau books 2,000 or more daily rooms.
- A second level of RevPAR impact begins at 4,000 room placements. Above this level, the RevPAR increases are much greater (approximately +38% RevPAR increases) than at 1,400-4,000 room placements.
- There also appears to be a third level of RevPAR impact at 6,200+ room placements. Most markets exhibit a second level of RevPAR gains and then plateau. This third level of gains is an indicator of the strength of the Philadelphia, PA hotel market. The largest of events continue to impact RevPAR at even stronger levels.

Polynomial Model of Market Impacts

While the previous chart demonstrates a positive relationship between larger room placements and increases in market RevPAR, these relationships are not completely linear. There are typically diminishing returns on room placements at the high end, when hotels become completely full and some guests are priced out of the market. As such, we have also used polynomial trend lines in order to understand the complex relationships between the generated room placements and local hotel performance. The following chart presents the polynomial or curved model.



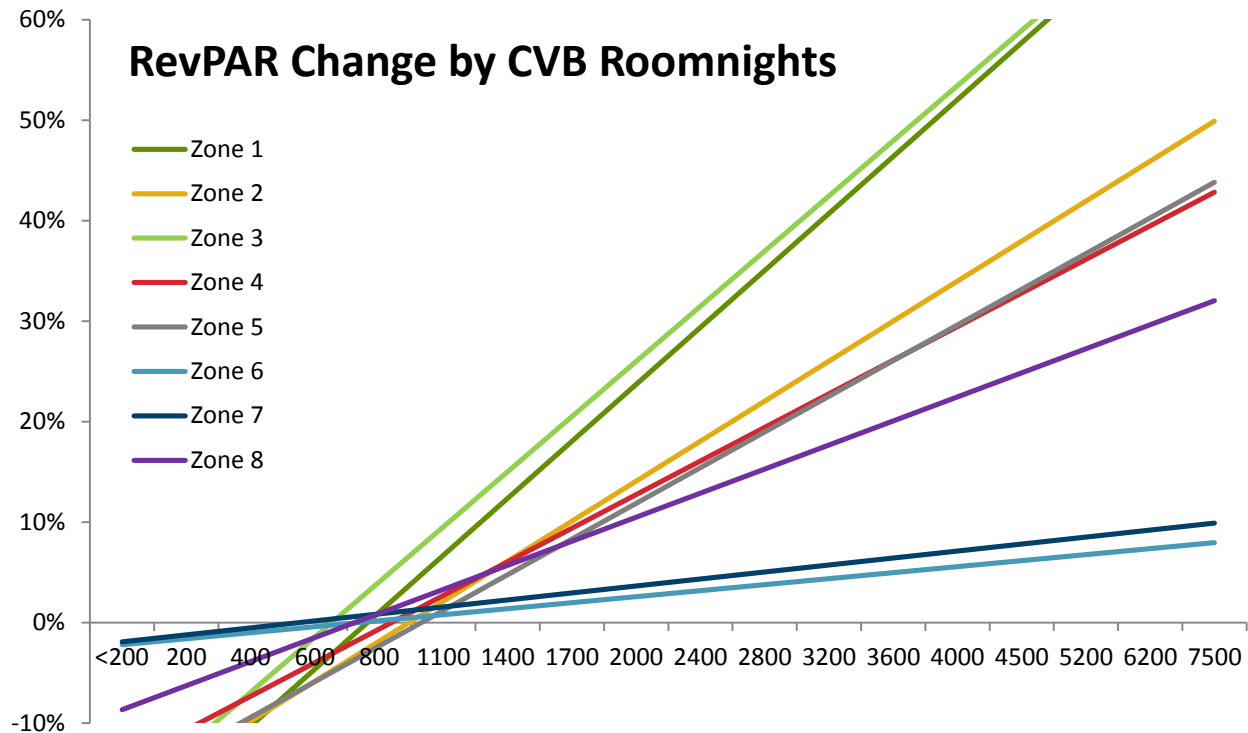
Source: STR, Inc.

The polynomial model provides a more nuanced view of the trend we previously observed with the linear model.

- The critical threshold of placements is 1,400. Above this level is where we begin to see much stronger levels of RevPAR increases above baseline.
- The polynomial model illustrates that RevPAR impact continues to increase even for events of 7,500+ room placements. At some point beyond 7,500 room placements, the polynomial model will plateau, as hotels are completely filled and hotels begin pricing some guests out of the market.

Market Zone Performance

Beyond general market-level characterizations, there are important differences across hotel zones with respect to the impacts of generated bookings. The chart below uses the same linear regression technique used earlier to show this relationship.



Source: STR, Inc.

- All market zones experienced a statistically significant increase above their baseline RevPARs as room placements increased.
- The Zone 1 and Zone 3s clearly benefited most from larger room blocks as demonstrated by their steeper modeled performance lines. The next fastest growth rates in RevPAR occurred in the Zone 2, Zone 4, Zone 5, and Zone 8.

All market zones are positively impacted by increases in placed room blocks. In the following table, we show the RevPAR impact of every 500 additional room nights generated by the City Convention & Visitors Bureau.

Summary of Linear Modeling by Market Zones

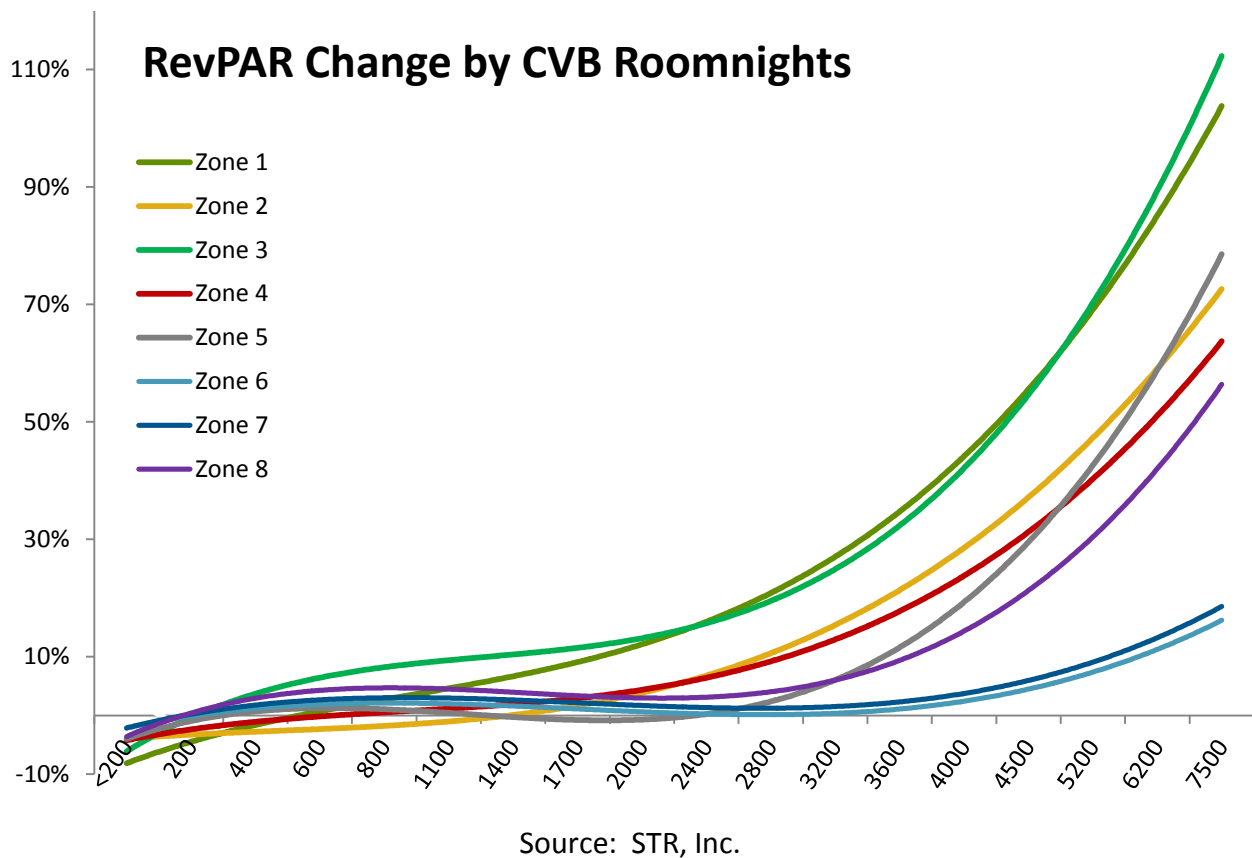
| Market Zone | RevPAR Increase from Baseline per 500 Rooms (%) | RevPAR Increase from Baseline per 500 Rooms (\$) |
|-------------|--|---|
| Zone 1 | 6.43% | \$7.83 |
| Zone 2 | 4.51% | \$6.51 |
| Zone 3 | 6.22% | \$7.86 |
| Zone 4 | 3.79% | \$4.97 |
| Zone 5 | 4.02% | \$3.49 |
| Zone 6 | 0.68% | \$0.44 |
| Zone 7 | 0.79% | \$0.60 |
| Zone 8 | 2.72% | \$1.79 |

Source: STR, Inc.

The Zone 3 realized the largest RevPAR gain, on average of +\$7.86 (an increase of +6.2%) for every 500 room nights placed. Following very closely was the Zone 1 with an average increase of +\$7.83 (+6.43%). The Zone 6 and Zone 7 had significantly lower impact, less than 1% per 500 room placements.

Compression: When Does Each Zone Experience Lift?

If we look at the polynomial model for each zone, we typically start to see diminishing returns on RevPAR impact for the largest of room placements. For the City, State market zones, the RevPAR impact does not yet plateau within the largest placement ranges shown. In theory, all zones will eventually plateau as hotels fill up and as some guests are priced out of the market. The zones that are first to be impacted are the first zones to plateau as well. At a room placement level beyond 7,500 room placements, we expect the RevPAR impact to level off for this market as well.



Each market zone is impacted differently by room placements. Highlights from the polynomial trend lines on the previous page are detailed below:

- The hotels located in the Zone 1 zone and the Zone 3 experience the greatest gains from large group events held within the market.
- The impact of placed rooms on the other zones is positive, but varies by degree and pace. The Zone 2, Zone 4, Zone 5, and Zone 8s are next to experience RevPAR growth.
- The majority of the hotel zones continue to experience increased RevPAR impact even at levels of 7,500 or more room placements.

A more complete snapshot of compression is presented in the RevPAR heat map on the following page. The percentages shown are the zone's RevPAR percentage change from the historical daily baselines.

Data highlights are below:

- The first zones to see RevPAR lift in excess of 10% were the Zone 1 and Zone 3s when placing 1,400+ rooms.
- The next zone to experience RevPAR lift in excess of 10% was Zone 2 at 2,000+ rooms.
- For each zone, the critical threshold can be seen where the RevPAR impact jumps to another level. Typically, this threshold occurs around a +10% increase in RevPAR over baseline. Above that level, RevPAR impact is much greater. These thresholds for each market zone are indicated in red.

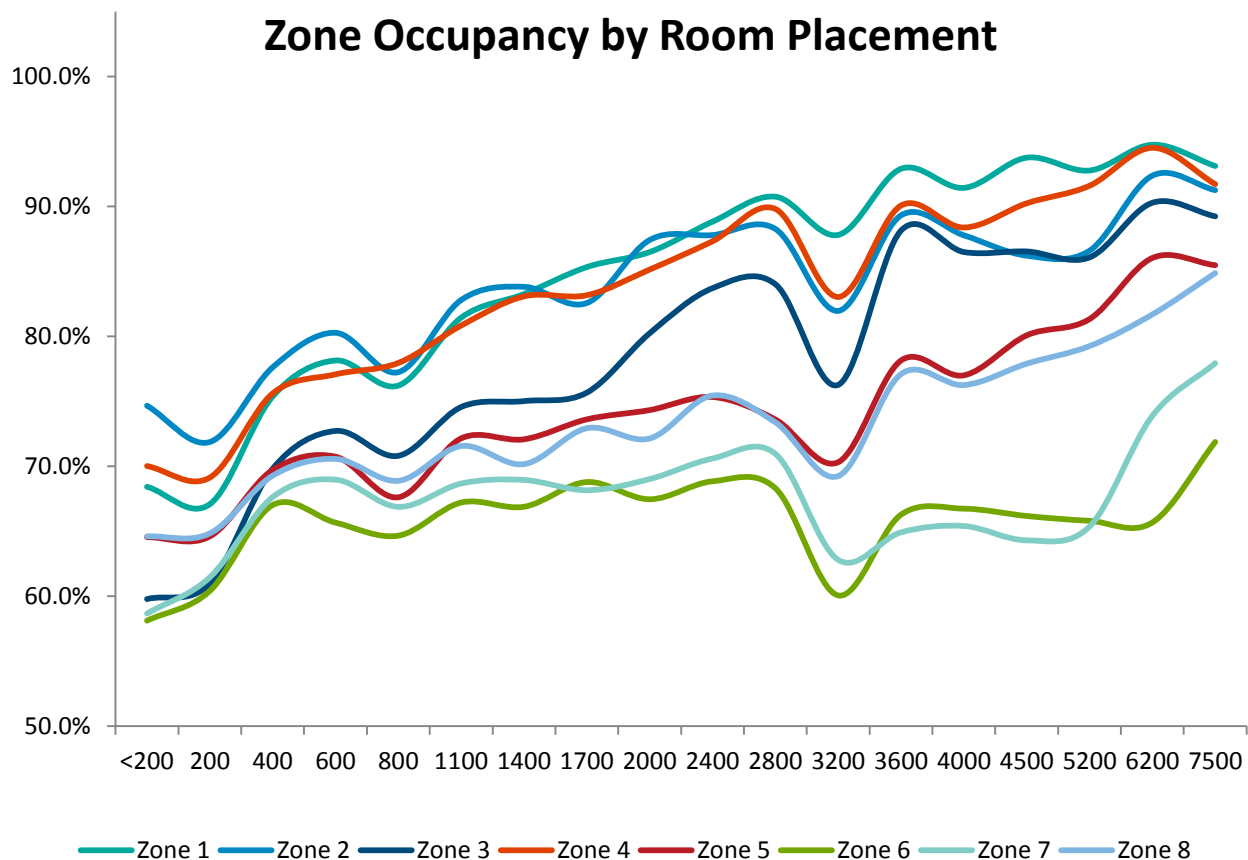
Market Zone RevPAR Impact from Baseline by Room Placements

| Daily Placed Rooms | | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 8 |
|--------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| - | 199 | 2.4% | 3.2% | -2.5% | 2.0% | 3.1% | -0.9% | 0.3% | 1.1% |
| 200 | 399 | -8.8% | -6.8% | 0.8% | -5.3% | -2.8% | -0.4% | -0.4% | 0.4% |
| 400 | 599 | -4.4% | -5.6% | 3.9% | -2.3% | -2.1% | 3.6% | 3.1% | 2.1% |
| 600 | 799 | -7.8% | -6.8% | 2.1% | -7.3% | -4.6% | -1.0% | -0.3% | -1.0% |
| 800 | 1,099 | -3.8% | -5.7% | 1.9% | -1.3% | -5.3% | -1.3% | 0.1% | -1.1% |
| 1,100 | 1,399 | 0.8% | -2.4% | 3.0% | -3.0% | -1.6% | -0.5% | -1.7% | 1.9% |
| 1,400 | 1,699 | 13.2% | 4.5% | 12.4% | 8.5% | 3.2% | 4.1% | 6.0% | 4.7% |
| 1,700 | 1,999 | 9.0% | 0.5% | 9.3% | 5.6% | 3.4% | 1.7% | 2.0% | 7.5% |
| 2,000 | 2,399 | 23.0% | 12.1% | 24.9% | 10.0% | 4.3% | 2.5% | 2.5% | 6.6% |
| 2,400 | 2,799 | 20.4% | 10.5% | 24.3% | 9.5% | 8.3% | 2.8% | 6.3% | 11.6% |
| 2,800 | 3,199 | 22.0% | 12.8% | 23.3% | 11.8% | -0.3% | 0.0% | 3.4% | 2.5% |
| 3,200 | 3,599 | 31.0% | 11.9% | 18.8% | 9.2% | 4.4% | 0.0% | 3.4% | 5.3% |
| 3,600 | 3,999 | 30.1% | 17.6% | 32.0% | 11.4% | 12.0% | 2.3% | 2.7% | 11.1% |
| 4,000 | 4,499 | 53.1% | 36.7% | 48.2% | 25.6% | 21.8% | 2.9% | 4.5% | 15.3% |
| 4,500 | 5,199 | 44.5% | 29.2% | 44.9% | 26.8% | 24.5% | 2.6% | -0.3% | 17.0% |
| 5,200 | 6,199 | 51.5% | 34.2% | 54.3% | 34.8% | 34.5% | 6.5% | 4.5% | 22.9% |
| 6,200 | 7,499 | 85.5% | 68.6% | 99.4% | 61.5% | 54.7% | 4.9% | 11.4% | 35.7% |
| 7,500 | + | 116.2% | 74.9% | 116.5% | 61.7% | 88.1% | 22.0% | 24.6% | 66.9% |

Source: STR, Inc.

Occupancy and ADR Analyses

As discussed previously, RevPAR is the best indicator of hotel performance. However, in order to present a complete picture of the effects of room placements, we have also analyzed occupancy and ADR. The following chart illustrates how occupancy in each market zone is impacted by room placements.



Source: STR, Inc.

Clearly, all of the market zones experience increased occupancy as larger placement blocks are booked. The zones with the greatest occupancy impact are those with the steepest lines. Furthermore, we have also illustrated when each zone reaches 85% occupancy on the page that follows.

Typical Room Block Size When Hotels Reach 85% Occupancy

| Zone | Room Blocks |
|--------|-------------|
| Zone 1 | 1,700+ |
| Zone 2 | 2,000+ |
| Zone 3 | 3,600+ |
| Zone 4 | 2,000+ |
| Zone 5 | 6,200+ |
| Zone 6 | 7,500+ |
| Zone 7 | 7,500+ |
| Zone 8 | 7,500+ |

Source: STR, Inc.

The first market zone to achieve 85% occupancy was the Zone 1 at 1,700+ rooms, followed by the Zone 2 and Zone 4s, which reached this level at 2,000+ rooms. The four county zones did not reach 85% occupancy even for the largest of events. For markets or zones with already strong occupancies, the impact of room placements is largely indicated by greater average rates. The two charts on the following pages illustrate, in greater detail, the occupancy and ADR impacts of room placements.

Market Zone Occupancy by Room Placements

| Daily Placed Rooms | | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 8 |
|--------------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| - | 199 | 68.5% | 74.1% | 59.8% | 70.1% | 64.8% | 58.1% | 58.7% | 64.6% |
| 200 | 399 | 66.1% | 72.2% | 61.0% | 69.7% | 64.6% | 60.4% | 61.5% | 64.8% |
| 400 | 599 | 75.1% | 78.2% | 69.8% | 75.8% | 69.7% | 67.0% | 67.6% | 69.3% |
| 600 | 799 | 79.7% | 80.8% | 72.7% | 77.2% | 70.7% | 65.7% | 69.0% | 70.6% |
| 800 | 1,099 | 76.6% | 77.7% | 70.8% | 78.2% | 67.6% | 64.7% | 66.9% | 68.9% |
| 1,100 | 1,399 | 83.4% | 83.2% | 74.6% | 81.1% | 72.1% | 67.2% | 68.7% | 71.6% |
| 1,400 | 1,699 | 84.8% | 84.1% | 75.0% | 83.3% | 72.1% | 66.9% | 68.9% | 70.2% |
| 1,700 | 1,999 | 87.7% | 83.2% | 75.7% | 83.3% | 73.6% | 68.8% | 68.2% | 72.9% |
| 2,000 | 2,399 | 88.4% | 87.3% | 80.3% | 85.2% | 74.3% | 67.5% | 69.0% | 72.1% |
| 2,400 | 2,799 | 89.3% | 88.2% | 83.7% | 87.3% | 75.3% | 68.8% | 70.6% | 75.4% |
| 2,800 | 3,199 | 91.3% | 88.8% | 84.0% | 89.7% | 73.6% | 68.3% | 71.0% | 73.4% |
| 3,200 | 3,599 | 88.0% | 82.9% | 76.3% | 83.1% | 70.4% | 60.1% | 62.8% | 69.2% |
| 3,600 | 3,999 | 92.7% | 89.9% | 88.2% | 90.1% | 78.2% | 66.3% | 64.9% | 77.1% |
| 4,000 | 4,499 | 92.4% | 88.6% | 86.5% | 88.5% | 77.0% | 66.7% | 65.4% | 76.2% |
| 4,500 | 5,199 | 94.4% | 87.4% | 86.5% | 90.5% | 80.1% | 66.2% | 64.3% | 77.9% |
| 5,200 | 6,199 | 92.4% | 87.8% | 86.1% | 91.7% | 81.5% | 65.8% | 65.4% | 79.2% |
| 6,200 | 7,499 | 94.3% | 92.7% | 90.3% | 94.4% | 86.0% | 65.7% | 73.9% | 81.7% |
| 7,500 | + | 93.2% | 92.0% | 89.2% | 91.7% | 85.5% | 71.9% | 77.9% | 84.9% |

Source: STR, Inc.

Market Zone ADR Impact from Baseline by Room Placements (\$ change)

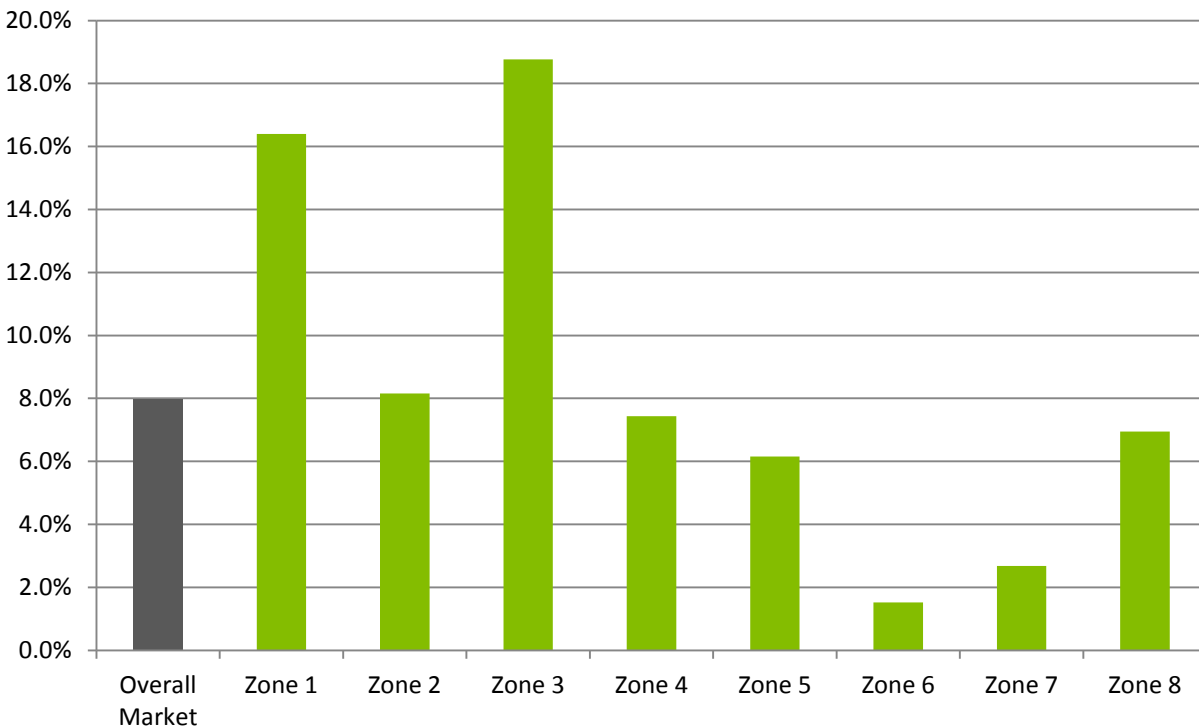
| Daily Placed Rooms | | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 | Zone 6 | Zone 7 | Zone 8 |
|--------------------|-------|----------|----------|----------|---------|---------|---------|---------|---------|
| - | 199 | \$2.07 | \$1.38 | \$4.01 | \$2.94 | \$2.57 | \$1.53 | \$2.21 | \$0.41 |
| 200 | 399 | -\$9.01 | -\$8.18 | \$3.53 | -\$6.57 | -\$1.91 | -\$1.18 | -\$2.04 | \$0.29 |
| 400 | 599 | -\$7.19 | -\$5.93 | \$2.73 | -\$2.46 | -\$1.62 | -\$0.17 | -\$0.67 | \$1.19 |
| 600 | 799 | -\$9.27 | -\$7.42 | \$0.45 | -\$4.68 | -\$2.49 | -\$0.94 | -\$1.56 | \$0.57 |
| 800 | 1,099 | -\$7.09 | -\$5.70 | \$1.24 | -\$2.79 | -\$2.51 | -\$0.45 | -\$1.66 | \$0.71 |
| 1,100 | 1,399 | -\$4.15 | -\$5.39 | \$0.79 | -\$4.65 | -\$1.43 | -\$0.81 | -\$2.00 | \$1.52 |
| 1,400 | 1,699 | -\$1.03 | -\$1.06 | \$4.21 | \$1.70 | -\$0.05 | -\$0.84 | -\$0.40 | \$2.50 |
| 1,700 | 1,999 | \$0.84 | -\$2.51 | \$6.08 | \$0.85 | \$0.38 | -\$0.86 | -\$1.54 | \$2.82 |
| 2,000 | 2,399 | \$8.81 | \$0.68 | \$12.56 | \$0.63 | \$0.06 | -\$0.93 | -\$1.45 | \$3.61 |
| 2,400 | 2,799 | \$10.62 | \$5.45 | \$13.77 | \$1.84 | \$2.52 | -\$0.71 | \$0.25 | \$4.37 |
| 2,800 | 3,199 | \$15.24 | \$11.14 | \$12.53 | \$0.97 | \$0.67 | \$0.10 | -\$0.40 | \$2.21 |
| 3,200 | 3,599 | \$13.96 | \$10.87 | \$7.15 | \$0.92 | \$1.13 | \$0.11 | -\$0.99 | \$1.70 |
| 3,600 | 3,999 | \$23.65 | \$18.83 | \$21.94 | \$6.97 | \$5.05 | \$0.06 | -\$0.76 | \$3.05 |
| 4,000 | 4,499 | \$37.21 | \$39.42 | \$38.86 | \$18.39 | \$11.30 | \$0.94 | \$0.54 | \$4.56 |
| 4,500 | 5,199 | \$31.07 | \$34.99 | \$43.21 | \$18.88 | \$10.34 | \$0.86 | -\$1.76 | \$4.63 |
| 5,200 | 6,199 | \$51.65 | \$53.72 | \$60.43 | \$34.00 | \$19.90 | \$2.00 | \$0.17 | \$8.34 |
| 6,200 | 7,499 | \$85.06 | \$87.38 | \$102.16 | \$67.63 | \$35.96 | \$2.67 | \$1.07 | \$16.51 |
| 7,500 | + | \$134.78 | \$101.77 | \$129.86 | \$74.56 | \$69.93 | \$10.30 | \$12.19 | \$39.13 |

Source: STR, Inc.

Market Impacts by Event Type

Different types of events have different impacts to the local hotel market. In the following section, we have examined the impact of events hosted at the City Convention Center, as well as the RevPAR impact for select event types. The event types that were analyzed are many of the segments that generated the most placed rooms over the examined period. The chart below presents the RevPAR premium for each market zone, when the City Convention & Visitors Bureau books convention center events of 50 or more daily placed rooms.

RevPAR Premium for Convention Center Events

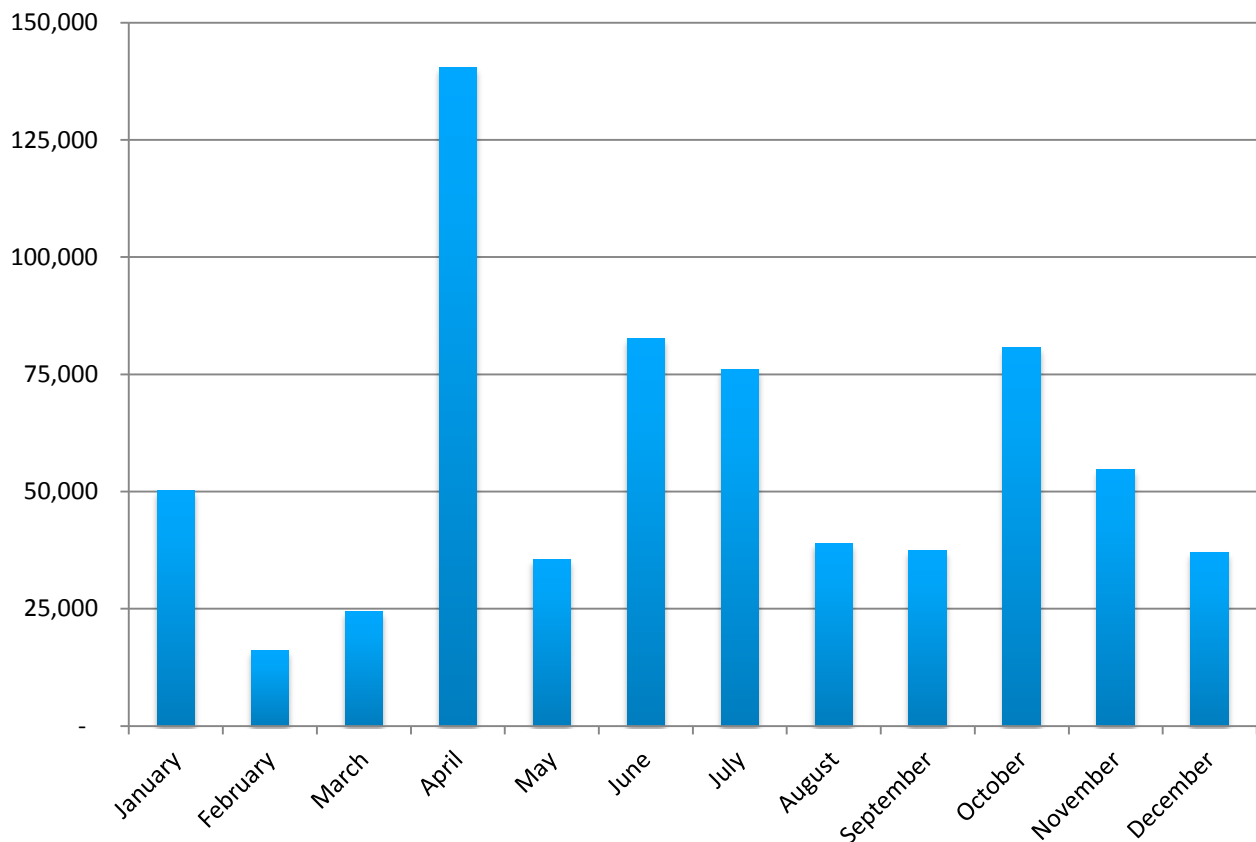


Source: STR, Inc.

- The City, State hotel market realized a +8.0% increase in RevPAR over baseline on days when events were booked at the City Convention Center.
- The Zone 3 and Zone 1s realized the greatest increase in RevPAR (+18.8% and +16.4%), when events were booked at the convention center.
- All of the other zones also benefited from convention center events. The Zone 2, Zone 4, Zone 5, and Zone 8s all experienced RevPAR gains of at least +6.0%.

The monthly distribution of room placements for events hosted by the City Convention Center is shown below. The chart illustrates the total room placements for the two-year period studied.

Room Placements - Convention Center

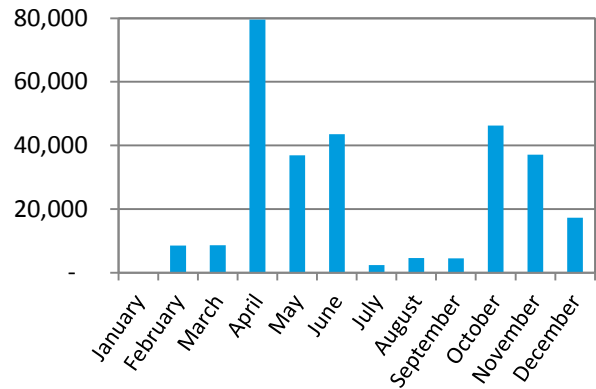
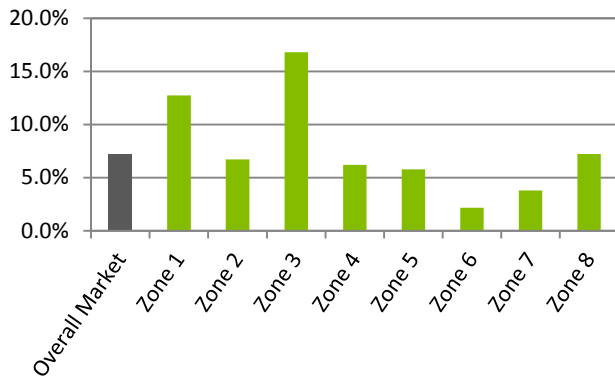


Source: City Convention & Visitors Bureau

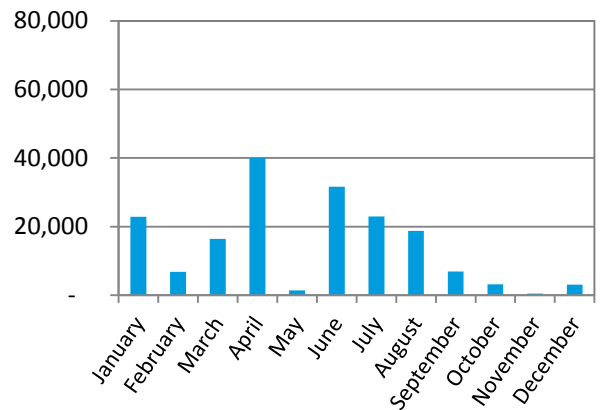
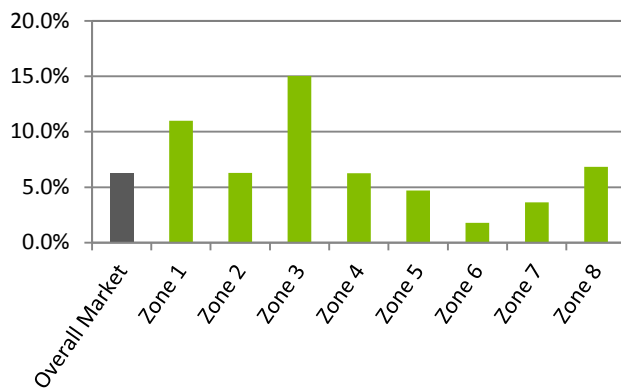
- April is by far the busiest month for room placements from events held at the City Convention Center. June, July, and October are also big months for convention center room placements.
- February is the slowest month for convention center room placements, along with March.

The RevPAR impacts of the following event types are illustrated in the charts below. The monthly distribution of room placements for each event type is also shown.

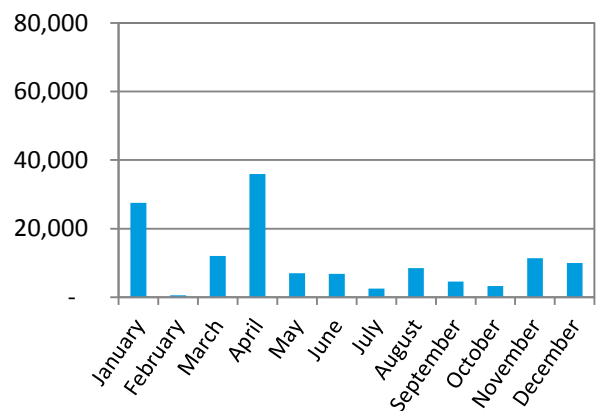
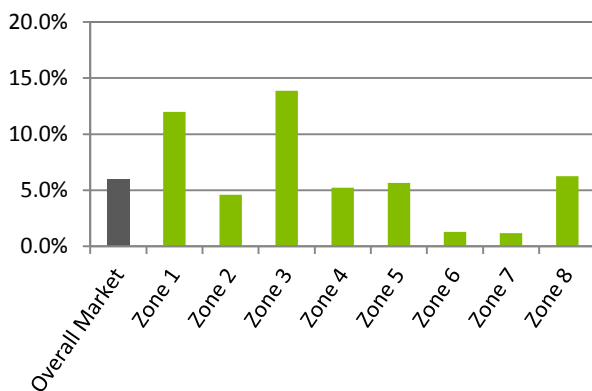
Segment 1



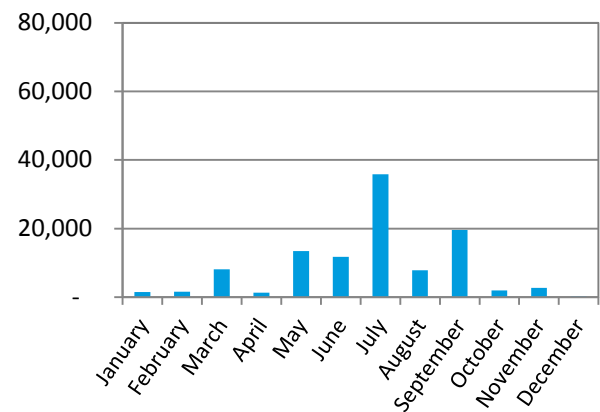
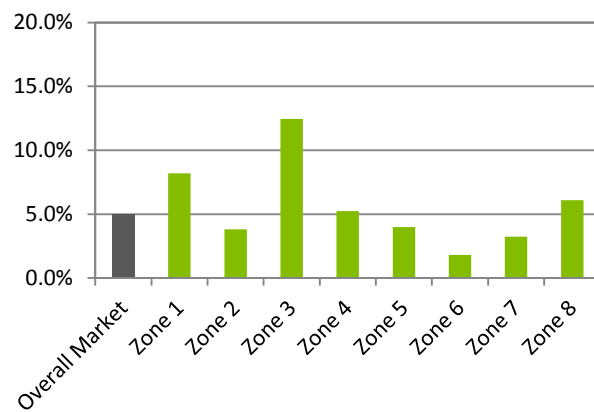
Segment 2



Segment 3



Segment 4



Source: STR, Inc. and City Convention & Visitors Bureau

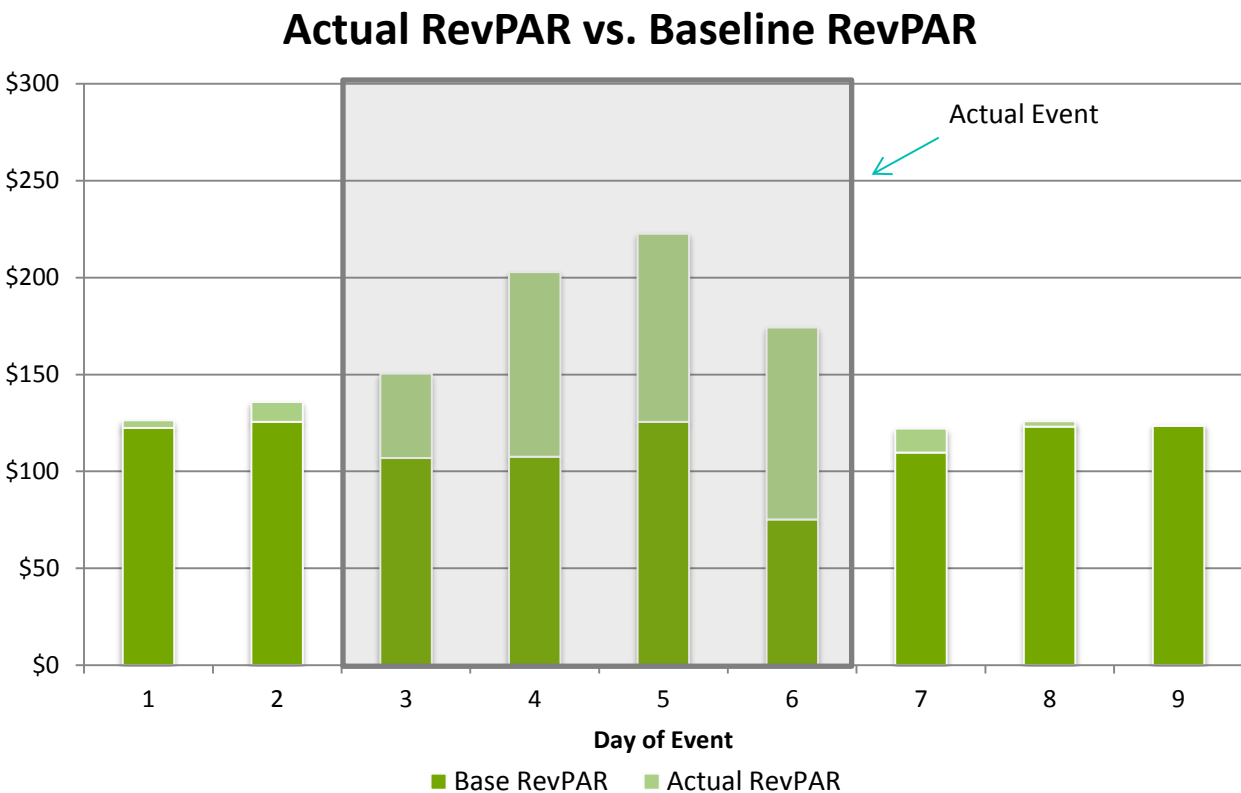
Selected observations from the charts above and on the previous pages:

- Segment 1 had the greatest RevPAR impact of the event segments analyzed.
- All of the other segments show a similar pattern of RevPAR impact for the different zones. Also, all zones experienced a RevPAR increase for each of the four event segments.
- The most room placements of the four segments were in Segment 1, with nearly 80,000 rooms placed.

Special Event Analysis

Special Event

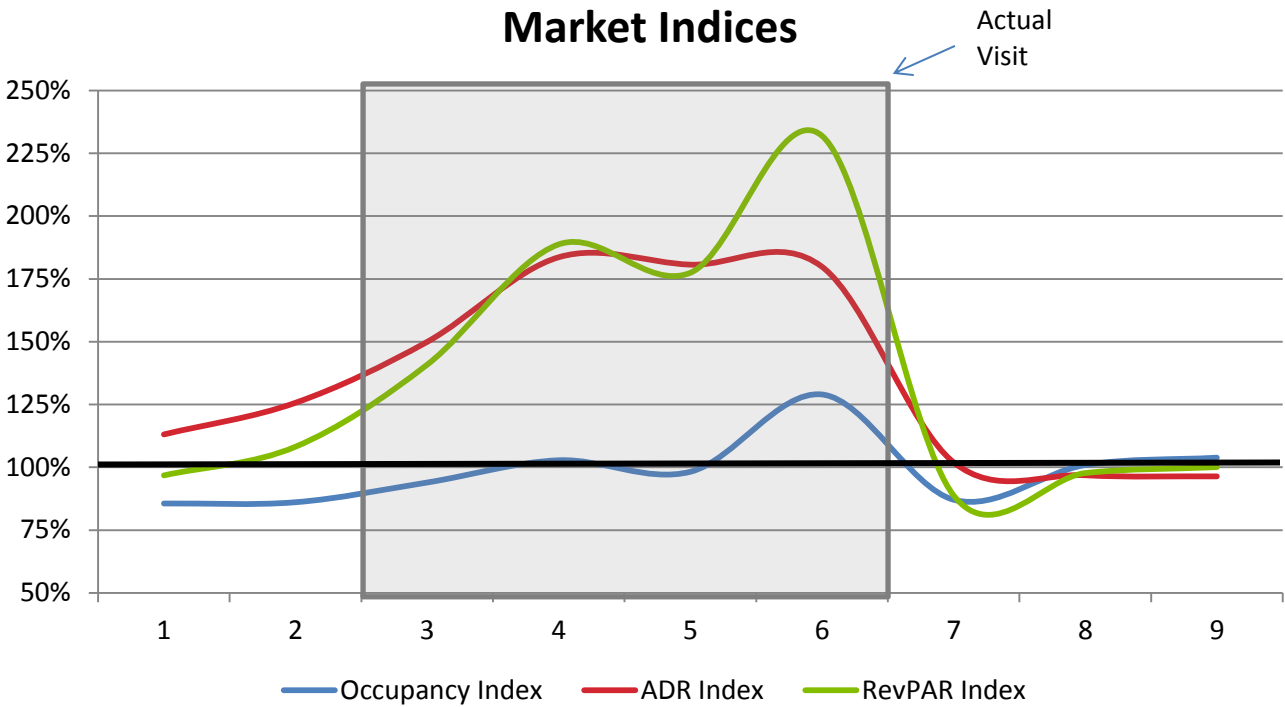
The most noteworthy event hosted in City, State during the time period analyzed was the Special Event, which took place on Date, Date. The impact of this event on the local hotel market was tremendous. The chart below illustrates the historical baseline RevPAR and actual RevPAR for the market before, during, and after the Special Event.



Source: STR, Inc.

As detailed in the methodology, the baseline RevPAR for each day is based on four years of daily data, and adjusted for day of the week and market improvement trends. The baseline RevPAR for these x days ranged from \$ to \$\$\$. The actual RevPAR for the entire market during these days ranged from \$ to \$\$.

The chart below shows the occupancy, ADR, and RevPAR indices for the entire event period. An index of 100% indicates that the market performed at normal levels for that specific day.

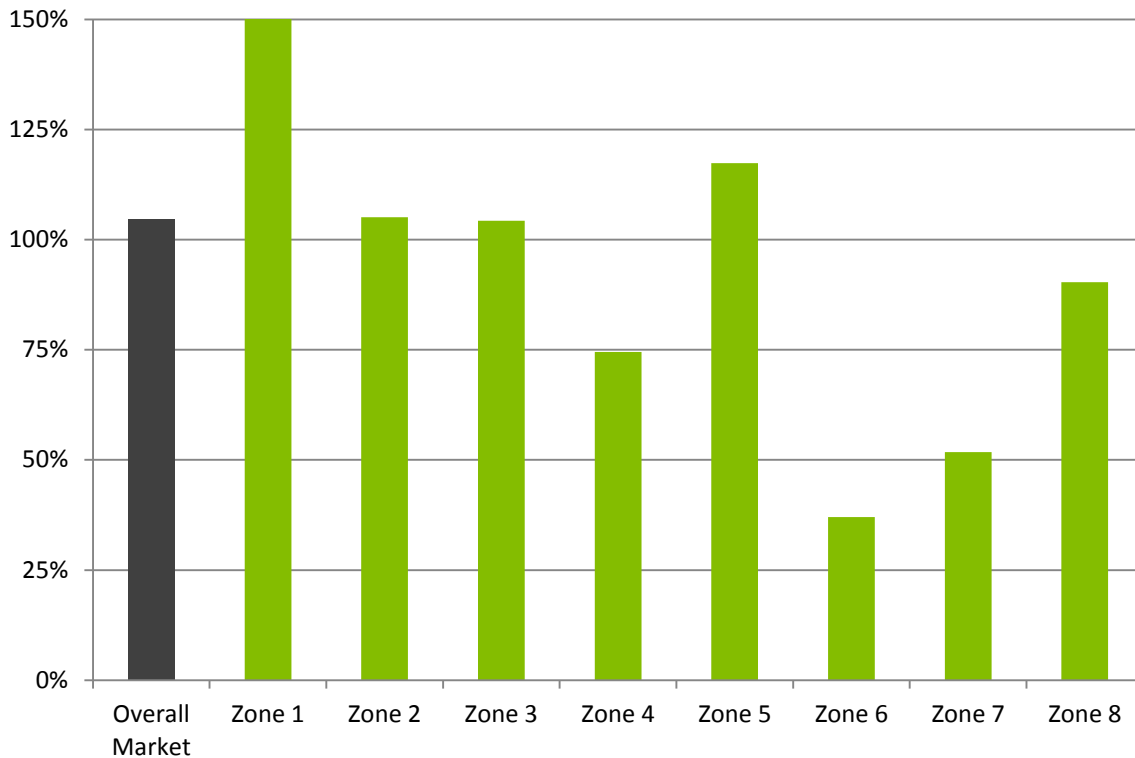


Source: STR, Inc.

Chart explanation

We also examined the impact of the event to the each of the individual market zones. The RevPAR impact for the two-day period of the actual visit is illustrated on the following chart.

RevPAR Premium by Market Zone



Source: STR, Inc.

The Zone 1 experienced the greatest RevPAR increase of +200% during the two days of the Special Event. All of the other market zones were strongly impacted by the event as well, especially the Zone 2, Zone 3, Zone 5, and Zone 8s. All of these market zones experienced RevPAR increases of over +75% during the two days of the Special Event. The market zone with the least RevPAR impact was the Zone 6, which still experienced a RevPAR increase of +35.6%.

Conclusions

This study has shown that bookings placed by the City Convention & Visitors Bureau significantly impact hotel performance in all geographic regions of the greater City, State market area.

Some key findings are summarized below:

- When the City Convention & Visitors Bureau books more than 824 daily room nights, the overall hotel market's RevPAR begins to surpass baseline RevPAR levels for the market.
- For every 500 additional daily rooms that are placed to the City Convention & Visitors Bureau, there is an increase of roughly +3.8% in average daily RevPAR to the market as a whole.
- A market-wide critical threshold in terms of RevPAR impact occurred when the City Convention & Visitors Bureau placed over 1,400 daily rooms.
- While the Zone 1 and Zone 3s are impacted the most, all zones of the hotel market eventually experienced positive RevPAR impact with increasingly larger placement room counts.
- As room placements increase, hotels in the Zone 1 and Zone 3s show the greatest percentage increases in RevPAR over their daily baseline averages. Beyond these two zones, larger room block events next impact hotels located in the Zone 2, Zone 4, Zone 5, and Zone 8s.
- The events with the greatest impact to the local hotel market were those related to the Group x segment and the Group z segment. The Group y Administration segment events yielded the least impact of the event types analyzed.

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Appendix I: Definitions

Average daily rate (ADR): A measure of the average rate paid for rooms sold, calculated by dividing rooms revenue by rooms sold.

Chain Scale: An industry segmentation by which chain-affiliated hotels are grouped based on the national average room rate of that chain. There are seven chain scale segments: Luxury, Upper-Upscale, Upscale, Upper-Midscale, Midscale, Economy, and Independents.

Class: Class is an industry categorization that includes chain-affiliated and independent hotels. The class for a chain-affiliated hotel is the same as its chain scale. An independent hotel is assigned a class based on its ADR, relative to that of the chain-affiliated hotels in its market. There are six class segments: Luxury, Upper-Upscale, Upscale, Upper-Midscale, Midscale, and Economy.

Key Performance Indicator (KPI): A measure of hotel performance including occupancy, ADR, and RevPAR.

Occupancy: The percentage of available rooms that were sold during a specified period of time. Occupancy is calculated by dividing the number of rooms sold by the number of rooms available.

RevPAR: Revenue Per Available Room is calculated by dividing rooms revenue by the number of rooms available for a specified period. This provides a standardized way of measuring hotel performance, accounting for the size of the hotel or its number of rooms. RevPAR is the most complete KPI for the rooms department, because it accounts for both the occupancy and the ADR of the hotel.

Appendix II: Hotels Included in the Analysis

| Census ID | Property Name | City | Class | Zone |
|-----------|---------------|------|----------------------|--------|
| 39169 | Hotel 1 | City | Upscale Class | Zone 1 |
| 49259 | Hotel 2 | City | Economy Class | Zone 1 |
| 55365 | Hotel 3 | City | Upscale Class | Zone 1 |
| 42112 | Hotel 4 | City | Upper Midscale Class | Zone 1 |
| 39551 | Hotel 5 | City | Upscale Class | Zone 1 |
| 62434 | Hotel 6 | City | Upper Midscale Class | Zone 1 |
| 57401 | Hotel 7 | City | Upper Upscale Class | Zone 1 |
| 36071 | Hotel 8 | City | Luxury Class | Zone 1 |
| 28963 | Hotel 9 | City | Upper Upscale Class | Zone 1 |
| 42555 | Hotel 10 | City | Upscale Class | Zone 1 |
| 35792 | Hotel 11 | City | Luxury Class | Zone 1 |
| 11268 | Hotel 12 | City | Upper Upscale Class | Zone 1 |
| 63684 | Hotel 13 | City | Midscale Class | Zone 1 |
| 43147 | Hotel 14 | City | Upper Midscale Class | Zone 2 |
| 10050 | Hotel 15 | City | Upper Upscale Class | Zone 2 |
| 11113 | Hotel 16 | City | Upscale Class | Zone 2 |
| 27184 | Hotel 17 | City | Upper Upscale Class | Zone 2 |
| 462 | Hotel 18 | City | Upper Midscale Class | Zone 2 |
| 24106 | Hotel 19 | City | Upper Upscale Class | Zone 2 |
| 60241 | Hotel 20 | City | Upper Upscale Class | Zone 2 |
| 38883 | Hotel 21 | City | Economy Class | Zone 2 |
| 39241 | Hotel 22 | City | Luxury Class | Zone 2 |
| 461 | Hotel 23 | City | Upscale Class | Zone 2 |
| 51368 | Hotel 24 | City | Upscale Class | Zone 2 |
| 55978 | Hotel 25 | City | Upper Upscale Class | Zone 2 |
| 17598 | Hotel 26 | City | Upper Upscale Class | Zone 2 |
| 37061 | Hotel 27 | City | Upper Upscale Class | Zone 2 |
| 60660 | Hotel 28 | City | Upper Upscale Class | Zone 2 |
| 57929 | Hotel 29 | City | Luxury Class | Zone 3 |
| 62245 | Hotel 30 | City | Upper Upscale Class | Zone 3 |
| 13219 | Hotel 31 | City | Upper Upscale Class | Zone 3 |
| 58935 | Hotel 32 | City | Luxury Class | Zone 3 |
| 13216 | Hotel 33 | City | Upper Upscale Class | Zone 3 |
| 23478 | Hotel 34 | City | Luxury Class | Zone 3 |
| 460 | Hotel 35 | City | Upper Upscale Class | Zone 3 |
| 18154 | Hotel 36 | City | Upper Midscale Class | Zone 4 |
| 15248 | Hotel 37 | City | Upper Upscale Class | Zone 4 |
| 40528 | Hotel 38 | City | Upper Upscale Class | Zone 4 |

| | | | | |
|-------|----------|------|----------------------|--------|
| 20632 | Hotel 39 | City | Upper Midscale Class | Zone 4 |
| 22729 | Hotel 40 | City | Upper Upscale Class | Zone 4 |
| 38757 | Hotel 41 | City | Upper Upscale Class | Zone 4 |
| 3047 | Hotel 42 | City | Upper Upscale Class | Zone 4 |
| 61632 | Hotel 43 | City | Upscale Class | Zone 4 |
| 3408 | Hotel 44 | City | Upscale Class | Zone 5 |
| 39329 | Hotel 45 | City | Upper Upscale Class | Zone 5 |
| 53157 | Hotel 46 | City | Upscale Class | Zone 5 |
| 57646 | Hotel 47 | City | Upscale Class | Zone 5 |
| 5665 | Hotel 48 | City | Upscale Class | Zone 5 |
| 62531 | Hotel 49 | City | Upscale Class | Zone 5 |
| 6869 | Hotel 50 | City | Upscale Class | Zone 5 |
| 27613 | Hotel 51 | City | Upper Upscale Class | Zone 5 |
| 36552 | Hotel 52 | City | Economy Class | Zone 5 |
| 36153 | Hotel 53 | City | Economy Class | Zone 5 |
| 38032 | Hotel 54 | City | Upper Midscale Class | Zone 5 |
| 4666 | Hotel 55 | City | Upscale Class | Zone 5 |
| 37154 | Hotel 56 | City | Upper Midscale Class | Zone 5 |
| 29284 | Hotel 57 | City | Midscale Class | Zone 5 |
| 9883 | Hotel 58 | City | Upper Midscale Class | Zone 5 |
| 32091 | Hotel 59 | City | Upper Upscale Class | Zone 5 |
| 6052 | Hotel 60 | City | Midscale Class | Zone 5 |
| 27659 | Hotel 61 | City | Upper Upscale Class | Zone 5 |
| 64257 | Hotel 62 | City | Upscale Class | Zone 5 |
| 9539 | Hotel 63 | City | Upper Upscale Class | Zone 5 |
| 5808 | Hotel 64 | City | Upscale Class | Zone 5 |
| 9834 | Hotel 65 | City | Upper Midscale Class | Zone 5 |
| 7402 | Hotel 66 | City | Upper Upscale Class | Zone 5 |
| 27597 | Hotel 67 | City | Upscale Class | Zone 5 |
| 55628 | Hotel 68 | City | Upper Upscale Class | Zone 5 |
| 27530 | Hotel 69 | City | Upscale Class | Zone 5 |
| 469 | Hotel 70 | City | Upper Midscale Class | Zone 5 |
| 458 | Hotel 71 | City | Economy Class | Zone 6 |
| 466 | Hotel 72 | City | Upper Midscale Class | Zone 6 |
| 467 | Hotel 73 | City | Midscale Class | Zone 6 |
| 2294 | Hotel 74 | City | Economy Class | Zone 6 |
| 3415 | Hotel 75 | City | Midscale Class | Zone 6 |
| 4983 | Hotel 76 | City | Economy Class | Zone 6 |
| 5679 | Hotel 77 | City | Economy Class | Zone 6 |
| 9885 | Hotel 78 | City | Upscale Class | Zone 6 |
| 11594 | Hotel 79 | City | Upper Midscale Class | Zone 6 |

| | | | | |
|-------|-----------|------|----------------------|--------|
| 13206 | Hotel 80 | City | Upscale Class | Zone 6 |
| 13207 | Hotel 81 | City | Upscale Class | Zone 6 |
| 13227 | Hotel 82 | City | Midscale Class | Zone 6 |
| 18923 | Hotel 83 | City | Midscale Class | Zone 6 |
| 20748 | Hotel 84 | City | Economy Class | Zone 6 |
| 21647 | Hotel 85 | City | Economy Class | Zone 6 |
| 23481 | Hotel 86 | City | Upper Upscale Class | Zone 6 |
| 24582 | Hotel 87 | City | Upscale Class | Zone 6 |
| 26147 | Hotel 88 | City | Upper Midscale Class | Zone 6 |
| 26602 | Hotel 89 | City | Upper Midscale Class | Zone 6 |
| 27599 | Hotel 90 | City | Midscale Class | Zone 6 |
| 28744 | Hotel 91 | City | Upper Upscale Class | Zone 6 |
| 30015 | Hotel 92 | City | Upper Upscale Class | Zone 6 |
| 30600 | Hotel 93 | City | Economy Class | Zone 6 |
| 30601 | Hotel 94 | City | Economy Class | Zone 6 |
| 30602 | Hotel 95 | City | Economy Class | Zone 6 |
| 30604 | Hotel 96 | City | Economy Class | Zone 6 |
| 30605 | Hotel 97 | City | Economy Class | Zone 6 |
| 30606 | Hotel 98 | City | Economy Class | Zone 6 |
| 30607 | Hotel 99 | City | Economy Class | Zone 6 |
| 30608 | Hotel 100 | City | Economy Class | Zone 6 |
| 30609 | Hotel 101 | City | Economy Class | Zone 6 |
| 35586 | Hotel 102 | City | Midscale Class | Zone 6 |
| 36635 | Hotel 103 | City | Economy Class | Zone 6 |
| 36935 | Hotel 104 | City | Upper Midscale Class | Zone 6 |
| 38492 | Hotel 105 | City | Upper Midscale Class | Zone 6 |
| 40487 | Hotel 106 | City | Economy Class | Zone 6 |
| 40490 | Hotel 107 | City | Economy Class | Zone 6 |
| 40493 | Hotel 108 | City | Upper Upscale Class | Zone 6 |
| 40494 | Hotel 109 | City | Upper Midscale Class | Zone 6 |
| 42618 | Hotel 110 | City | Upper Midscale Class | Zone 6 |
| 42688 | Hotel 111 | City | Upper Midscale Class | Zone 6 |
| 43148 | Hotel 112 | City | Midscale Class | Zone 6 |
| 43162 | Hotel 113 | City | Upscale Class | Zone 6 |
| 43993 | Hotel 114 | City | Midscale Class | Zone 6 |
| 44238 | Hotel 115 | City | Midscale Class | Zone 6 |
| 44907 | Hotel 116 | City | Upscale Class | Zone 6 |
| 54686 | Hotel 117 | City | Upper Midscale Class | Zone 6 |
| 55082 | Hotel 118 | City | Upscale Class | Zone 6 |
| 58012 | Hotel 119 | City | Upscale Class | Zone 6 |
| 58381 | Hotel 120 | City | Upper Midscale Class | Zone 6 |

| | | | | |
|-------|-----------|------|----------------------|--------|
| 58638 | Hotel 121 | City | Upscale Class | Zone 6 |
| 61806 | Hotel 122 | City | Upscale Class | Zone 6 |
| 61989 | Hotel 123 | City | Upscale Class | Zone 6 |
| 63310 | Hotel 124 | City | Upper Midscale Class | Zone 6 |
| 63445 | Hotel 125 | City | Upscale Class | Zone 6 |
| 64938 | Hotel 126 | City | Luxury Class | Zone 6 |
| 441 | Hotel 127 | City | Upper Midscale Class | Zone 7 |
| 9540 | Hotel 128 | City | Upper Upscale Class | Zone 7 |
| 13258 | Hotel 129 | City | Upper Midscale Class | Zone 7 |
| 15495 | Hotel 130 | City | Upper Midscale Class | Zone 7 |
| 16127 | Hotel 131 | City | Upscale Class | Zone 7 |
| 18787 | Hotel 132 | City | Upper Midscale Class | Zone 7 |
| 19046 | Hotel 133 | City | Upscale Class | Zone 7 |
| 20639 | Hotel 134 | City | Upper Midscale Class | Zone 7 |
| 21567 | Hotel 135 | City | Upscale Class | Zone 7 |
| 25748 | Hotel 136 | City | Upscale Class | Zone 7 |
| 26348 | Hotel 137 | City | Upper Upscale Class | Zone 7 |
| 26580 | Hotel 138 | City | Upper Midscale Class | Zone 7 |
| 26615 | Hotel 139 | City | Economy Class | Zone 7 |
| 28238 | Hotel 140 | City | Upper Upscale Class | Zone 7 |
| 28728 | Hotel 141 | City | Upper Midscale Class | Zone 7 |
| 32511 | Hotel 142 | City | Upper Upscale Class | Zone 7 |
| 35463 | Hotel 143 | City | Economy Class | Zone 7 |
| 35890 | Hotel 144 | City | Upper Midscale Class | Zone 7 |
| 36006 | Hotel 145 | City | Upscale Class | Zone 7 |
| 36517 | Hotel 146 | City | Upper Midscale Class | Zone 7 |
| 37577 | Hotel 147 | City | Economy Class | Zone 7 |
| 37802 | Hotel 148 | City | Economy Class | Zone 7 |
| 38942 | Hotel 149 | City | Economy Class | Zone 7 |
| 40932 | Hotel 150 | City | Upscale Class | Zone 7 |
| 41422 | Hotel 151 | City | Upper Midscale Class | Zone 7 |
| 42514 | Hotel 152 | City | Upscale Class | Zone 7 |
| 43161 | Hotel 153 | City | Midscale Class | Zone 7 |
| 48934 | Hotel 154 | City | Economy Class | Zone 7 |
| 49152 | Hotel 155 | City | Economy Class | Zone 7 |
| 49213 | Hotel 156 | City | Economy Class | Zone 7 |
| 56714 | Hotel 157 | City | Upscale Class | Zone 7 |
| 57716 | Hotel 158 | City | Upper Midscale Class | Zone 7 |
| 58719 | Hotel 159 | City | Economy Class | Zone 7 |
| 59990 | Hotel 160 | City | Upper Midscale Class | Zone 7 |
| 61619 | Hotel 161 | City | Upscale Class | Zone 7 |

| | | | | |
|-------|-----------|------|----------------------|--------|
| 62016 | Hotel 162 | City | Upper Midscale Class | Zone 7 |
| 62996 | Hotel 163 | City | Upscale Class | Zone 7 |
| 64948 | Hotel 164 | City | Upscale Class | Zone 7 |
| 470 | Hotel 165 | City | Upper Midscale Class | Zone 8 |
| 4526 | Hotel 166 | City | Economy Class | Zone 8 |
| 6739 | Hotel 167 | City | Economy Class | Zone 8 |
| 7929 | Hotel 168 | City | Upper Midscale Class | Zone 8 |
| 7932 | Hotel 169 | City | Upper Midscale Class | Zone 8 |
| 10096 | Hotel 170 | City | Midscale Class | Zone 8 |
| 13221 | Hotel 171 | City | Upscale Class | Zone 8 |
| 18952 | Hotel 172 | City | Upper Midscale Class | Zone 8 |
| 19606 | Hotel 173 | City | Upper Midscale Class | Zone 8 |
| 23270 | Hotel 174 | City | Economy Class | Zone 8 |
| 27470 | Hotel 175 | City | Economy Class | Zone 8 |
| 27659 | Hotel 176 | City | Upper Upscale Class | Zone 8 |
| 28196 | Hotel 177 | City | Economy Class | Zone 8 |
| 29805 | Hotel 178 | City | Economy Class | Zone 8 |
| 30700 | Hotel 179 | City | Upper Midscale Class | Zone 8 |
| 32508 | Hotel 180 | City | Midscale Class | Zone 8 |
| 41544 | Hotel 181 | City | Economy Class | Zone 8 |
| 43145 | Hotel 182 | City | Upscale Class | Zone 8 |
| 46723 | Hotel 183 | City | Economy Class | Zone 8 |
| 48421 | Hotel 184 | City | Economy Class | Zone 8 |
| 51383 | Hotel 185 | City | Economy Class | Zone 8 |
| 53076 | Hotel 186 | City | Midscale Class | Zone 8 |
| 54781 | Hotel 187 | City | Economy Class | Zone 8 |
| 55939 | Hotel 188 | City | Upscale Class | Zone 8 |
| 57299 | Hotel 189 | City | Upper Midscale Class | Zone 8 |
| 58065 | Hotel 190 | City | Upper Midscale Class | Zone 8 |
| 60434 | Hotel 191 | City | Upscale Class | Zone 8 |
| 61468 | Hotel 192 | City | Upper Midscale Class | Zone 8 |
| 62737 | Hotel 193 | City | Upscale Class | Zone 8 |
| 64574 | Hotel 194 | City | Economy Class | Zone 8 |