

GREATER PHILADELPHIA TOURISM IMPACT 2017: DETAILED REPORT

September 2018

FINAL REPORT SUBMITTED TO:
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DETAILED 2017 VISITATION AND ECONOMIC IMPACT RESULTS

Econsult Solutions Inc. (ESI) has been commissioned by Visit Philadelphia to quantify and contextualize the volume and impact of visitor activity in the Greater Philadelphia region on an annual basis. This includes the level and trends of visitation to the region, direct spending by those visitors, total economic output associated with that spending, and employment and tax revenue impacts from this economic activity.

This report expands upon previously released regional visitation and impact figures for calendar year 2017 to provide additional statistical detail and additional context for these results. The report proceeds in six chapters:

1. Visitation to Greater Philadelphia
2. Visitor Spending
3. Visitation and Spending Trends
4. Economic Impact and Tax Revenue Generated
5. Employment Impact
6. Neighborhood Impact

The appendix documents the methodology utilized to arrive at visitation and economic impact figures.

1.0 VISITATION TO GREATER PHILADELPHIA

Each year, millions of travelers visit the Greater Philadelphia region.¹ This section reviews visitation to Greater Philadelphia for 2017,² presenting visitation estimates in total and then segmenting these visitors in a variety of ways, including:

- Visitor point of origin (domestic and international)
- Visitor segment (leisure and business, day and overnight)
- Area of visitation (city and suburbs)
- Seasonality of visitation

1.1 TOTAL VISITATION

Greater Philadelphia welcomed 43.3 million domestic visitors in 2017. Including international visitors, total visitation was 44.5 million (see Table 1.1).

- Domestic visitors represented the vast majority of total visitation, numbering more than 43 million and growing by 3%.
- More than 500,000 visitors came from Canada and Mexico, an increase of more than 2%.
- Another 648,000 visitors came from overseas, a slight increase over 2016.

TABLE 1.1 - VISITATION TO GREATER PHILADELPHIA 2016-2017

| Visitor Type | 2017 Visitation | 2016 Visitation | % Chg |
|-----------------|----------------------|----------------------|---------------|
| Domestic | 43.29 million | 42.02 million | + 3.0% |
| Canada / Mexico | 525,000 | 514,000 | + 2.1% |
| Overseas | 648,000 | 644,000 | + 0.6% |
| Total | 44.46 million | 43.18 million | + 3.0% |

Source: Econsult Solutions, Inc. (Domestic), Tourism Economics via PHLCVB (International)

¹ Throughout this report, "Greater Philadelphia" refers to the 5-County region of Bucks, Chester, Delaware, Montgomery, and Philadelphia counties in Southeastern Pennsylvania.

² This analysis adopts the definition of a visit employed by Longwoods International in their Travel USA® panel survey, which defines overnight and day trips as follows:

- An overnight trip is any journey for business or pleasure outside your community and not part of your normal routine, where you spend one or more nights away from home.

- A day trip is any journey for business or pleasure, outside your community and not part of your normal routine that did not include an overnight stay. Day trips involve travel of more than 50 miles from home.

Total trip volume is measured in "person-trips," which are defined as one trip taken by one visitor (inclusive of both day and overnight trips)

1.2 DOMESTIC VISITATION BY SEGMENT

Domestic visitation to Philadelphia is estimated through an “index model,” which utilizes direct industry and economic inputs in combination to generate visitation estimates.³ Table 1.2 below shows domestic visitation by segment for 2017, and percentage growth relative to 2016.

- Total domestic visitor volume is estimated at 43.3 million, an increase of 3% from 42.0 million in 2016.
- Growth is relatively consistent across all visitor segments.

TABLE 1.2 - DOMESTIC VISITATION TO GREATER PHILADELPHIA 2016-2017 (IN MILLIONS)

| Year | Total | Overnight Leisure | Overnight Business | Day Leisure | Day Business | Overnight | Day | Leisure | Business |
|-------|-------|-------------------|--------------------|-------------|--------------|-----------|-------|---------|----------|
| 2017 | 43.29 | 15.07 | 2.33 | 23.09 | 2.80 | 17.40 | 25.89 | 38.16 | 5.13 |
| 2016 | 42.02 | 14.65 | 2.26 | 22.35 | 2.76 | 16.91 | 25.11 | 37.00 | 5.02 |
| % Chg | 3.0% | 2.9% | 3.1% | 3.3% | 1.4% | 2.9% | 3.1% | 3.1% | 2.2% |

Source: Econsult Solutions, Inc. Longwoods International

Greater Philadelphia combines city and suburban experiences. Table 1.3 below shows the share of regional visitors that visit the City of Philadelphia during their trip.

- Out of the 43 million domestic visitors to the region, 27 million (or 62%) visited the City of Philadelphia during their trip.
- The proportion of regional overnight visitors to the city (63%) is slightly higher than the proportion of day visitors to the city (61%).

TABLE 1.3 - DOMESTIC VISITATION TO GREATER PHILADELPHIA – CITY SHARE

| Trip Type | Total | Philadelphia | Philadelphia Share |
|---------------------------|--------------|--------------|--------------------|
| Day Visitors (M) | 25.89 | 15.98 | 61.7% |
| Overnight Visitors (M) | 17.40 | 11.00 | 63.2% |
| Domestic Total (M) | 43.29 | 26.98 | 62.3% |

Source: Econsult Solutions, Inc. Longwoods International

³ See Appendix A for more detail on the Greater Philadelphia Visitation index model.

Importantly, many trips include visits to more than one county, whether both the city and suburban counties or multiple counties within the suburbs. Therefore, the sum of visitation to all counties is larger than the unique visitation to the region. While 38% of visitors (or 16 million) visit only the suburban on their trip, total suburban visitation is larger due to the more than 10% of visitors who combine city and suburban destinations on their trip.

1.3 DOMESTIC VISITATION BY SEASON

Table 1.4 below shows 2017 visitation estimates by quarter and by segment relative to 2016.

- Robust growth is seen in both total visitation and overnight visitation in Q1 and Q4, (which represent the lowest quarters in overall visitation). This indicates that travel was more consistent (i.e. less seasonal) in 2017 than in prior years.
- A slight decline is seen in both total visitation and overnight visitation in Q3. This is likely associated with the Democratic National Convention (DNC) in July of 2016, which resulted in an unusually high visitation benchmark for summer 2016.

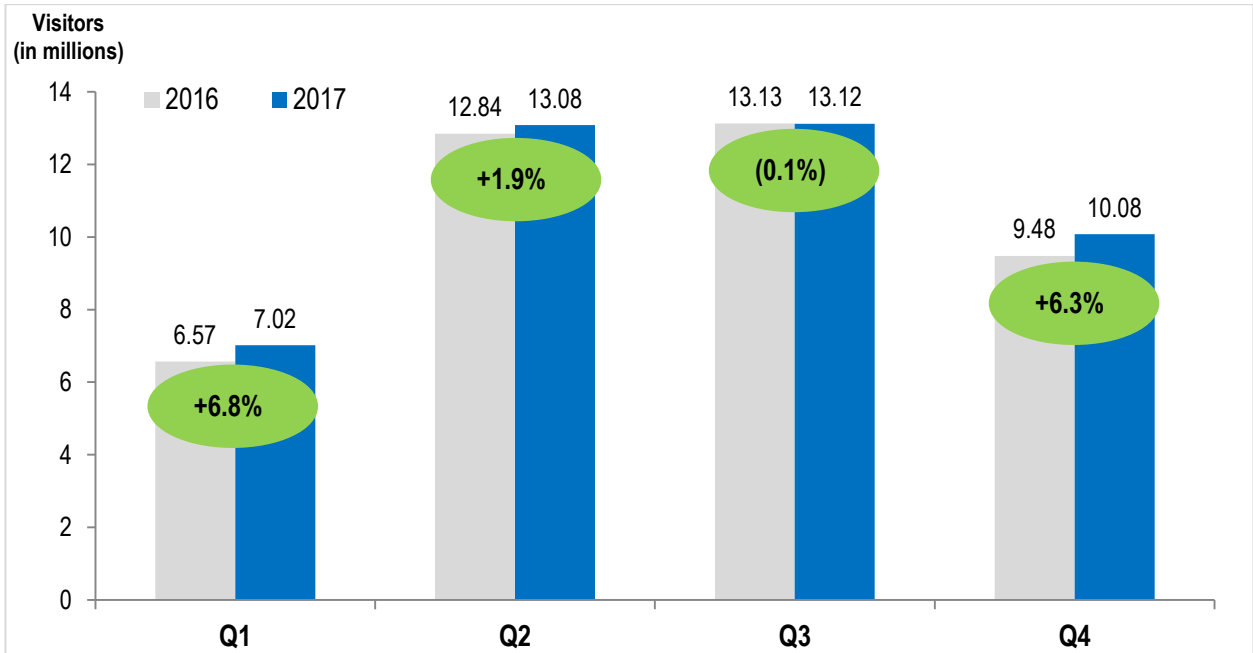
TABLE 1.4 - QUARTERLY DOMESTIC VISITATION TO GREATER PHILADELPHIA, 2016-2017 (IN MILLIONS)

| Quarter | Total | Overnight Leisure | Overnight Business | Day Leisure | Day Business | Overnight | Day | Leisure | Business |
|----------|--------|----------------------|-----------------------|----------------|-----------------|-----------|------|---------|----------|
| Q1 2017 | 7.02 | 2.37 | 0.55 | 3.37 | 0.73 | 2.92 | 4.10 | 5.74 | 1.28 |
| Q2 2017 | 13.08 | 4.52 | 0.63 | 7.23 | 0.70 | 5.15 | 7.93 | 11.75 | 1.33 |
| Q3 2017 | 13.12 | 4.67 | 0.56 | 7.18 | 0.70 | 5.23 | 7.88 | 11.85 | 1.26 |
| Q4 2017 | 10.08 | 3.51 | 0.59 | 5.31 | 0.67 | 4.10 | 5.98 | 8.82 | 1.26 |
| Q1 2016 | 6.57 | 2.22 | 0.52 | 3.15 | 0.68 | 2.74 | 3.83 | 5.37 | 1.20 |
| Q2 2016 | 12.84 | 4.44 | 0.62 | 7.10 | 0.68 | 5.06 | 7.78 | 11.53 | 1.30 |
| Q3 2016 | 13.13 | 4.74 | 0.56 | 7.10 | 0.73 | 5.30 | 7.83 | 11.84 | 1.29 |
| Q4 2016 | 9.48 | 3.25 | 0.56 | 5.00 | 0.67 | 3.81 | 5.67 | 8.25 | 1.23 |
| Q1 % Chg | 6.8% | 6.8% | 5.8% | 7.0% | 7.4% | 6.6% | 7.0% | 6.9% | 6.7% |
| Q2 % Chg | 1.9% | 1.8% | 1.6% | 1.8% | 2.9% | 1.8% | 1.9% | 1.8% | 2.3% |
| Q3 % Chg | (0.1%) | (1.5%) | 0.0% | 1.1% | (4.1%) | (1.3%) | 0.6% | 0.1% | (2.3%) |
| Q4 % Chg | 6.3% | 8.0% | 5.4% | 6.2% | 0.0% | 7.6% | 5.5% | 6.9% | 2.4% |

Source: Econsult Solutions, Inc. Longwoods International

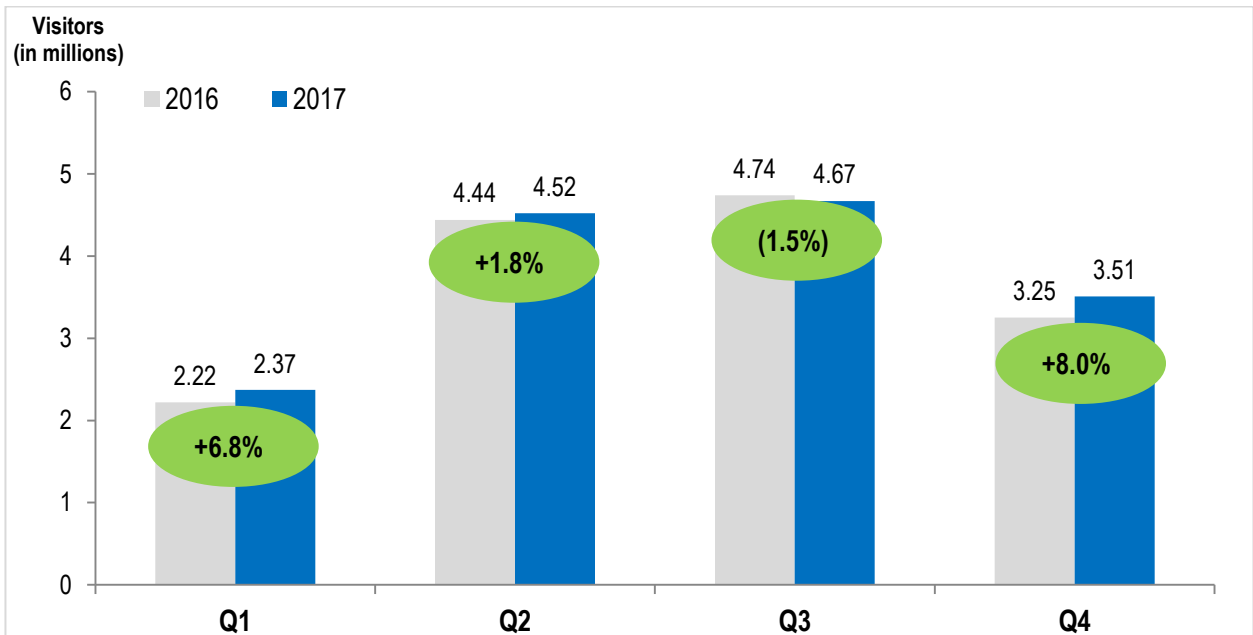
Figure 1.1 visualizes total domestic visitation by quarter and Figure 1.2 overnight leisure visitation by quarter.

FIGURE 1.1 – TOTAL DOMESTIC VISITATION TO GREATER PHILADELPHIA BY QUARTER (IN MILLIONS)



Source: Econsult Solutions, Inc. Longwoods International

FIGURE 1.2 – DOMESTIC OVERNIGHT LEISURE VISITATION TO GREATER PHILADELPHIA BY QUARTER (IN MILLIONS)



Source: Econsult Solutions, Inc. Longwoods International

1.4 INTERNATIONAL VISITATION

Visitors to the United States are frequently divided into those arriving from neighboring countries of Canada and Mexico and those arriving from all other destinations, which are grouped together as “overseas.” On a national level, Canada and Mexico are the largest origin markets for visitors, and combine to represent around half of international visitation, with overseas markets representing the other half.

Table 1.5 below shows estimated international visitation and spending in Greater Philadelphia by Canadian, Mexican, and Overseas visitors.

- Canadian visitation was 502,000, an increase of around 2%, while Canadian visitor spending fell slightly to \$177 million.
- Mexican visitation was 23,000, an increase of around 5%, but Mexican visitor spending fell by 14% to \$5 million.
- Overseas visitation increased slightly to 648,000 (up from 644,000 in 2016). Spending increased more materially, growing 7% to \$651 million.

TABLE 1.5 – INTERNATIONAL VISITATION AND SPENDING IN GREATER PHILADELPHIA

| Origin | Visitation | Direct Spending | Visitation % Chg from 2016 | Direct Spending % Chg from 2016 |
|----------------------------|----------------------|----------------------|-------------------------------|------------------------------------|
| Canada | 502,000 | \$177 million | + 2.1% | (2.9%) |
| Mexico | 23,000 | \$5 million | + 5.0% | (14.4%) |
| Overseas | 648,000 | \$651 million | + 0.6% | + 7.2% |
| International Total | 1.173 million | \$833 million | + 1.3% | + 1.7% |

Source: Tourism Economics via PHLCVB⁴

The increase in overseas visitor spending may be due in part to shifts in the composition of the source markets. In particular, visitation from China has grown significantly in recent years, and these visitors tend to have an elevated per visitor spending profile.

⁴ Estimates are produced by Tourism Economics for the PHLCVB, using an index modeling approach. These estimates differ from federal estimates produced by the National Travel and Tourism Office. These NTTTO estimates have yet to be released for 2017 due to “data anomalies” discovered in the quality control process, which may also result in revisions to 2016 NTTTO estimates.

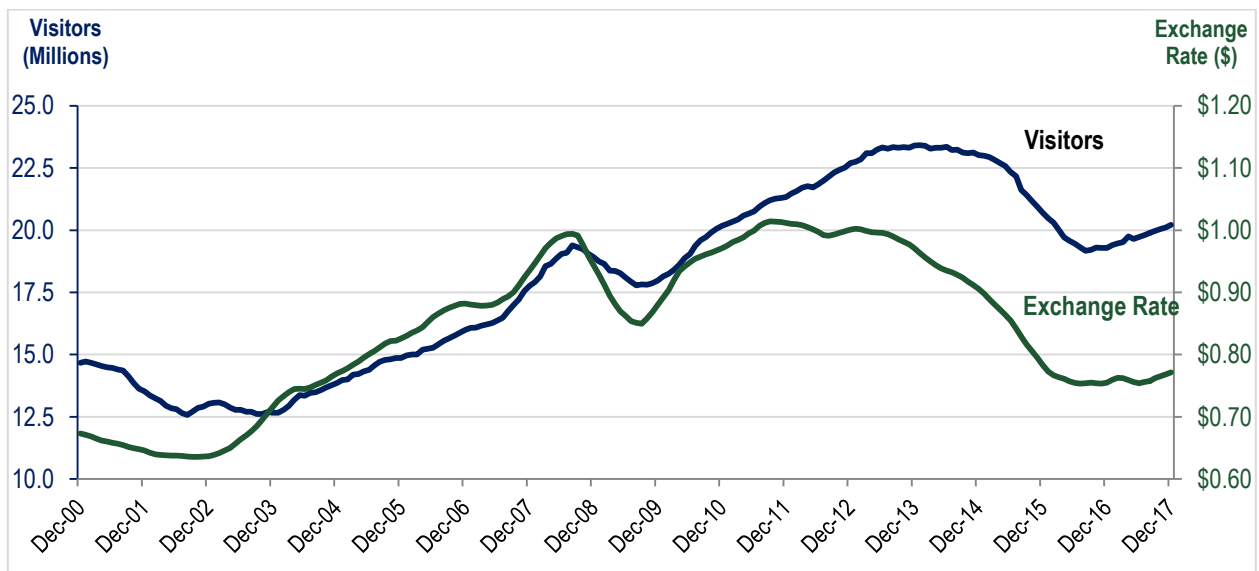
CANADIAN VISITATION

Canada is the largest international visitor market for the Greater Philadelphia region. In 2017, the region welcomed more than 500,000 Canadian visitors. This accounted for 43% of all international visitation to Greater Philadelphia.

Nationally, travel from Canada to the United States has grown from 15 million visitors in 2000 to more than 20 million in 2017. However, that growth has been cyclical, tracking closely with changes in the exchange rate that reflect the buying power of Canadian dollars in the United States (see Figure 1.3).

- The purchasing power of the Canadian dollar fell from around \$1.00 in U.S. dollars from 2011-2013 to between \$0.75 and \$0.80 by the end of 2015, leading to a significant drop in visitation to the U.S.
- Visitation began to recover in 2017 as the exchange rate stabilized, but remained below historic highs. The exchange rates ended 2017 at \$0.77, and remains at that level as of September 2018.

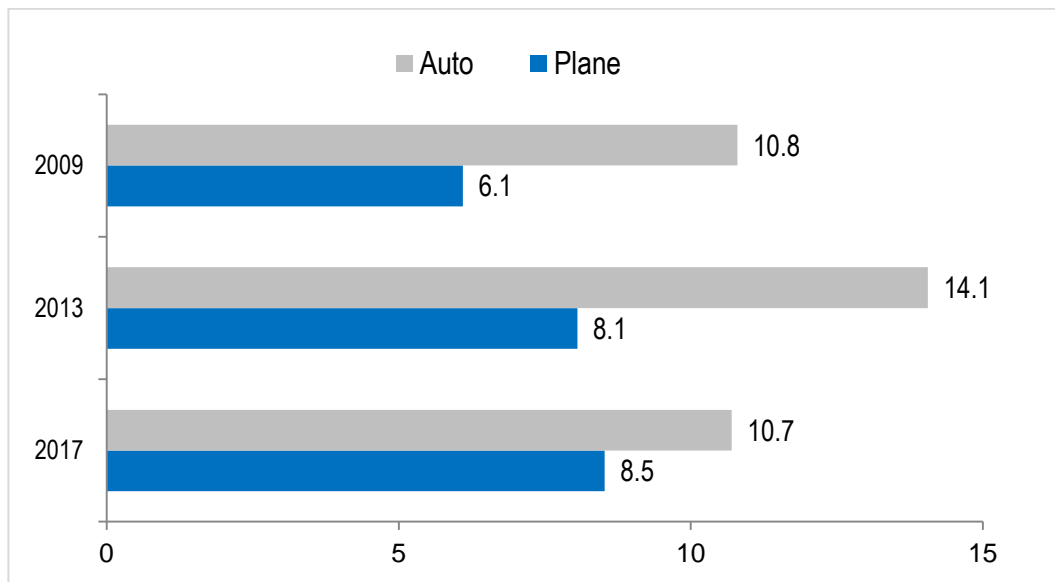
FIGURE 1.3 – CANADIAN VISITATION TO THE UNITED STATES AND CANADA/US EXCHANGE RATE, 2000-2017



Source: ESI Analysis of Statistics Canada data (based on rolling 12 month averages)

Declines in Canadian visitation to the U.S. since 2013 have come entirely from a reduction in car trips, which have declined to 2009 levels while air trips have continued to grow (see Figure 1.4).

FIGURE 1.4 – CANADIAN VISITATION TO UNITED STATES: AUTO VS. PLANE (IN MILLIONS)



Source: Statistics Canada

Industry experts cite declining relative air fare prices, increases in US border requirements, and reductions in day travel relative to overnight travel as factors driving this trend.⁵

MEXICAN VISITATION

Mexico is the second largest source of visitors to the United States, but has not typically been a large feeder market for Philadelphia. In 2017, Greater Philadelphia welcomed more than 23,000 Mexican visitors (as shown in Table 1.5 above).

Mexico ranks #7 among all international markets in visitation to Greater Philadelphia. However, expenditures per visitor from Mexico are around \$220, well below the average for overseas visitors of around \$1,000. As a result, Mexico ranks lower in aggregate visitor spending than in visitation.

In July 2018, American Airlines launched daily roundtrip service from PHL to Mexico City. The American Airlines flight has 128 seats, which will yield about 100 inbound passengers a day at projected occupancy rates, or 36,000 passengers per year. While this figure is not equivalent to new visitation (since it includes returning locals and connecting passengers), it has the potential to materially increase visitation from Mexico to Philadelphia. Airport and city officials have also cited increased business ties as a benefit of this direct air service, which could lead to potential opportunities for combined business / leisure trips.

⁵ See for example: Lotin, Henry, "International Travel to Canada: What in the World is it Telling Us?." *The Accidental Occidental Tourist*. <<https://theaccidentaloccidentaltourist.wordpress.com/2017/11/27/international-travel-to-canada-what-in-the-world-is-it-telling-us/>>

Mexico also has significant cultural and economic ties to the Philadelphia region:

- According to the Consulate of Mexico, the Philadelphia region has about 200,000 residents of Mexican heritage. This suggests considerable potential for visiting friends and relatives (VFR) travel with improved air service. This flow is complicated by current political tensions and immigration restrictions.
- Mexico is the second largest export market for trade from the Philadelphia region (behind only Canada), with \$2.6 billion in export activity per year according to the International Trade Administration.

The Mexico City metropolitan area has a population of more than 21 million, about 1/6 of the population of the country as a whole. The population of the city and region are similar in scale to New York, although the regional GDP is about 1/4 as high (see Table 1.6).

TABLE 1.6 – COMPARISON OF MEXICO CITY AND NEW YORK CITY METRO AREAS

| Origin | Mexico City | New York City |
|-----------------------|--------------------|----------------------|
| Metro Area Population | 21.6 million | 20.3 million |
| City Population | 8.8 million | 8.5 million |
| Regional GDP | \$411 billion | \$1.71 trillion |

Source: Mexico and US Gvt Population Data, Brookings Institution GDP Estimate (Mexico City), IHS GDP Estimate (New York City)

2.0 VISITOR SPENDING

Direct visitor spending reflects point of sale purchases by visitors within the Greater Philadelphia region. These expenditures are largely concentrated in five key sectors of the economy that directly serve visitors. This section reviews direct visitor spending in Greater Philadelphia in 2017, presenting expenditures in total and then segmented in a variety of ways, including:

- Spending by sector (i.e. industry)
- Spending by visitor segment (leisure and business, day and overnight)
- Spending by location (Philadelphia and suburbs)

2.1 DIRECT SPENDING BY SECTOR

Direct visitor spending totaled \$7.1 billion in 2017, an increase of 4.4% from 2016. This increase is composed of a 3% increase in the volume of visitors, and a 1.4% increase in expenditures per visitor.

Table 2.1 and Figure 2.1 below show the distribution of spending and growth by sector.⁶

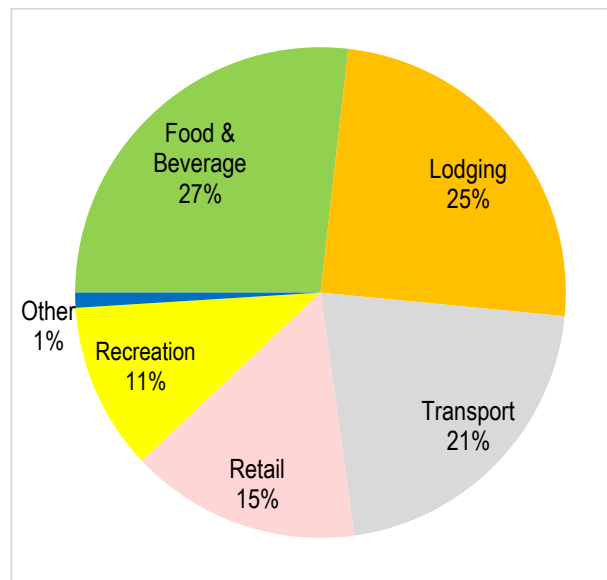
- Food and beverage, which represents the largest sector of the visitor economy at 27% of total spending, grew by nearly 5%.
- Lodging spending grew by around 2%, with growth in overnight stays offsetting a slight decrease in nightly rate (which was elevated in 2016 in part due to the DNC).
- Transportation spending grew by nearly 10% after two straight years of decline, as fuel prices returned to more typical levels.
- The retail and recreation sectors showed modest growth of around 2%, driven by increases in visitation rather than increased expenditures per visitor.

⁶ See Appendix B for further information on the methodology utilized to estimate visitor expenditures by sector.

TABLE 2.1 - GREATER PHILADELPHIA DIRECT VISITOR SPEND BY SECTOR, 2016-2017 (\$M)

| Sector | 2017 | 2016 | % Chg |
|-----------------|----------------|----------------|--------------|
| Food & Beverage | \$1,910 | \$1,820 | 4.9% |
| Lodging | \$1,762 | \$1,726 | 2.1% |
| Transportation | \$1,514 | \$1,380 | 9.7% |
| Retail | \$1,084 | \$1,065 | 1.8% |
| Recreation | \$786 | \$768 | 2.3% |
| Other | \$71 | \$67 | 4.7% |
| Total | \$7,125 | \$6,827 | 4.4% |

Source: Econsult Solutions, Inc. Longwoods International

FIGURE 2.1 – DISTRIBUTION OF DIRECT VISITOR SPEND BY SECTOR, 2017

Source: Econsult Solutions, Inc. Longwoods International

2.2 DIRECT SPENDING BY VISITOR TYPE

Table 2.2 below shows the distribution of visitor spending by sector by visitor type.

- Overnight visitors spend the largest portion of their travel budget on lodging, which accounts for 34% of the \$5.16 billion in total overnight visitor spending.
- Day visitors spend the largest portion on food and beverage, which accounts for 33% of the \$1.96 billion in day visitor spending. They also spend a large share (27%) on transportation.
- Leisure visitor spending of \$5.00 billion is relatively evenly distributed between the top spending categories of food & beverage (27%), transportation (24%) and lodging (22%).
- Business visitors spend 31% of their travel budget of \$2.12 billion on lodging.

TABLE 2.2 – DIRECT VISITOR SPENDING BREAKDOWN BY VISITOR TYPE, 2017

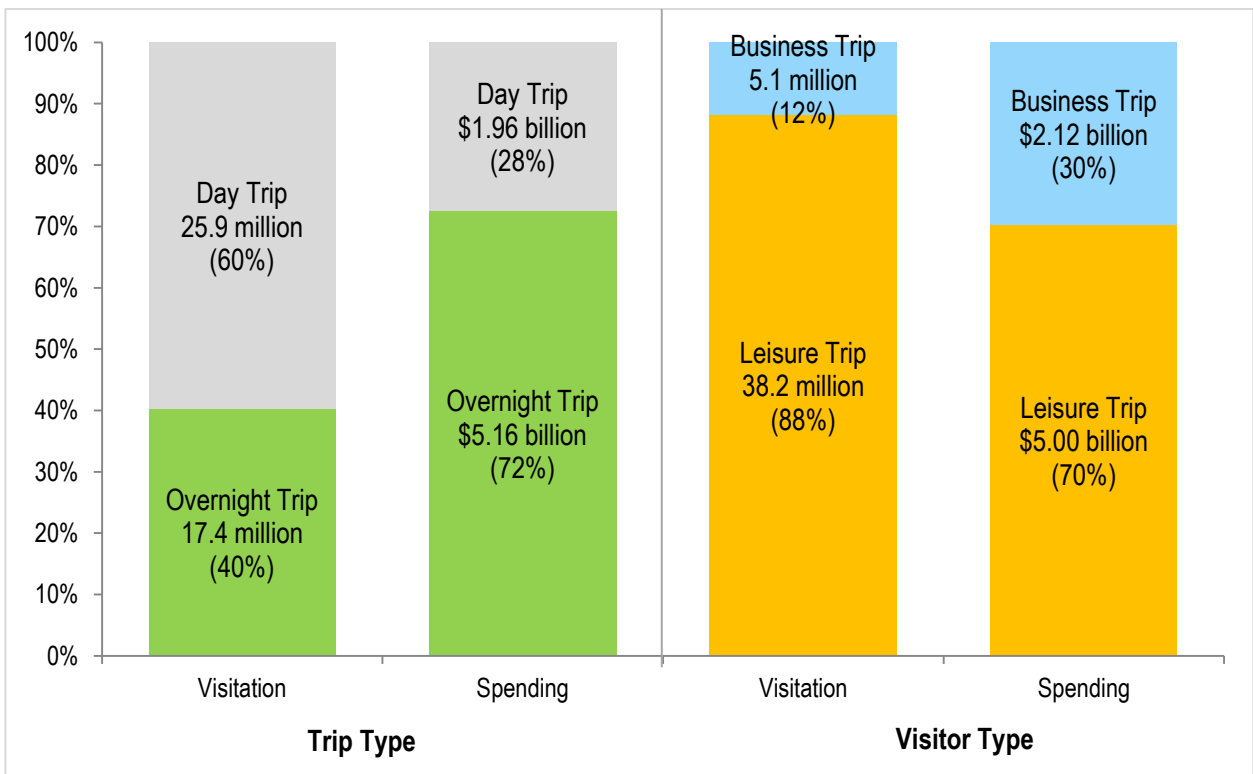
| Sector | Overnight | | Day | | Leisure | | Business | |
|------------------------|------------------|------------|------------------|------------|------------------|------------|------------------|------------|
| | 2017 Spend (\$M) | % of Spend | 2017 Spend (\$M) | % of Spend | 2017 Spend (\$M) | % of Spend | 2017 Spend (\$M) | % of Spend |
| Food & Beverage | \$1,257 | 24% | \$653 | 33% | \$1,348 | 27% | \$562 | 26% |
| Lodging | \$1,762 | 34% | \$0 | 0% | \$1,108 | 22% | \$654 | 31% |
| Transportation | \$975 | 19% | \$539 | 27% | \$1,183 | 24% | \$330 | 16% |
| Retail | \$645 | 13% | \$438 | 22% | \$758 | 15% | \$325 | 15% |
| Recreation | \$451 | 9% | \$334 | 17% | \$606 | 12% | \$180 | 8% |
| Other | \$71 | 1% | \$0 | 0% | \$0 | 0% | \$71 | 3% |
| Total | \$5,160 | | \$1,964 | | \$5,003 | | \$2,122 | |
| Visitors (M) | 17.40 | | 25.89 | | 38.16 | | 5.13 | |
| Spend per Visitor (\$) | \$297 | | \$76 | | \$131 | | \$414 | |

Source: Econsult Solutions, Inc. Longwoods International

Figure 2.2 below compares the proportion of visitation and spending by day and overnight visitors and by leisure and business visitors:

- Overnight visitors comprise less than half of total visitors but contribute the majority (72%) of visitor spending. Overnight visitors lead to hotel room nights, and have a greater length of time to frequent the region’s attractions, restaurants and shops, leading to a larger spending footprint per visitor.
- Leisure travelers make up the vast majority of visitors to Greater Philadelphia, and contribute the majority (70%) of visitor spending.

FIGURE 2.2 – COMPARISON OF VISITATION AND SPENDING BY VISITOR AND TRIP TYPE, 2017



Source: Econsult Solutions, Inc. Longwoods International

Table 2.3 divides expenditures by location within Greater Philadelphia (City of Philadelphia or suburban counties) and visitor type.

- In aggregate, 58% of expenditures (\$4.1 billion) take place in the City of Philadelphia, and 42% (\$3.0 billion) in the suburban counties.
- Expenditures for overnight visitors to the city were \$3.0 billion.
- Expenditures for leisure visitors to the city \$2.9 billion.

TABLE 2.3 – DIRECT VISITOR SPENDING BREAKDOWN BY VISITOR TYPE AND LOCATION

| Trip Type | Visitor Spending | Share of Total Spending | Visitor Type | Visitor Spending | Share of Total Spending |
|---------------------|-----------------------|-------------------------|--------------------|------------------|-------------------------|
| Overnight – City | \$3.02 billion | 42.4% | Leisure – City | \$2.88 billion | 40.3% |
| Overnight – Suburbs | \$2.14 billion | 30.1% | Leisure – Suburbs | \$2.13 billion | 29.9% |
| Day – City | \$1.10 billion | 15.5% | Business – City | \$1.25 billion | 17.5% |
| Day – Suburbs | \$0.86 billion | 12.1% | Business – Suburbs | \$0.87 billion | 12.3% |
| Total | \$7.13 billion | | | | |
| City | \$4.12 billion | 57.9% | | | |
| Suburbs | \$3.00 billion | 42.1% | | | |

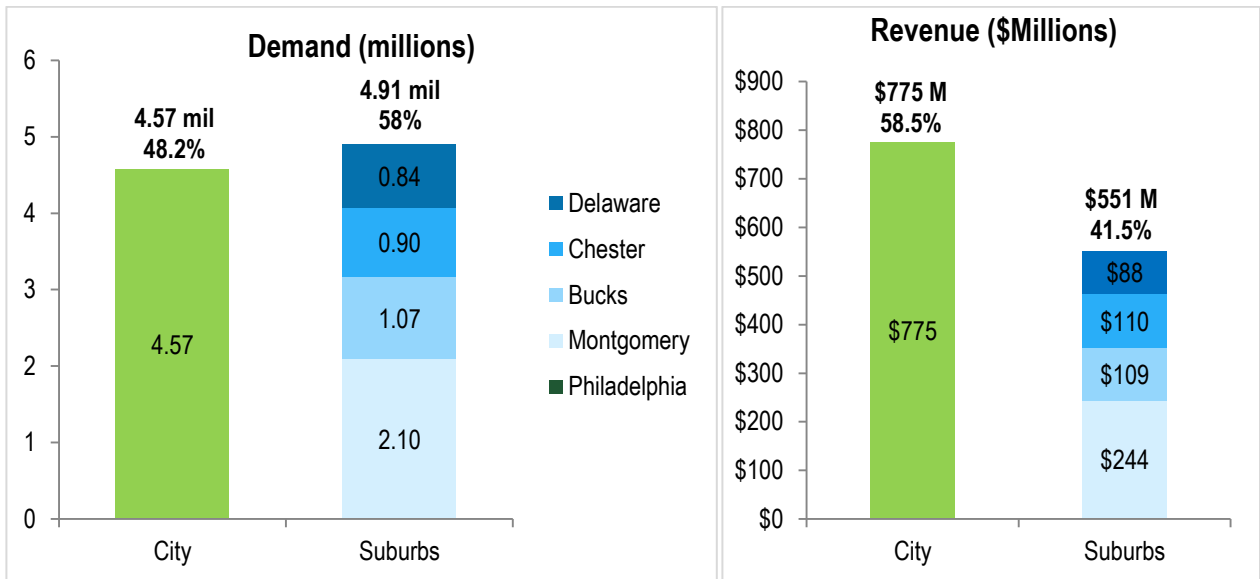
Source: Econsult Solutions, Inc. Longwoods International

Rows and columns may not sum exactly due to rounding

This distribution of spending between city and suburbs is consistent with hotel expenditure data reported by Smith Travel Research (STR). Figure 2.3 below shows the distribution of hotel room nights and hotel revenue by county for 2017.

- A slight majority of hotel room nights (52%) take place in the suburban counties.
- However, the majority of hotel revenue (58%) is generated in the city, due to a significantly higher average daily rate (\$170 in the city compared to \$112 in the suburban counties).

FIGURE 2.3 – HOTEL DEMAND AND HOTEL REVENUE BY COUNTY, 2017 (IN MILLIONS)



Source: ESI Analysis of Smith Travel Research Data

3.0 VISITATION AND SPENDING TRENDS

Regional visitation and visitor spending have been tracked by ESI and previously by Tourism Economics through a consistent time series and with consistent input data from Longwoods International over a number of years. This section reviews comparisons of visitation and spending trends over time, including:

- Domestic visitation in total and by visitor segment
- Visitor spending by visitor type and compared to national benchmarks
- Visitor spending by sector

3.1 VISITATION TREND

2017 represents the 8th consecutive year of visitation growth for Greater Philadelphia since a recession-driven low in 2009. Table 3.1 below shows total and annual growth rates in visitation by segment for this period.

- The estimated growth rate of 3.0% for total domestic visitation for 2017 exceeds the average annual growth rate of 2.3% over the 2009-2017 period. The rate of growth in 2017 was faster than the rate in five of the past six years (all but 2015).

TABLE 3.1 – ANNUAL GROWTH RATES IN DOMESTIC VISITATION BY SEGMENT, 2009-2017

| Year | Total | Overnight Leisure | Overnight Business | Day Leisure | Day Business |
|----------------------|-------|----------------------|-----------------------|----------------|-----------------|
| 2009 | 36.01 | 11.35 | 1.80 | 20.50 | 2.36 |
| % Chg 2010 | 4.4% | 10.9% | 7.2% | 0.8% | 2.5% |
| % Chg 2011 | 0.9% | 2.2% | 3.6% | (0.2%) | 1.7% |
| % Chg 2012 | 2.1% | 2.0% | 4.5% | 1.7% | 4.1% |
| % Chg 2013 | 0.7% | 2.5% | 0.5% | (0.4%) | 0.4% |
| % Chg 2014 | 2.0% | 3.3% | 3.3% | 1.1% | 1.2% |
| % Chg 2015 | 3.2% | 2.7% | 1.4% | 3.6% | 3.5% |
| % Chg 2016 | 2.4% | 2.6% | 2.8% | 2.1% | 2.6% |
| % Chg 2017 | 3.0% | 2.9% | 3.1% | 3.3% | 1.4% |
| 2017 | 43.25 | 15.11 | 2.34 | 23.01 | 2.79 |
| Growth 2009-2017 (#) | 7.28 | 3.72 | 0.53 | 2.59 | 0.44 |
| Growth 2009-2017 (%) | 20.2% | 32.8% | 29.4% | 12.6% | 18.6% |
| Annual Growth Rate | 2.3% | 3.6% | 3.3% | 1.5% | 2.2% |

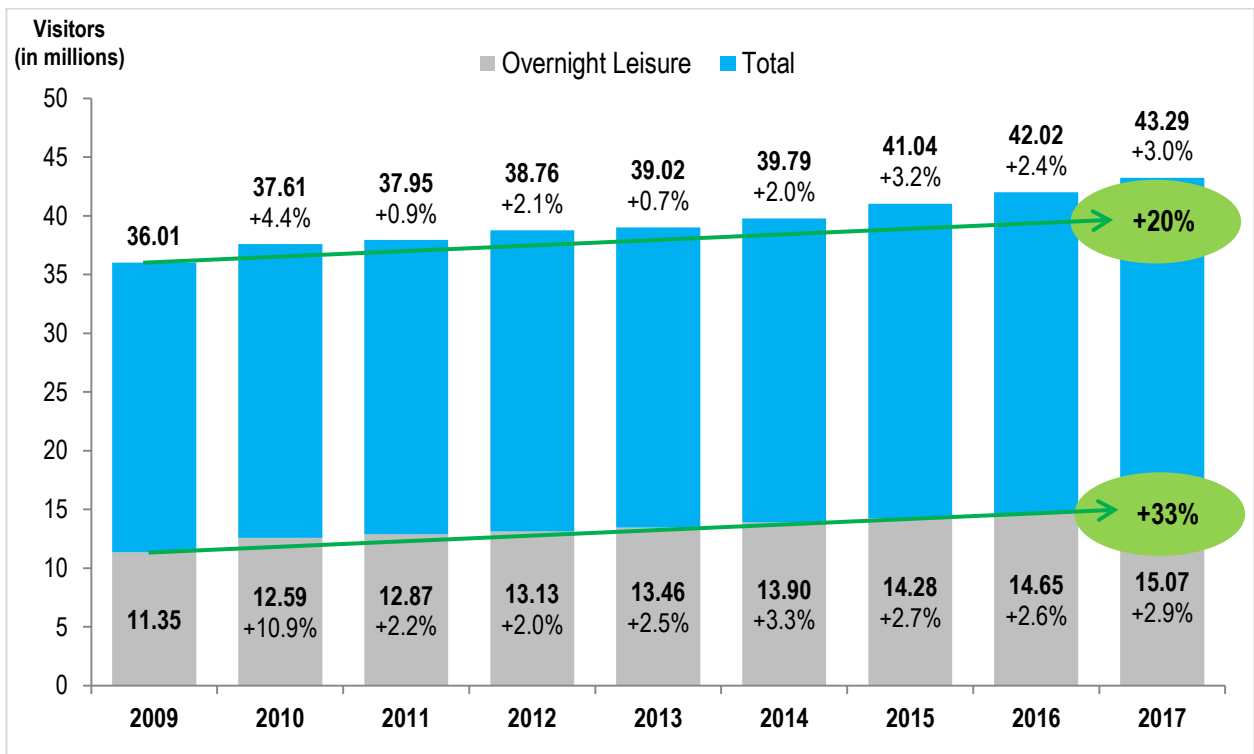
| Year | Total | Overnight | Day | Leisure | Business |
|----------------------|-------|-----------|-------|---------|----------|
| 2009 | 36.01 | 13.15 | 22.86 | 31.85 | 4.16 |
| % Chg 2010 | 4.4% | 10.4% | 1.0% | 4.4% | 4.6% |
| % Chg 2011 | 0.9% | 2.4% | 0.0% | 0.7% | 2.5% |
| % Chg 2012 | 2.1% | 2.4% | 2.0% | 1.9% | 4.3% |
| % Chg 2013 | 0.7% | 2.2% | -0.3% | 0.7% | 0.4% |
| % Chg 2014 | 2.0% | 3.3% | 1.1% | 2.0% | 2.1% |
| % Chg 2015 | 3.2% | 2.6% | 3.5% | 3.2% | 2.5% |
| % Chg 2016 | 2.4% | 2.6% | 2.2% | 2.7% | 2.3% |
| % Chg 2017 | 3.0% | 2.9% | 3.1% | 3.1% | 2.2% |
| 2017 | 43.29 | 17.40 | 25.89 | 38.16 | 5.13 |
| Growth 2009-2017 (#) | 7.28 | 4.25 | 3.03 | 6.31 | 0.97 |
| Growth 2009-2017 (%) | 20.2% | 32.3% | 13.3% | 19.8% | 23.3% |
| Annual Growth Rate | 2.3% | 3.6% | 1.6% | 2.3% | 2.7% |

Source: Econsult Solutions, Inc. Tourism Economics, Longwoods International

Figure 3.1 shows total domestic visitation and overnight leisure visitation since 2009.

- Total domestic visitation has increased by 20% over the 2009-2017 period, growing by more than 7 million people from 36.01 million in 2009 to an estimated 42.29 million in 2017.
- Overnight leisure visitation has grown by 33% over this time period (from 11.35 million in 2009 to 15.07 million in 2017), making it the fastest growing visitor segment. Growth in overnight visitation overall (32%) has significantly outpaced growth in day visitation (13%) over this period.

FIGURE 3.1 – TOTAL VISITATION AND DOMESTIC LEISURE VISITATION BY YEAR, 2009-2017 (IN MILLIONS)



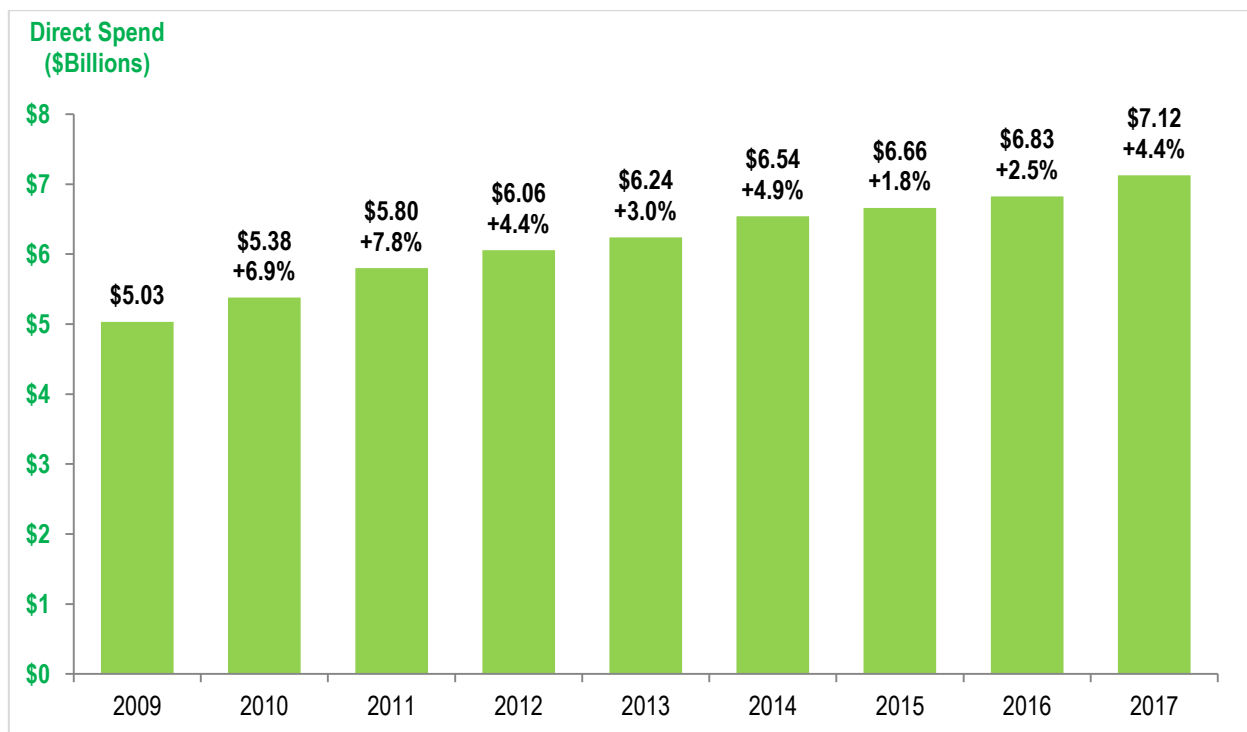
Source: Econsult Solutions, Inc. Tourism Economics, Longwoods International

3.2 HISTORICAL SPENDING TRENDS

Figure 3.2 shows annual direct visitor expenditures from 2009-2017.⁷ Visitor expenditures grew in each year, although rates of growth varied across the period.

- Expenditures grew rapidly in 2010 and 2011, as the industry recovered towards prior levels from large losses in 2009 due to the recession.⁸
- Growth was relatively modest in 2015-2016, due in large part to declines in fuel prices that resulted in decreases in transportation, before recovering in 2017.
- Average annual growth over the period was 4.5%.

FIGURE 3.2 – DIRECT VISITOR SPENDING GROWTH, 2009-2017 (IN BILLIONS)



Source: Econsult Solutions, Inc. Tourism Economics

⁷ Throughout the Figures in Sections 3.2 and 3.3, green bars represent annual expenditures (shown along the left axis), while gray lines represent year over year percentage changes in expenditures (shown along the right axis).

⁸ Note that expenditures in 2007 and 2008 were \$5.8 billion, matching the level in 2011.

Table 3.2 shows annual expenditures, growth and shares by trip type (day and overnight).

- Overnight visitor spending grew by 4.9% annually over the period, outpacing spending growth by day visitors of 3.3%.
- As a result, the share of expenditures by overnight visitors grew from around 70% to 72.4% over the period.
- However, the most rapid growth in overnight visitor expenditures took place in 2010 and 2011, and shares have been stable since that time.

TABLE 3.2 – VISITOR SPENDING GROWTH BY TRIP TYPE, 2009-2017

| Year | Direct Spending | Overnight Spending | Overnight Growth | Overnight Share | Day Spending | Day Growth | Day Share |
|----------------------|-----------------|--------------------|------------------|-----------------|---------------|--------------|---------------|
| 2009 | \$5.03 | \$3.52 | | 69.9% | \$1.51 | | 30.0% |
| 2010 | \$5.38 | \$3.84 | 9.2% | 71.4% | \$1.54 | 1.7% | 28.6% |
| 2011 | \$5.80 | \$4.20 | 9.3% | 72.4% | \$1.60 | 3.9% | 27.6% |
| 2012 | \$6.06 | \$4.42 | 5.2% | 72.9% | \$1.64 | 2.6% | 27.1% |
| 2013 | \$6.24 | \$4.54 | 2.8% | 72.8% | \$1.70 | 3.5% | 27.2% |
| 2014 | \$6.54 | \$4.78 | 5.2% | 73.0% | \$1.78 | 4.7% | 27.1% |
| 2015 | \$6.66 | \$4.84 | 1.3% | 72.7% | \$1.82 | 2.6% | 27.3% |
| 2016 | \$6.83 | \$4.96 | 2.6% | 72.7% | \$1.84 | 0.8% | 26.9% |
| 2017 | \$7.12 | \$5.16 | 4.0% | 72.4% | \$1.96 | 7.0% | 27.6% |
| Total | \$55.66 | \$40.26 | | 72.3% | \$15.38 | | 27.6% |
| Chg 09-17 | \$2.09 | \$1.64 | 46.6% | 2.5% | \$0.45 | 29.9% | (2.5%) |
| Annual Growth | 4.4% | 4.9% | | | 3.3% | | |

Source: Econsult Solutions, Inc. Tourism Economics

Table 3.3 shows annual expenditures, growth and shares by visitor type (leisure and business).

- Leisure and business expenditures grew at similar rates over the period, with leisure spending growing by 4.4% per year and business spending by 4.6%.
- As a result, the share of expenditures by leisure visitors stayed consistent through the period at around 70%.
- Growth patterns were more volatile for business travelers than leisure travelers.

TABLE 3.3 – VISITOR SPENDING GROWTH BY VISITOR TYPE, 2009-2017

| Year | Direct Spending | Leisure Spending | Leisure Growth | Leisure Share | Business Spending | Business Growth | Business Share |
|----------------------|-----------------|------------------|----------------|---------------|-------------------|-----------------|----------------|
| 2009 | \$5.03 | \$3.55 | | 70.5% | \$1.48 | | 29.5% |
| 2010 | \$5.38 | \$3.79 | 6.8% | 70.4% | \$1.59 | 7.1% | 29.6% |
| 2011 | \$5.80 | \$4.00 | 5.6% | 69.0% | \$1.80 | 12.9% | 31.0% |
| 2012 | \$6.06 | \$4.21 | 5.1% | 69.5% | \$1.85 | 2.9% | 30.5% |
| 2013 | \$6.24 | \$4.36 | 3.5% | 69.9% | \$1.88 | 1.7% | 30.1% |
| 2014 | \$6.54 | \$4.64 | 6.5% | 70.9% | \$1.90 | 1.1% | 29.1% |
| 2015 | \$6.66 | \$4.66 | 0.4% | 70.0% | \$2.00 | 5.3% | 30.0% |
| 2016 | \$6.83 | \$4.78 | 2.4% | 69.9% | \$2.05 | 2.5% | 30.1% |
| 2017 | \$7.12 | \$5.00 | 4.8% | 70.2% | \$2.12 | 3.4% | 29.8% |
| Total | \$55.66 | \$38.99 | | 70.0% | \$16.67 | | 30.0% |
| Chg 09-17 | \$2.09 | \$1.46 | 41.0% | (0.3%) | \$0.64 | 42.9% | 0.3% |
| Annual Growth | 4.4% | 4.4% | | | 4.6% | | |

Source: Econsult Solutions, Inc. Tourism Economics

Changes in visitor spending are ultimately the product of interrelated changes in the number of visitors, the price of goods (i.e. inflation), and the spending patterns of those visitors. National and regional benchmarks are useful in disentangling the contribution of these various factors to overall visitor spending growth. Table 3.4 below shows annual changes nationally and regionally in domestic travel volume, the consumer price index (a standard measure of inflation) and visitor expenditures.

- Visitation and expenditure growth for Greater Philadelphia tracks closely with the national benchmark over this period.
- Growth in visitor expenditures over the past eight years has exceeded combined growth in visitation and prices both in Greater Philadelphia and nationally, indicating additional “real” growth in per visitor spending.⁹

TABLE 3.4 – VISITOR EXPENDITURE GROWTH CONTEXT, 2010-2017

| Year | National Domestic Trips | National CPI | National Visitor Expenditures | Greater Phila Domestic Visitors | Greater Phila CPI | Greater Phila Visitor Expenditures |
|----------------|-------------------------|--------------|-------------------------------|---------------------------------|-------------------|------------------------------------|
| 2010 | 3.3% | 1.6% | 6.8% | 4.4% | 2.0% | 6.9% |
| 2011 | 1.7% | 3.2% | 8.7% | 0.9% | 2.7% | 7.8% |
| 2012 | 1.6% | 2.1% | 5.2% | 2.1% | 1.8% | 4.4% |
| 2013 | 1.4% | 1.5% | 3.7% | 0.7% | 1.2% | 3.0% |
| 2014 | 2.4% | 1.6% | 2.1% | 2.0% | 1.3% | 4.9% |
| 2015 | 3.3% | 0.1% | 4.8% | 3.2% | (0.1%) | 1.8% |
| 2016 | 1.3% | 1.3% | 2.9% | 2.4% | 0.6% | 2.5% |
| 2017 | 1.9% | 2.1% | 4.3% | 3.0% | 1.3% | 4.4% |
| Average | 2.1% | 1.7% | 4.7% | 2.3% | 1.4% | 4.5% |

Source: US Travel Association (national trips and expenditures), Bureau of Labor Statistics (CPI), Tourism Economics, Econsult Solutions, Inc. (Greater Philadelphia visitation and expenditures)

Growth in per visitor spending relative to inflation can result from visitors spending more on the same goods/services and/or visitors altering the composition of what they are spending on. At the destination level, such an increase could imply that similar visitors are spending more, or that a destination is attracting a different type of visitor over time. In either case, it means that visitors are becoming relatively more valuable over time through increased spending.

⁹ Holding all else equal, an increase in the number of visitors will produce a comparable increase in visitor expenditures. Similarly, an increase in CPI would produce an increase in visitor spending, holding all else equal.

3.3 SPENDING TRENDS BY SECTOR

Within the context of overall expenditure growth, expenditure growth patterns have varied by sector over the 2009-2017 period. These changes are reflective of both broader economic conditions and changes in regional tourism product.

Figure 3.3 below shows aggregate direct visitors spending for each sector across the nine-year period.

- Direct visitor expenditures in food and beverage, lodging, and transportation are more than \$14 billion, \$13 billion and \$12 billion respectively, out of a total of more than \$55 billion.

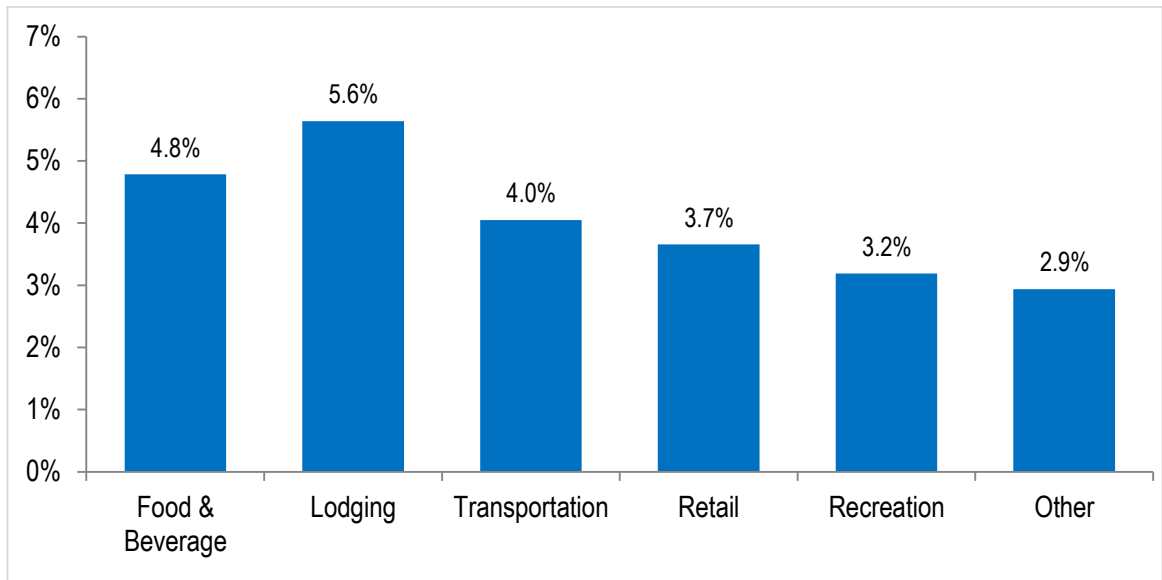
FIGURE 3.3 – AGGREGATE DIRECT VISITOR SPENDING BY SECTOR, 2009-2017 (IN BILLIONS)



Source: Econsult Solutions, Inc. *Tourism Economics*

Figure 3.4 below shows the average annual growth in each of these sectors over the 2009-2017 period.

- The two largest sectors of the tourism economy, food and beverage and lodging, have shown the most rapid growth over the 2009-2017 period. Lodging has growth fastest (5.6% per year), followed by food and beverage (4.8%).

FIGURE 3.4 – ANNUAL GROWTH IN DIRECT VISITOR SPENDING BY SECTOR, 2009-2017

Source: Econsult Solutions, Inc. *Tourism Economics*

Table 3.5 shows the annual growth trends for each major sector of the tourism economy. As shown in Figure 3.4 above, spending has increased in all sectors over this period. However, growth varies by sector both in the level and the pattern across the 2009-2017 period:

- Food and beverage spending has shown robust growth in recent years, outpacing overall expenditure growth each year from 2014-2017.
- Lodging spending has shown consistent growth, leading to the highest average annual increase of any sector.
- Transportation spending has shown significant variance, due largely to fuel prices, which impact both gasoline purchases and airfares. Spending dipped significantly in 2015-2016 due to low fuel costs, and year over year growth is significant when prices recover to prior levels.
- Retail spending has shown sluggish year over year growth in recent years, likely constrained by the overall slowdown in the sector.
- Recreation spending has grown consistently but slowly over the period, and as a result has the largest decrease in share of spending for any sector.

TABLE 3.5 – VISITOR EXPENDITURES BY SECTOR, 2009-2017 (\$MILLIONS)

| Year | Direct Spending | Food & Beverage | Lodging | Transport | Retail | Recreation | Other |
|----------------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|--------------|
| <i>Spend (\$M)</i> | | | | | | | |
| 2009 | \$5,032 | \$1,314 | \$1,136 | \$1,102 | \$813 | \$611 | \$56 |
| 2010 | \$5,380 | \$1,410 | \$1,190 | \$1,217 | \$867 | \$638 | \$58 |
| 2011 | \$5,799 | \$1,480 | \$1,318 | \$1,333 | \$938 | \$670 | \$60 |
| 2012 | \$6,058 | \$1,526 | \$1,408 | \$1,403 | \$966 | \$694 | \$61 |
| 2013 | \$6,257 | \$1,552 | \$1,459 | \$1,468 | \$1,013 | \$703 | \$61 |
| 2014 | \$6,542 | \$1,645 | \$1,546 | \$1,496 | \$1,066 | \$726 | \$63 |
| 2015 | \$6,662 | \$1,757 | \$1,637 | \$1,416 | \$1,045 | \$743 | \$64 |
| 2016 | \$6,827 | \$1,820 | \$1,726 | \$1,380 | \$1,065 | \$768 | \$67 |
| 2017 | \$7,125 | \$1,910 | \$1,762 | \$1,514 | \$1,084 | \$786 | \$71 |
| Total | \$55,681 | \$14,414 | \$13,182 | \$12,330 | \$8,856 | \$6,338 | \$561 |
| % Chg 09-17 | 41.6% | 45.3% | 55.1% | 37.4% | 33.3% | 28.6% | 26.1% |
| <i>Growth (%)</i> | | | | | | | |
| 2010 | 6.9% | 7.3% | 4.8% | 10.4% | 6.6% | 4.4% | 3.6% |
| 2011 | 7.8% | 5.0% | 10.8% | 9.5% | 8.2% | 5.0% | 3.4% |
| 2012 | 4.5% | 3.1% | 6.8% | 5.3% | 3.0% | 3.6% | 1.7% |
| 2013 | 3.3% | 1.7% | 3.6% | 4.6% | 4.9% | 1.3% | 0.0% |
| 2014 | 4.6% | 6.0% | 6.0% | 1.9% | 5.2% | 3.3% | 3.3% |
| 2015 | 1.8% | 6.8% | 5.9% | -5.3% | -2.0% | 2.3% | 2.0% |
| 2016 | 2.5% | 3.6% | 5.5% | -2.6% | 1.9% | 3.4% | 4.9% |
| 2017 | 4.4% | 4.9% | 2.1% | 9.7% | 1.8% | 2.3% | 4.7% |
| Annual Growth | 4.4% | 4.8% | 5.6% | 4.0% | 3.7% | 3.2% | 2.9% |

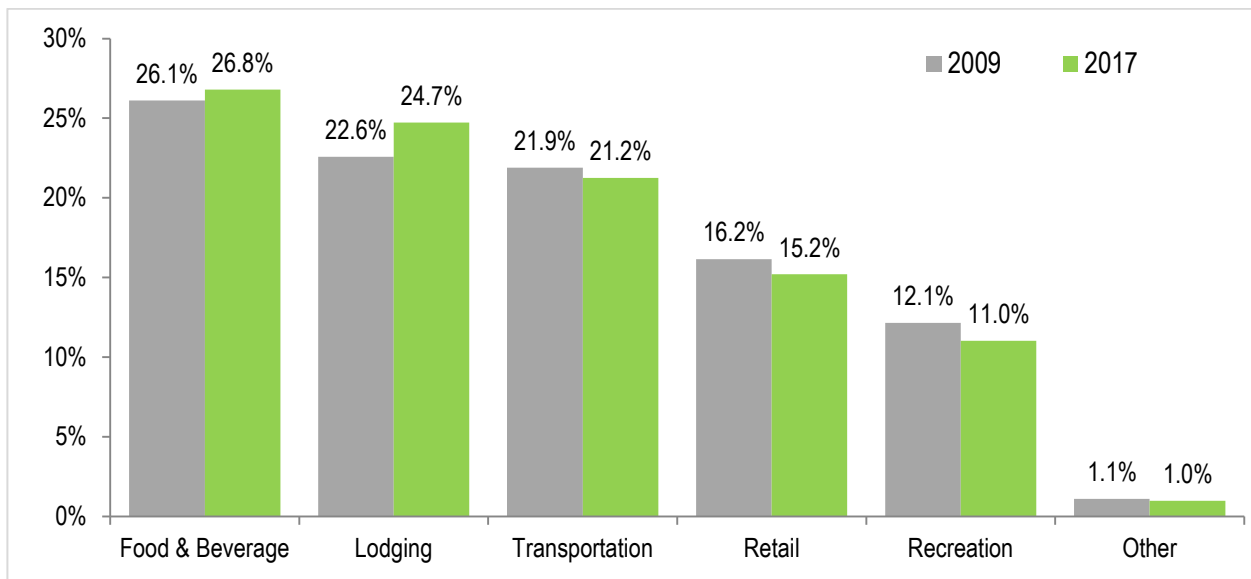
Source: Econsult Solutions, Inc. Tourism Economics

These differential growth rates have yielded changes in the share of visitor expenditures. Figure 3.5 and Table 3.6 below show the proportion of total expenditures represented by each sector from 2009-2017.

- Food and beverage and lodging have each grown as a share of total expenditures. Combined, these two sectors now represent 51.5% of spending, up from 48.7% in 2009.
 - While lodging spending grew across the period, food and beverage declined as a share of total spending from 2009-2013, then grew rapidly from 2014-2017 to increase its share on net.

- Transportation, retail, and recreation all saw mild declines in their share of expenditures over the period.
 - Transportation spending varies significantly with fuel prices, and accordingly may expand or contract its share depending on the time period. By contrast, retail and recreation have steadily declined in spending share due to below average growth.

FIGURE 3.5 – SHARE OF VISITOR EXPENDITURES BY SECTOR 2009 AND 2017



Source: Econsult Solutions, Inc. Tourism Economics

TABLE 3.6 – SHARE OF VISITOR EXPENDITURES, 2009-2017

| Year | Direct Spending | Food & Beverage | Lodging | Transport | Retail | Recreation | Other |
|----------------|-----------------|-----------------|-------------|---------------|---------------|---------------|---------------|
| 2009 | \$5,032 | 26.1% | 22.6% | 21.9% | 16.2% | 12.1% | 1.1% |
| 2010 | \$5,380 | 26.2% | 22.1% | 22.6% | 16.1% | 11.9% | 1.1% |
| 2011 | \$5,799 | 25.5% | 22.7% | 23.0% | 16.2% | 11.6% | 1.0% |
| 2012 | \$6,058 | 25.2% | 23.2% | 23.2% | 15.9% | 11.5% | 1.0% |
| 2013 | \$6,257 | 24.8% | 23.3% | 23.5% | 16.2% | 11.2% | 1.0% |
| 2014 | \$6,542 | 25.1% | 23.6% | 22.9% | 16.3% | 11.1% | 1.0% |
| 2015 | \$6,662 | 26.4% | 24.6% | 21.3% | 15.7% | 11.1% | 1.0% |
| 2016 | \$6,827 | 26.7% | 25.3% | 20.2% | 15.6% | 11.3% | 1.0% |
| 2017 | \$7,125 | 26.8% | 24.7% | 21.2% | 15.2% | 11.0% | 1.0% |
| Net Chg | | 0.7% | 2.2% | (0.7%) | (1.0%) | (1.1%) | (0.1%) |

Source: Econsult Solutions, Inc. Tourism Economics

4.0 ECONOMIC IMPACT AND TAX REVENUE GENERATED

The economic impact of Greater Philadelphia's visitors is the sum of direct spending by tourists and the effects that those dollars have on the local economy. Impacts include not only total economic activity attributable to visitor spending, but the jobs and earnings that this activity supports, and the tax revenue that it generates. This activity also enhances the state and local tax base, generating revenue to support government services. Direct visitor spending is also subject to local consumption taxes, increasing the revenue generating impact of visitor activity.

This section reviews the economic impact and tax revenue generated by visitors to Greater Philadelphia in 2017, including:

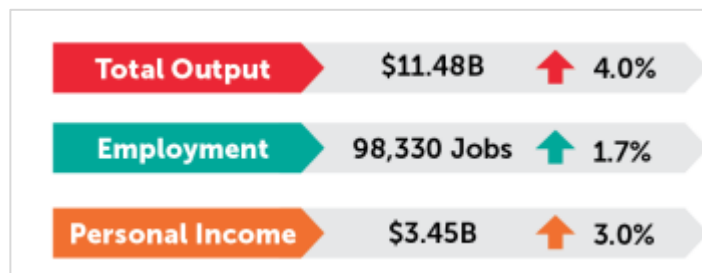
- Direct and total economic output, employment and earnings
- Economic impact by visitor type and location
- Tax revenue generated for state, city and local suburban governments
- Tax revenue generated by city of Philadelphia consumption taxes

4.1 TOTAL ECONOMIC IMPACT

Figure 4.1 below shows the total (direct, indirect and induced) impacts from visitor spending within Greater Philadelphia in 2017.

- The regional economic impact from visitor spending was \$11.48 billion in 2017, an increase of 4.0% from \$11.03 billion in 2016. This is equivalent to \$31.5 million in economic activity per day.
- This activity supported 98,330 jobs and more than \$3.45 billion in earnings.

FIGURE 4.1 – TOURISM ECONOMIC IMPACT, 2017



Source: Econsult Solutions, Inc

Table 4.1 below shows the breakdown of this activity by direct, indirect and induced impacts.¹⁰

- Growth in economic output (4.0%) was slightly lower than growth in direct spending (4.4%) largely because transportation spending, which was a large driver of the direct spending increase, has a relatively low local capture rate (since fuel tends to be supplied from outside of the region).
- Growth in employment counts (1.7%) was lower than growth in earnings (3.0%), which indicates an increase in the average earnings per job supported.

TABLE 4.1 - GREATER PHILADELPHIA VISITOR ECONOMIC IMPACT, 2016-2017

| Metric | Total | Direct Impact | Indirect/ Induced |
|-----------------------------|-----------------|----------------------|--------------------------|
| 2017 Output (\$ M) | \$11,479 | \$7,125 | \$4,355 |
| 2017 Employment (jobs) | 98,329 | 72,535 | 25,794 |
| 2017 Personal Income (\$ M) | \$3,451 | \$2,066 | \$1,385 |
| 2016 Output (\$ M) | \$11,033 | \$6,827 | \$4,206 |
| 2016 Employment (jobs) | 96,640 | 71,256 | 25,384 |
| 2016 Personal Income (\$ M) | \$3,351 | \$2,000 | \$1,351 |
| Output % Chg | 4.0% | 4.4% | 3.5% |
| Employment % Chg | 1.7% | 1.8% | 1.6% |
| Personal Income % Chg | 3.0% | 3.3% | 2.5% |

Source: Econsult Solutions, Inc

¹⁰ See Appendix B for further detail on the input-output modeling methodology used to estimate indirect and induced impacts.

4.2 ECONOMIC IMPACT BREAKOUT

Economic impacts are broken out by those occurring in the City of Philadelphia vs. the four suburban counties, and those yielded by leisure visitor spending vs. business visitor spending.¹¹ Table 4.2 below shows the level of activity for each segment, as well as the share of total activity.

- 27 million domestic visitors, or 62% of the total, visited Philadelphia on their trip. 21 million visitors, or 48%, visited one or more suburban counties.¹²
- The City of Philadelphia represents 58% of economic impact (\$6.6 billion), 55% of earnings, and 53% of employment.
- Leisure visitors account for \$5.0 billion in direct spending (70% of the total) and \$7.9 billion in economic impact (69% of the total). This activity supports 68,700 jobs with \$2.4 billion in earnings.

TABLE 4.2 - GREATER PHILADELPHIA VISITOR ECONOMIC IMPACT BREAKDOWN, 2017

| Metric | Total | Philadelphia | Suburbs | Leisure | Business |
|-------------------------------------|----------------|---------------------|----------------|----------------|-----------------|
| Level of Activity | | | | | |
| Domestic Visitation (M) | 43.29 | 26.98 | 20.99 | 38.16 | 5.13 |
| Direct Spending (\$B) ¹³ | \$7.13 | \$4.12 | \$3.00 | \$5.00 | \$2.12 |
| Output (\$B) | \$11.48 | \$6.64 | \$4.84 | \$7.91 | \$3.57 |
| Employment (jobs) | 98,329 | 52,540 | 45,789 | 68,712 | 29,617 |
| Personal Income (\$B) | \$3.45 | \$1.91 | \$1.54 | \$2.39 | \$1.06 |
| Share of Activity | | | | | |
| Domestic Visitation | 100% | 62% | 47% | 88% | 12% |
| Direct Spending | 100% | 58% | 42% | 70% | 30% |
| Output | 100% | 58% | 42% | 69% | 31% |
| Employment | 100% | 53% | 47% | 70% | 30% |
| Personal Income | 100% | 55% | 45% | 69% | 31% |

¹¹ Note that due to the linkages in the regional economy, indirect and induced impacts occurring in the city and suburbs are driven by direct visitor spending in both locations.

¹² The sum of city and suburban visitation is greater than 100% because some travelers visit both the city and one or more suburban counties on their trip. However, economic impacts by geography listed below sum to 100% of the regional total, since spending activity occurs in a specific location.

¹³ Note that spending, output, employment and earnings calculations include all visitors (domestic and international).

4.3 TAX REVENUE GENERATED

Tourism activity is also a major revenue generator for state and local governments and school district. Visitor-generated economic impact increases the tax base both by adding to the overall wealth of the region (increasing income, business and property tax collections) and through specific consumption taxes and fees.

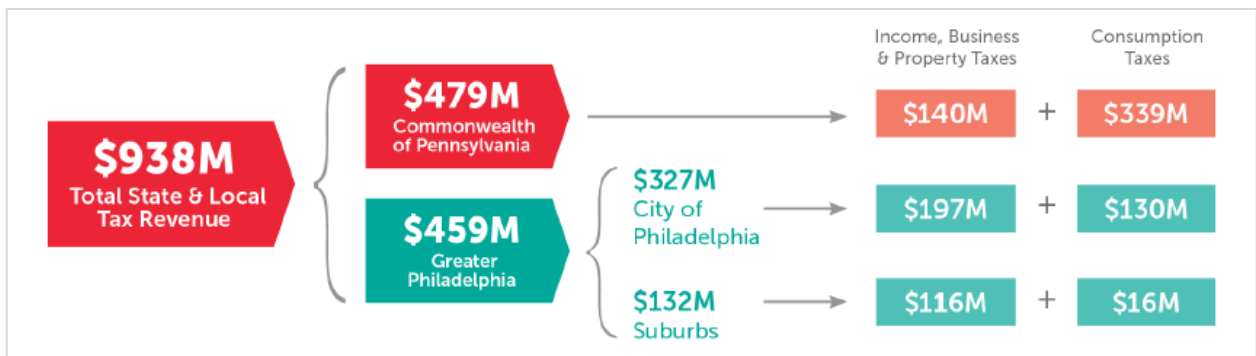
Figure 4.2 below shows tax revenue generation for the Commonwealth of Pennsylvania, the City of Philadelphia and suburban jurisdictions for 2017. Table 4.3 provides a detailed breakdown of these revenues by line item.

Total state and local tax revenues are estimated at \$938 million, an increase of 6.5% over 2016.

- Pennsylvania tax revenues are estimated at \$489 million, an increase of 7.3%. In addition to healthy growth in income, sales and business taxes, growth was driven by an increase in the state liquid fuels tax rate, which led to a jump in revenue.
- Philadelphia City and School District tax revenues are estimated at \$327 million, an increase of 4.8%. This includes \$130 million in consumption taxes borne by visitors.
- Suburban tax revenues are estimated at \$132 million, an increase of 7.7%. In addition to growth in income and property taxes, three of the four suburban counties increased their hotel tax rate in 2017, leading to a significant increase in hotel tax revenue collections.

These visitor-generated revenues reduce the burden that local residents bear for vital public services. Without the \$938 million in visitor-generated taxes, the 1.5 million households in Greater Philadelphia would need to pay an additional \$620 per household in taxes to maintain the same level of services.

FIGURE 4.2 – STATE AND LOCAL TAX REVENUE GENERATED BY VISITOR SPENDING, 2017 (\$M)



Source: Econsult Solutions, Inc, IMPLAN, City of Philadelphia, Commonwealth of Pennsylvania

TABLE 4.3 – DETAILED STATE AND LOCAL TAX REVENUE GENERATION BY LINE ITEM, 2017 (\$M)

| Revenue Source | Pennsylvania | Local – Philadelphia | Local – Suburban | Total State & Local | Total Local (City + Suburb) |
|----------------------------|---------------------|----------------------|---------------------|---------------------|-----------------------------|
| Personal Income/Wage Taxes | \$118.0 | \$63.3 | \$19.0 | \$200.4 | \$82.3 |
| Business Taxes | \$21.9 | \$16.9 | -- | \$38.9 | \$16.9 |
| Property Tax | -- | \$116.4 | \$96.9 | \$213.3 | \$213.3 |
| Consumption Taxes | | | | | |
| Hotel Tax | -- | \$68.2 | \$16.4 | \$84.7 | \$84.7 |
| Sales and Use Taxes | \$194.4 | \$26.2 | -- | \$220.7 | \$26.2 |
| Liquid Fuels Tax | \$117.6 | -- | -- | \$117.6 | -- |
| Liquor Tax | -- | \$23.1 | -- | \$23.1 | \$23.1 |
| Amusement Tax | -- | \$5.7 | -- | \$5.7 | \$5.7 |
| Vehicle Rental Tax | \$26.5 | \$4.2 | \$0.0 | \$30.7 | \$4.2 |
| Parking Lot Tax | -- | \$2.5 | -- | \$2.5 | \$2.5 |
| 2017 Total | \$478.6 | \$326.5 | \$132.4 | \$937.5 | \$458.9 |
| 2016 Total | \$445.8 | \$311.6 | \$122.9 | \$880.4 | \$434.5 |
| Total % Chg | 7.3% | 4.8% | 7.7% | 6.5% | 5.6% |
| Income/Wage Taxes % Chg | 2.8% | 2.6% | 3.4% | 2.8% | 2.8% |
| Business Taxes % Chg | 2.9% | 3.1% | | 3.0% | 3.1% |
| Property Tax % Chg | -- | 3.2% | 2.6% | 2.9% | 2.9% |
| Consumption Taxes | | | | | |
| Hotel Tax % Chg | -- | 11.5% | 64.8% ¹⁴ | 18.9% | 18.9% |
| Sales Tax % Chg | 2.7% | 3.2% | -- | 2.8% | 3.2% |
| Liquid Fuels Tax % Chg | 23.0% ¹⁵ | -- | -- | 23.0% | -- |
| Liquor Tax % Chg | -- | 4.3% | -- | 4.3% | 4.3% |
| Amusement Tax % Chg | -- | 1.9% | -- | 1.9% | 1.9% |
| Vehicle Rental Tax % Chg | 7.0% | 7.0% | -- | 7.0% | 7.0% |
| Parking Tax % Chg | -- | (0.1%) | -- | (0.1%) | (0.1%) |

Source: Econsult Solutions, Inc, IMPLAN, City of Philadelphia, Commonwealth of Pennsylvania

¹⁴ Bucks County, Chester County and Montgomery County each increased their hotel tax by 2% in 2017, leading to a significant increase in hotel tax revenue despite a modest increase in hotel sales.

¹⁵ Growth is driven largely by an increase in the Liquid Fuels Tax (i.e. gas tax) rate, which increase by 15% (from \$0.50 to \$0.58 per gallon on Jan 1, 2017). These funds, part of the Act 89 transportation bill, support infrastructure and state police funding across Pennsylvania.

4.4 PHILADELPHIA CONSUMPTION TAXES

Both Pennsylvania and Philadelphia see a significant supplement to visitor driven tax revenues through consumption taxes. At the state level, the 6% sales tax and the \$0.58 per gallon liquid fuels tax combined to generate an estimated \$312 million from visitor spending in 2017.

Table 4.4 below shows consumption tax revenues for the City of Philadelphia, as well as the share of the revenues generated by visitors and the uses of those funds.

- The largest revenue amounts are generated by the hotel tax and the sales tax, which is generated primarily by hotels and restaurants.¹⁶
- The liquor by the drink tax also generates a significant infusion of revenue for the School District, about one-third of which is attributable to visitors.
- Including the amusement tax, vehicle rental tax, and parking lot tax, an estimated \$130 million in consumption taxes is generated for the City and School District by visitor activity, about 29% of total annual revenue from these six sources.

TABLE 4.4 – SHARE OF SELECTED CITY OF PHILADELPHIA CONSUMPTION TAXES SUPPORTED BY VISITORS (\$M)

| Tax Type | Visitor Supported Revenue, 2017 (\$M) | Total City of Phila Collections, FY 2017 (\$M) | Visitor Supported Proportion (%) | Use of Revenue |
|--------------------|---------------------------------------|--|----------------------------------|--|
| Hotel Tax | \$68.2 | \$71.8 | 95.0% | Tourism Promotion/ Convention Center Debt |
| Sales Tax | \$26.2 | \$190.5 | 13.8% | General Fund |
| Liquor Tax | \$23.1 | \$66.2 | 34.9% | School District |
| Amusement Tax | \$5.7 | \$20.7 | 27.5% | General Fund |
| Vehicle Rental Tax | \$4.2 | \$6.2 | 67.3% | Stadium Debt |
| Parking Lot Tax | \$2.5 | \$93.4 | 2.7% | General Fund |
| Total | \$129.9 | \$448.7 | 29.0% | |

Source: Econsult Solutions, Inc, City of Philadelphia

While the bulk of visitor generated revenues support public services, a portion supports further tourism marketing efforts via the hotel tax (which funds the Convention Center, the Convention & Visitors Bureau and Visit Philadelphia), meaning that tourism marketing efforts are self-sustaining.

¹⁶ Note that a Philadelphia sales tax of 1% applies to hotel room rentals within the City, above and beyond the 8.5% hotel tax and 6% state sales tax. Many items purchased by visitors are exempt from the city and state sales tax, including clothing, groceries and admissions tickets.

5.0 EMPLOYMENT IMPACT

Among the most crucial impacts of the tourism industry on a region is the base of employment that it supports. In recent years, tourism employment has grown faster than the broader economy, increasing the importance of the sector to the local employment mix. Importantly, the tourism industry provides a diversity of employment opportunities at a range of skill levels, locations and socioeconomic groups. Spatial analysis shows that while many tourism jobs are located in Center City, the residential location of leisure and hospitality employees is broadly distributed throughout the city. This means that growth in tourism activity helps the city and region grow in an equitable way.

This section discusses a range of data on tourism employment, including:

- Comparing the different approaches to measuring tourism employment
- Visitor-supported employment by sector
- Leisure and hospitality sector employment trends
- Tourism employment as a share of private sector employment
- The geographic distribution of tourism employees in neighborhoods throughout Philadelphia.

5.1 MEASURING TOURISM EMPLOYMENT

Employment in the tourism industry can be quantified in two different ways:

- “Leisure and hospitality employment” reflects the number of employees in tourism-serving sectors.¹⁷
- “Visitor-supported employment” tracks the flow of spending by visitors through the economy.¹⁸

These approaches have some overlap in the employees that they capture, but also some important differences.

- There are about 187,000 jobs in the regional leisure and hospitality industry. These jobs in the leisure and hospitality industry are supported by a combination of local spending and

¹⁷ The federal Bureau of Labor Statistics (BLS) defines this “super-sector” as the food & beverage, accommodation, and arts, entertainment & recreation sectors

¹⁸ This includes direct, indirect and induced economic impacts, as described in the economic impact section of this report.

visitor spending, since visitor-serving amenities like restaurants and attractions are also frequented by locals.

- About 60,000 leisure and hospitality jobs in the Greater Philadelphia region (1/3 of the total) are supported by visitor (as opposed to local) spending. These leisure and hospitality jobs supported by visitors represent the overlap between the two approaches to measuring tourism employment. Jobs supported by local spending are captured within the leisure and hospitality statistics, but are not included in the visitor-supported employment impact.
- Visitors also directly support employment through their spending in other sectors, most notably transportation and retail. These jobs are part of the visitor-supported impact, are not captured within the leisure & hospitality industry statistics.
- Finally, direct visitor spending supports indirect and induced activity as it recirculates within the local economy. This activity creates additional jobs in sectors that do not directly serve visitors, such as health care and real estate. These jobs are another component of the visitor supported impact not captured by leisure & hospitality industry statistics.
- Total visitor supported employment within Greater Philadelphia is 98,330.

From an economic perspective, the visitor-supported employment calculation more accurately tracks the impact of visitors on the local economy than the industry count. However, generating this estimate requires a custom economic analysis (like the one undertaken in this study), which is not readily available using comparable methods across all sectors and geographies. By contrast, leisure and hospitality data is regularly published by the BLS, and can generate useful comparisons across geographies, across sectors, and across time.

5.2 VISITOR-SUPPORTED EMPLOYMENT BY SECTOR

Figure 5.1 below shows the breakdown of visitor-supported employment (including direct, indirect and induced impacts) by sector. Table 5.1 shows the change in each sector relative to 2016.

- The largest sector is food and beverage, which represents 34% of total visitor-supported employment.
- “Spillover” jobs in sectors that do not receive significant visitor spending (including professional services, education and medicine, real estate, etc.) represent 18% of all visitor-supported employment.
- Transportation saw the largest increase in year over year visitor-supported employment, while lodging and recreation employment were effectively flat.

FIGURE 5.1 – DISTRIBUTION OF VISITOR-SUPPORTED EMPLOYMENT BY SECTOR, 2017

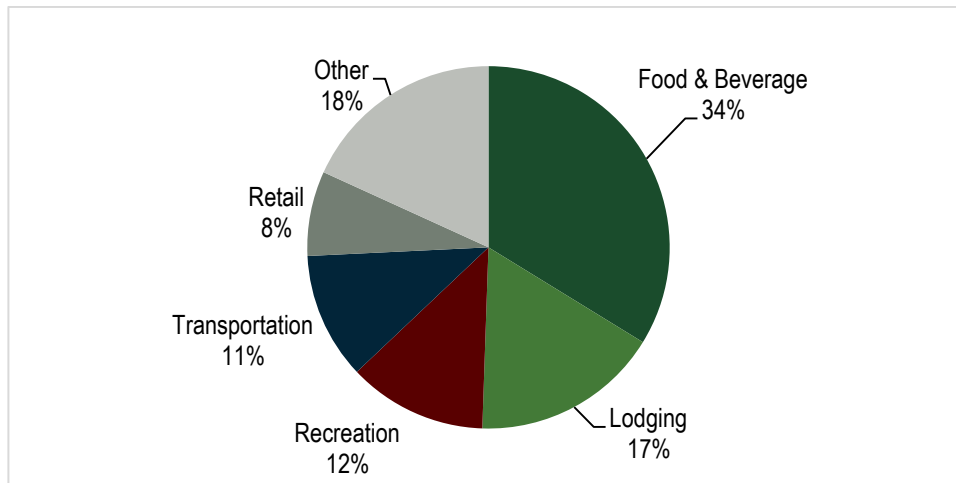


TABLE 5.1 – GREATER PHILADELPHIA VISITOR-SUPPORTED EMPLOYMENT BY SECTOR, 2016-2017

| Sector | 2017 | 2016 | % Chg |
|-----------------|---------------|---------------|---------------|
| Food & Beverage | 33,200 | 32,270 | + 2.9% |
| Lodging | 16,500 | 16,550 | (0.3%) |
| Recreation | 12,190 | 12,190 | 0.0% |
| Transportation | 11,110 | 10,590 | + 4.9% |
| Retail | 7,440 | 7,340 | + 1.4% |
| Other | 17,890 | 17,700 | + 1.1% |
| Total | 98,330 | 96,640 | + 1.7% |

Source: Econsult Solutions, Inc, IMPLAN

Table 5.2 below combines visitor-supported employment with government data on employment by industry to illustrate the share of total employment supported by visitors in particular sectors.

- 1 out of 3 jobs in the region’s leisure and hospitality sector (including the accommodations and food service and arts, recreation & entertainment sub-sectors) is supported by visitors to the region.
- More than 2 out of 5 jobs in the region’s transportation sector are supported by visitors to the region.
- Overall, 6% of total private employment in the region (representing 98,330 jobs) is accounted for by visitor-supported employment.

TABLE 5.2 – VISITOR SUPPORTED EMPLOYMENT AS A SHARE OF TOTAL PRIVATE EMPLOYMENT, 2017

| Sector | Total Private Employment | Visitor-Supported Employment | % Visitor-Supported |
|---------------------------------------|---------------------------------|-------------------------------------|----------------------------|
| Leisure and Hospitality Sector | | | |
| Accommodations & Food Service | 147,790 | 49,700 | 34% |
| Arts, Entertainment & Recreation | 35,800 | 12,190 | 34% |
| Transportation | 26,300 | 11,110 | 42% |
| Other Industries | 1,486,580 | 25,330 | 2% |
| Total | 1,696,470 | 98,330 | 5.8% |

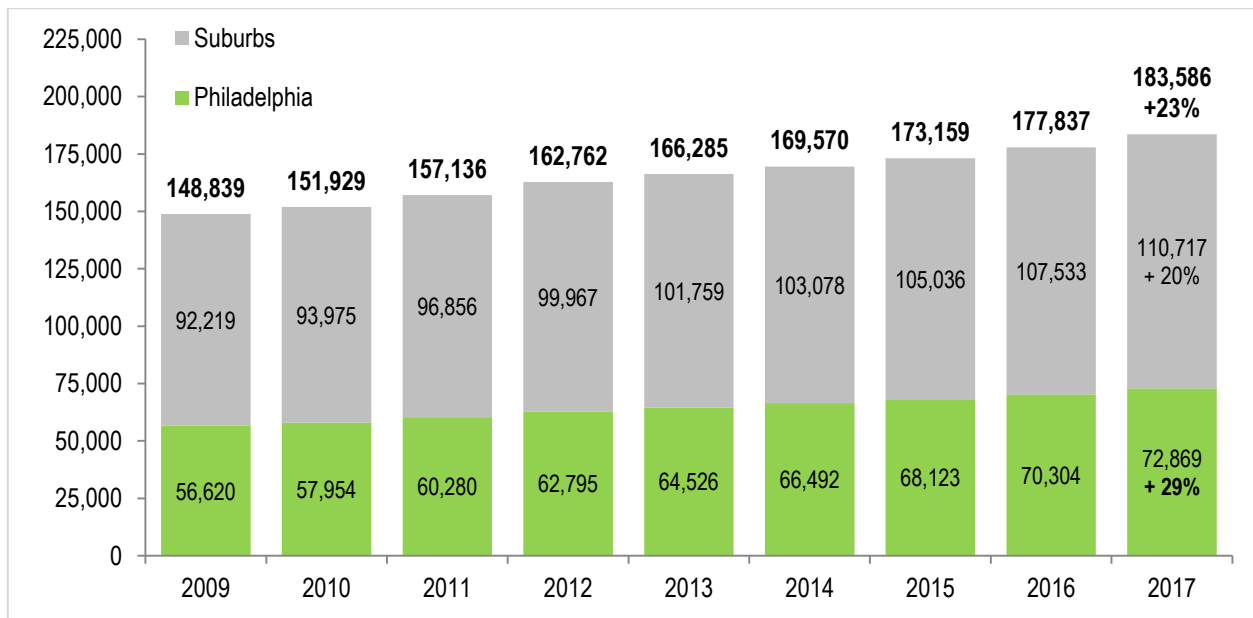
Source: Bureau of Labor Statistics, Econsult Solutions, Inc, IMPLAN

5.3 LEISURE AND HOSPITALITY SECTOR EMPLOYMENT

Figure 5.2 below shows growth in employment in the leisure and hospitality sector within the city and region from 2009-2017. The Bureau of Labor Statistics defines the leisure and hospitality “super-sector” to include the food and beverage, accommodations and arts, entertainment and recreation sectors. As noted above, employment in these sectors is supported by both visitor and local spending, with visitor spending estimated to account for around one-third of employment within the sector.

- Regional employment in the leisure and hospitality sector grew from 148,800 in 2009 to 183,600 in 2017, an increase of 23%.
- Leisure and hospitality employment in the city of Philadelphia increased by 29% over this period, while suburban employment increased by 20%.

FIGURE 5.2 – GREATER PHILADELPHIA ANNUAL LEISURE AND HOSPITALITY SECTOR EMPLOYMENT, 2009-2017

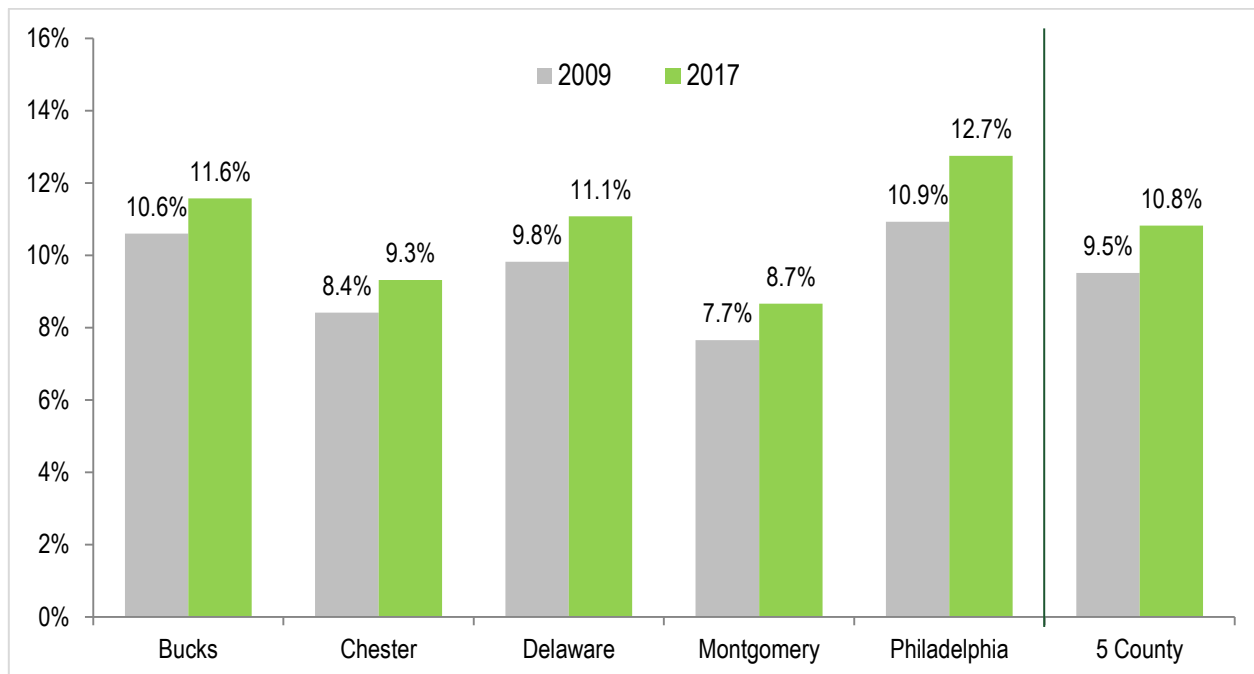


Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages (QCEW)

Employment counts in the leisure and hospitality industry can also be analyzed as a share of overall employment to understand the relative contribution of the sector to the employment base. Figure 5.3 below shows the proportion of total private employment (excluding government jobs) represented by leisure and hospitality employment for each county in the region in 2009 and 2017.

- Leisure and hospitality jobs have increased as a share of employment in each county over this time period. Overall, the sector represented 10.8% of private employment in 2017, up from 9.5% in 2009.
- Philadelphia has a higher share of leisure and hospitality jobs than each of the suburban counties, with the sector representing 12.7% of employment (up from 10.9% in 2009).

FIGURE 5.3 – LEISURE AND HOSPITALITY SHARE OF PRIVATE EMPLOYMENT BY COUNTY, 2009-2017



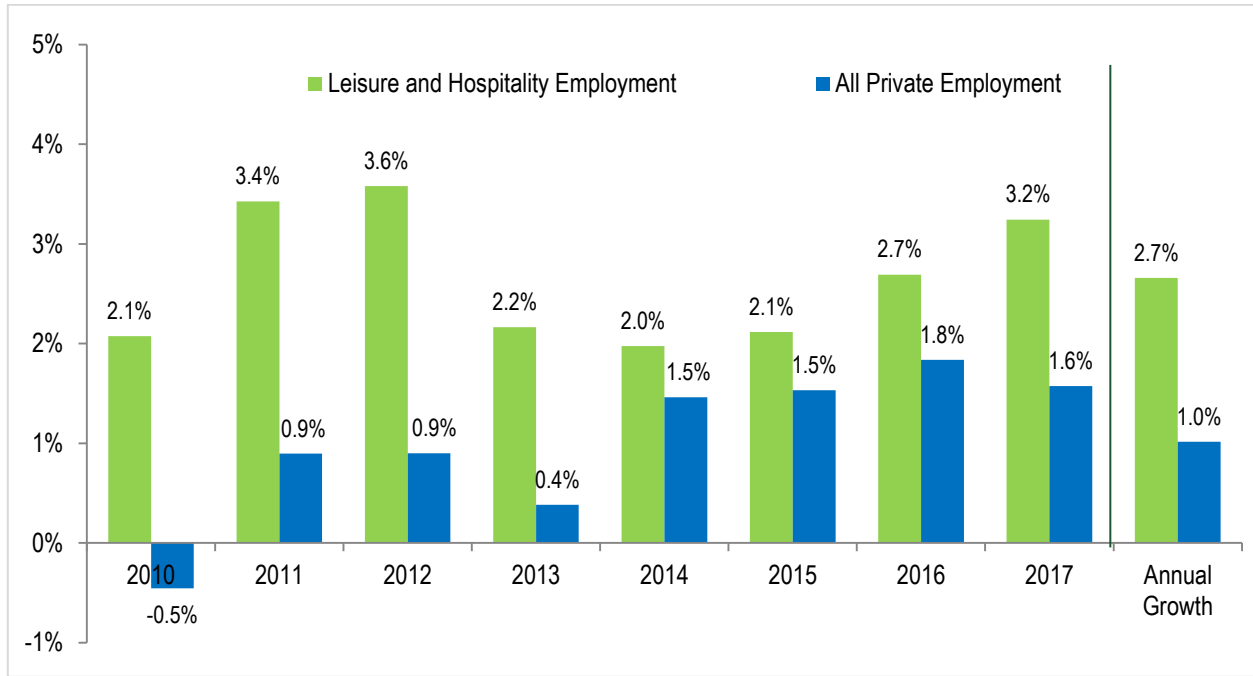
Source: Bureau of Labor Statistics QCEW

The increase in share of employment indicated that leisure and hospitality employment has grown faster than overall employment growth over this period, increasing the importance of this sector to the local economy. Figure 5.4 compares the annual growth in leisure and hospitality employment to total private sector growth in Greater Philadelphia.

- Leisure and hospitality employment in Greater Philadelphia grew by an average of 2.7% per year over the 2009-2017 period, while total private employment growth averaged 1.0% growth.

- Leisure and hospitality employment growth exceeded total private sector job growth in Greater Philadelphia each year during this period.

FIGURE 5.4 – ANNUAL GROWTH IN EMPLOYMENT IN GREATER PHILADELPHIA, 2009-2017



Source: Bureau of Labor Statistics QCEW

The growth in leisure and hospitality employment in the Philadelphia region is also notable relative to trends in the rest of Pennsylvania. Table 5.3 below shows the annual growth in employment within the sector in Greater Philadelphia relative to the rest of the state, as well as share of statewide leisure and hospitality employment represented by the region.

- Leisure and hospitality jobs have grown faster in Greater Philadelphia than elsewhere in the state in each year over the period. Overall, employment within the sector in Greater Philadelphia grew by 23%, more than twice as fast as the 11% growth in the remainder of the state.
- As a result, the share of statewide leisure and hospitality employment represented by the 5-county region grew by more than 2 points to 32% in 2017.

TABLE 5.3 – LEISURE AND HOSPITALITY EMPLOYMENT GROWTH BY GEOGRAPHIC AREA, 2009-2017

| Year | Pennsylvania Employ | Greater Phila Employ | Greater Phila Growth | Greater Phila Share | Rest of State Employ | Rest of State Growth | Rest of State Share |
|------------------|------------------------|----------------------------|----------------------------|---------------------------|----------------------------|----------------------------|---------------------------|
| 2009 | 494,100 | 148,800 | | 30.1% | 345,200 | | 69.9% |
| 2010 | 500,400 | 151,900 | 2.1% | 30.4% | 348,400 | 0.9% | 69.6% |
| 2011 | 510,200 | 157,100 | 3.4% | 30.8% | 353,000 | 1.3% | 69.2% |
| 2012 | 523,100 | 162,800 | 3.6% | 31.1% | 360,300 | 2.1% | 68.9% |
| 2013 | 532,100 | 166,300 | 2.2% | 31.3% | 365,800 | 1.5% | 68.7% |
| 2014 | 537,500 | 169,600 | 2.0% | 31.6% | 368,000 | 0.6% | 68.5% |
| 2015 | 545,400 | 173,200 | 2.1% | 31.8% | 372,300 | 1.2% | 68.3% |
| 2016 | 557,700 | 177,800 | 2.7% | 31.9% | 379,900 | 2.0% | 68.1% |
| 2017 | 566,300 | 183,600 | 3.2% | 32.4% | 382,700 | 0.7% | 67.6% |
| Chg 09-17 | 72,200 | 34,800 | 23.4% | 2.3% | 37,500 | 10.9% | (2.3)% |

Source: ESI Analysis of Bureau of Labor Statistics data

The growing share of employment in the tourism sector underscores the growing importance of tourism activity in the modern economy. As traditional forms of export of physical goods like manufacturing decline in prominence, tourism serves as a modern form of export, with visitors from outside the region “buying” a unique travel experience. This product is by its nature experiential and tied to the unique qualities of a place, making it very difficult to outsource or to automate. This makes investing in tourism activity an important part of any region’s growth strategy.

Importantly, growth in the tourism industry is consistent with a broader equitable growth strategy for the city and region. Jobs within the tourism economy are accessible to residents across a range of skill levels, locations and socioeconomic groups. As the cities and regions seek strategies to address important concerns around equity and opportunity, the durability and accessibility of the tourism sector make it a valuable component of a forward-looking strategy.

5.4 EMPLOYMENT OF NEIGHBORHOOD RESIDENTS

While tourism activity is broadly distributed throughout the city and region, downtown Philadelphia is a central hub of visitor activities. The center city core features the majority of the city's hotel supply, as well as concentrations of restaurants, retail and attractions that serve visitors. Accordingly, Center City Philadelphia is a major hub of employment in the leisure and hospitality industry. However, while the downtown contains a large share of tourism-related jobs, the workers who hold these jobs are distributed far more broadly throughout the city.

Table 5.4 below shows the share of Philadelphia's leisure and hospitality jobs (divided into the Accommodations and Food service and Arts, Entertainment and Recreation sectors) that are located in Center City, as well as the share of Philadelphia residents working in the industry that live downtown.¹⁹ According the Census Bureau data from 2015 (the most recent year available):

- 37% of all leisure and hospitality jobs in Philadelphia are located in the downtown core, but just 4% of Philadelphia residents working in the leisure and hospitality industry live in Center City.

TABLE 5.4 – EMPLOYMENT AND RESIDENTIAL LOCATIONS OF LEISURE AND HOSPITALITY WORKERS IN PHILADELPHIA

| Year | Accommodations and Food Service | Arts, Entertainment and Recreation | Combined (Leisure and Hospitality) |
|----------------------|---------------------------------|------------------------------------|------------------------------------|
| Work Location | | | |
| Center City | 21,734 | 3,890 | 25,624 |
| Philadelphia Total | 57,920 | 12,183 | 70,103 |
| % Center City | 37.5% | 31.9% | 36.6% |
| Home Location | | | |
| Center City | 2,009 | 490 | 2,499 |
| Philadelphia Total | 52,745 | 10,029 | 62,774 |
| % Center City | 3.8% | 4.9% | 4.0% |

Source: US Census Bureau via On the Map (2015)

Figures 5.5 to 5.8 map these spatial patterns in work and home locations for the Accommodations and Food Service and Arts, Recreation and Entertainment industries. While employment is densest in the downtown, workers in these industries represent a broad cross section of residents distributed throughout the city.²⁰

¹⁹ This analysis uses the "core" Center City, stretching from Vine Street to South Street between the Schuylkill and Delaware Rivers.

²⁰ Note that the accessibility of downtown jobs is increased not only by its central location but by the density of public transit serving the area. This pattern thus capitalizing on existing public infrastructure and land use.

FIGURE 5.5 – EMPLOYMENT LOCATION: PHILADELPHIA ACCOMMODATIONS AND FOOD SERVICE JOBS

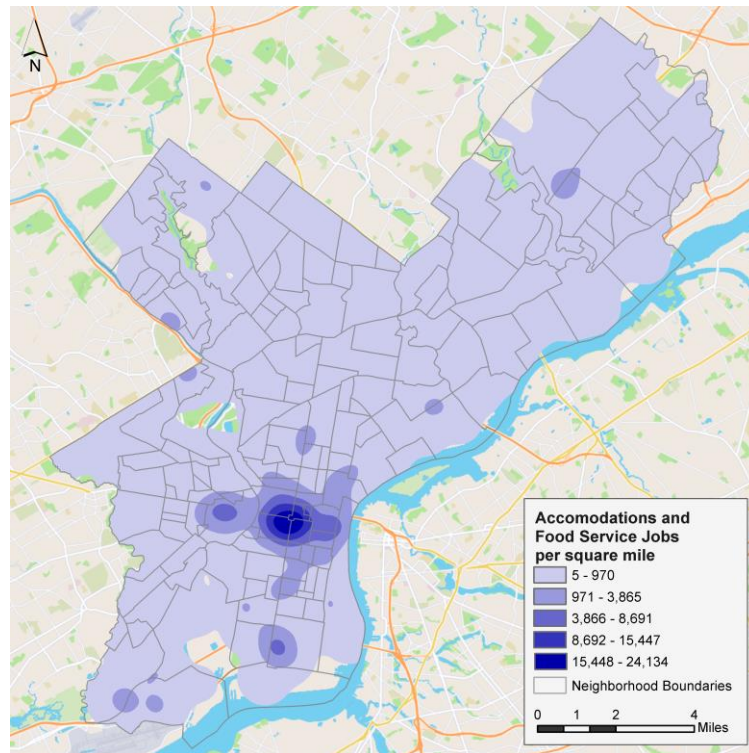
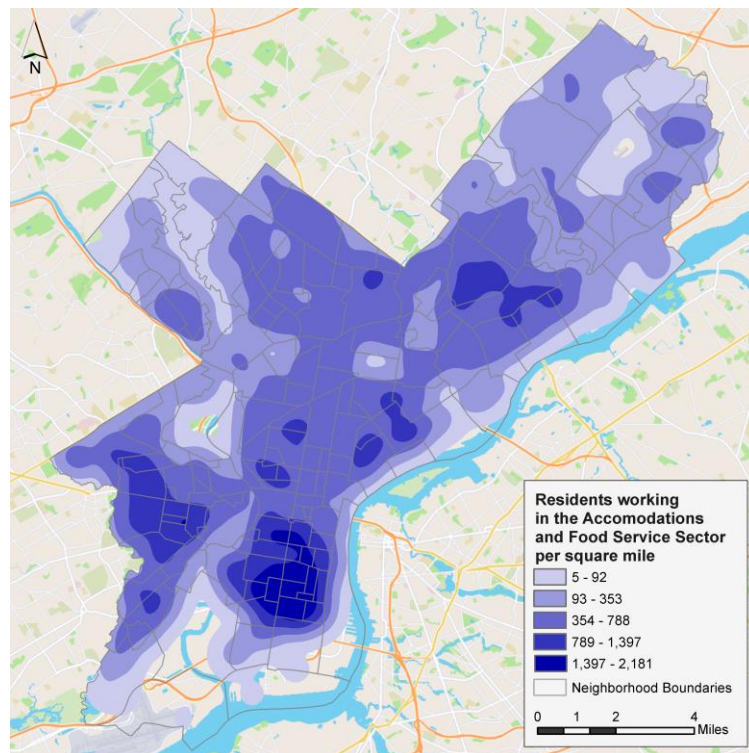


FIGURE 5.6 –RESIDENTIAL LOCATION: PHILADELPHIANS WORKING IN THE ACCOMMODATIONS AND FOOD INDUSTRY



Source: US Census Bureau via On the Map (2015)

FIGURE 5.7 – EMPLOYMENT LOCATION: PHILADELPHIA ARTS, ENTERTAINMENT AND RECREATION JOBS

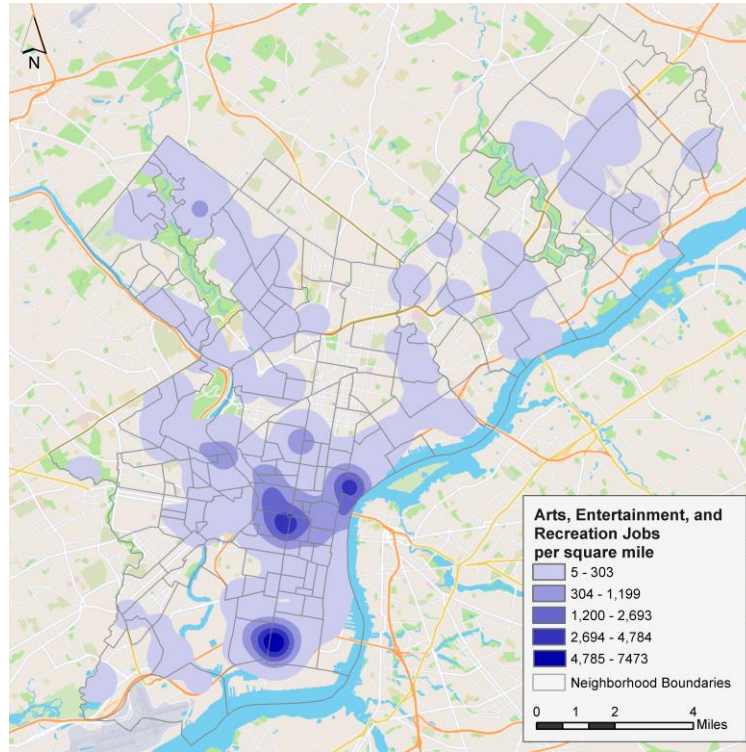
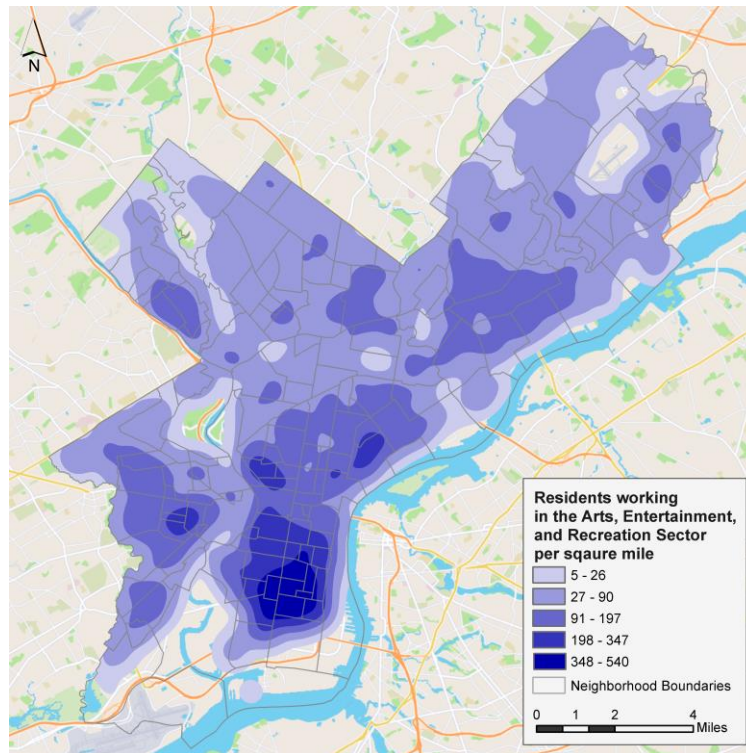


FIGURE 5.8 – RESIDENTIAL LOCATION: PHILADELPHIANS WORKING IN THE ARTS, ENTERTAIN AND REC INDUSTRY



Source: US Census Bureau via On the Map (2015)

6.0 NEIGHBORHOOD IMPACT

While Center City remains a hub of tourism activity and entry point for many visitors, Philadelphia's neighborhoods have experienced an increase in tourism product and an increasing flow of visitors in recent years. This trend means that visitor activity does more to directly benefit neighborhood businesses, helping to share the benefit of this export activity across the city.

Restaurants and bars have been crucial to this trend, often serving as an entry point to draw visitors into different neighborhoods. Further, food and drink have become an increasingly central to the travel experience in recent years. This trend has been a boon for Philadelphia, which has seen a positive feedback loop from greater tourist interest in dining and growth in the food scene throughout the destination. As this sector has grown, it has also become a larger part of the city's job base in recent years.

6.1 DISTRIBUTION OF TOURISM ACTIVITY

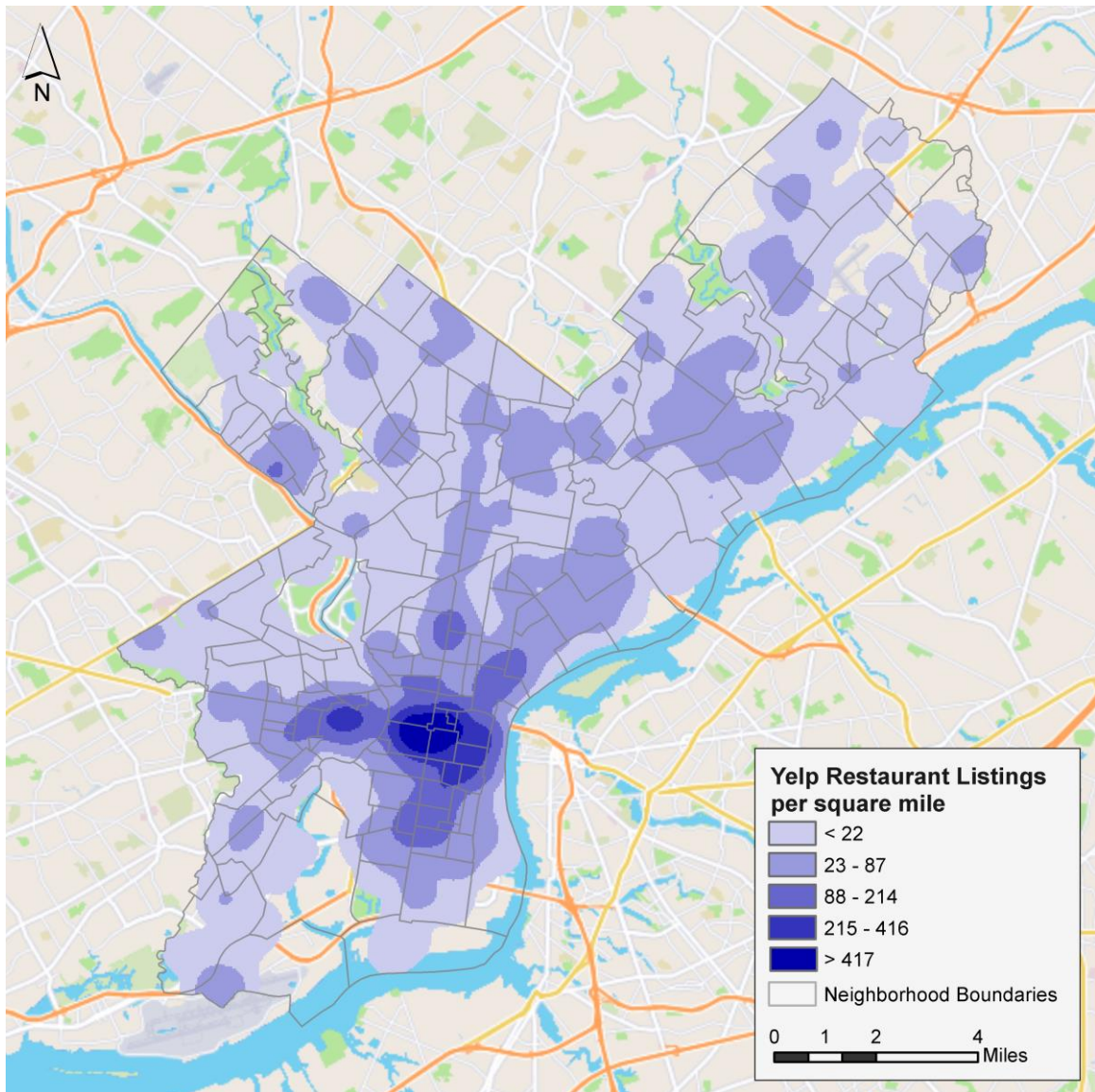
A combination of factors has increased the flow of visitors to neighborhoods outside of the traditional downtown in recent years. An increase in the visitor-ready product has been paired with new marketing channels that make it easier for visitors to learn about these destinations and new technologies that make it easier to get to them. This creates a virtuous feedback cycle of greater tourism activity, and therefore greater economic benefit, in neighborhoods throughout Philadelphia.

Residential neighborhood and commercial corridors throughout Philadelphia have become increasingly vibrant. Neighborhood restaurants, shops, arts and culture attractions and outdoor public spaces have continued to proliferate and cater not only to neighborhood residents but to residents throughout the region and to tourists. These attractions match well with industry trends in the experiences that visitors are seeking and how trips are planned and researched. Visitors increasingly seek an "authentic" experience, and online marketing platforms have often focused on giving tourists the opportunity to experience a destination as a local would. By their nature, online platforms can also be more expansive and up to date than traditional print guides, and accordingly may be better suited to helping visitors find the "long-tail" of attractions throughout a destination.

Simultaneously, the barriers to accessing destinations that are "off the beaten path" have lessened through other technology platforms. Ridesharing technologies like Uber have increased the accessibility of neighborhoods by increasing the comfort level of tourists that they will be able to secure a ride home from an unfamiliar place (particularly at night). And new lodging options like Airbnb have increased the ability of visitors seeking these experiences to stay directly within the neighborhoods, which may not be served by traditional hotel product.

Restaurants are often at the forefront of how tourists (and even locals) explore a new neighborhood. Figure 6.1 below shows the density of Yelp restaurant listings by neighborhood throughout Philadelphia.²¹ While the densest concentration is downtown, significant clusters are visible in Greater Center City neighborhoods like Fishtown, East Passyunk and University City. Extending further, restaurants cluster along commercial corridors on North and South Broad Street and throughout the Northeast and Northwest.

FIGURE 6.1 – DENSITY OF YELP RESTAURANT LISTINGS IN PHILADELPHIA

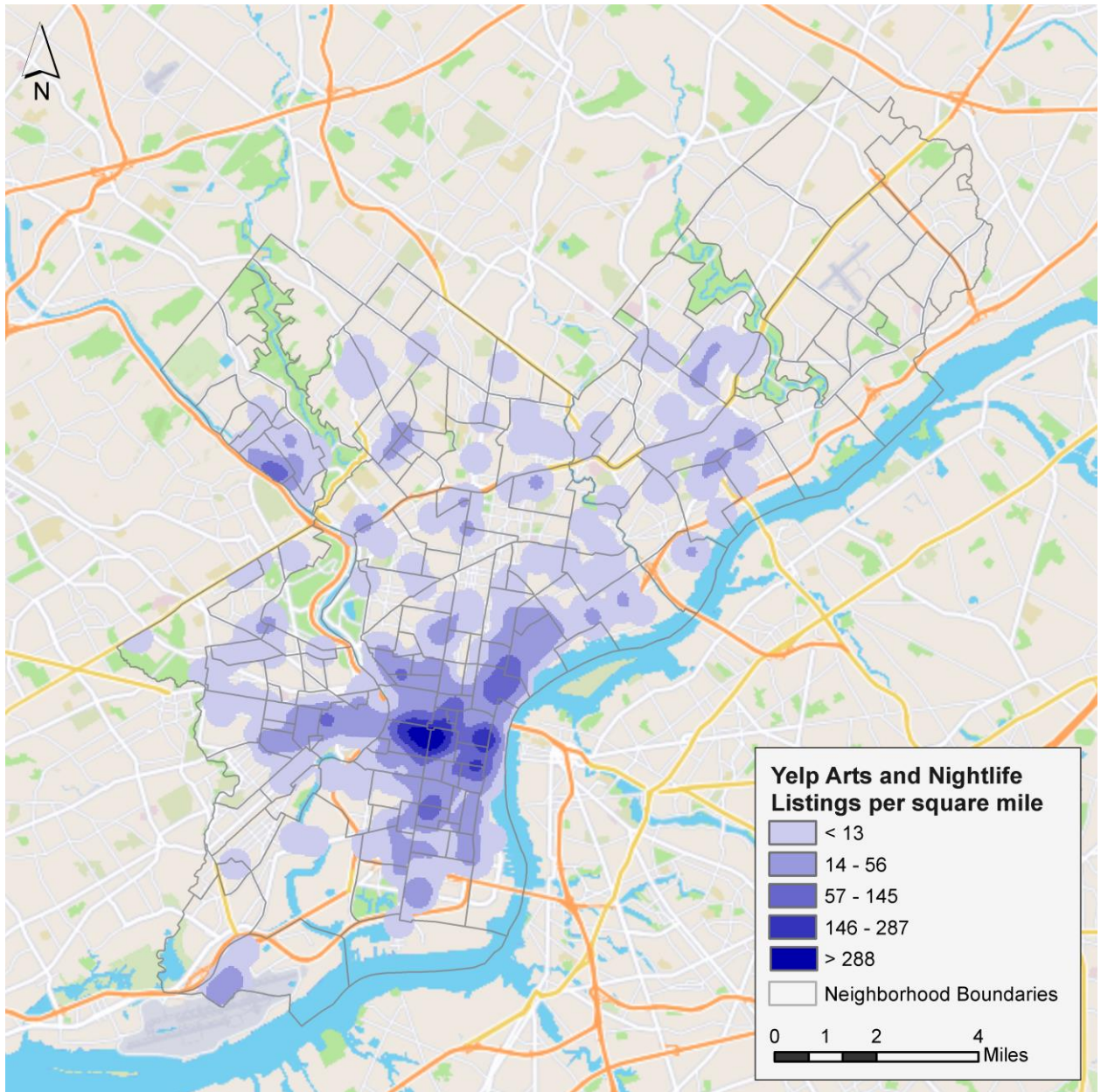


Source: ESI Visualization Yelp Data, August 2018

²¹ Restaurants are categorized by Yelp based on its search filtering criteria. ESI has exported, analyzed and mapped data directly from Yelp.

Figure 6.2 maps Yelp listings for entertainment and nightlife attractions across Philadelphia.²² Pockets of activity emerge across the city, though they are typically more tightly clustered to main corridors than the restaurants shown above.

FIGURE 6.2 – DENSITY OF YELP ARTS & ENTERTAINMENT AND NIGHTLIFE LISTINGS IN PHILADELPHIA

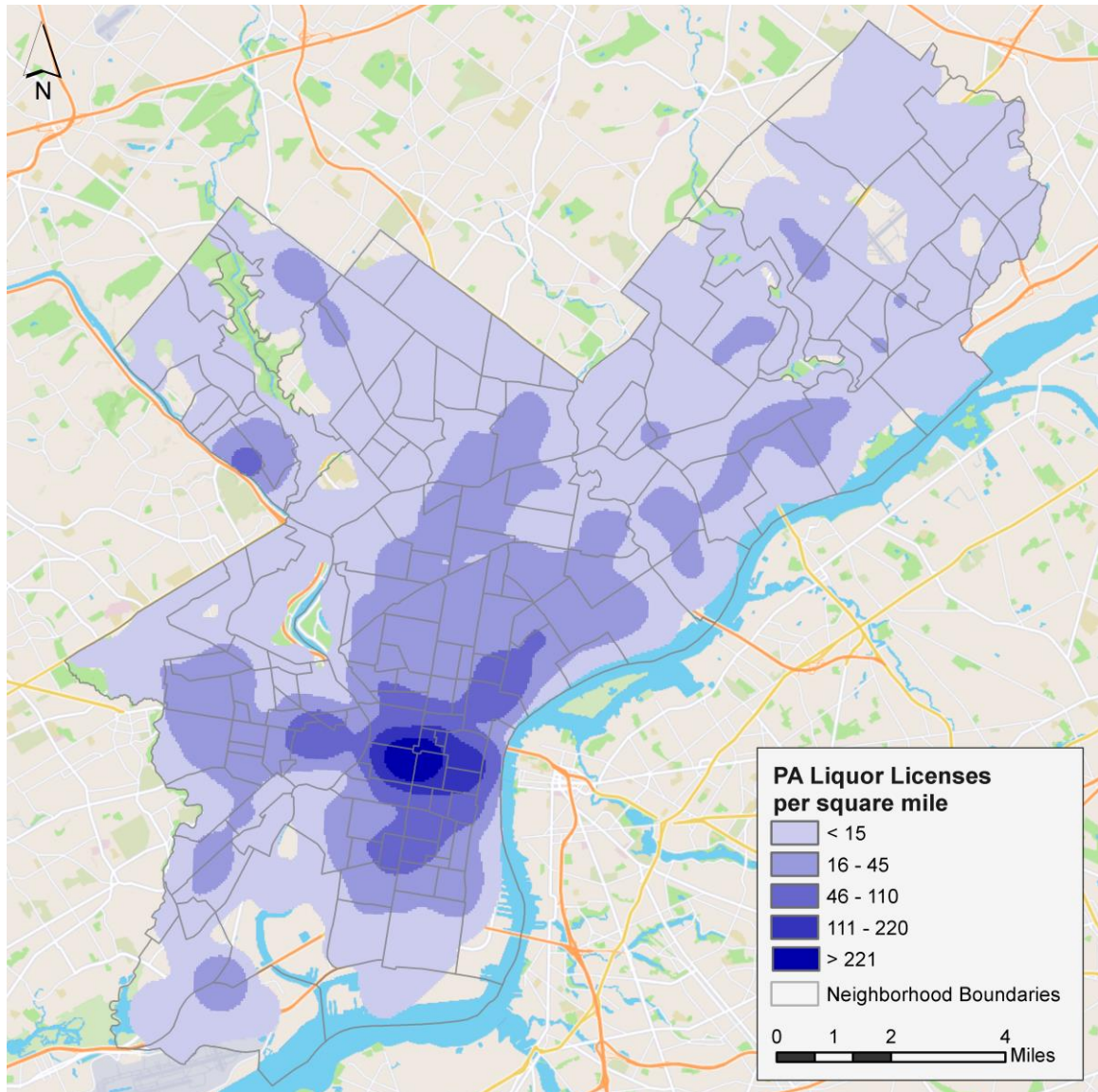


Source: ESI Visualization of Yelp Data, August 2018

²² Arts and Nightlife are categorized by Yelp based on its search filtering criteria. ESI has exported, analyzed and mapped data directly from Yelp.

Figure 6.3 maps active liquor licenses across Philadelphia, based on data from the Pennsylvania Liquor Control Board. These licenses are primarily held by restaurants, bars and entertainment venues, making them another indicator of nighttime activity. These patterns again extend throughout the city, with clear concentrations in Manayunk and South Philadelphia and broad coverage across West Philadelphia, North Philadelphia and the Northeast.

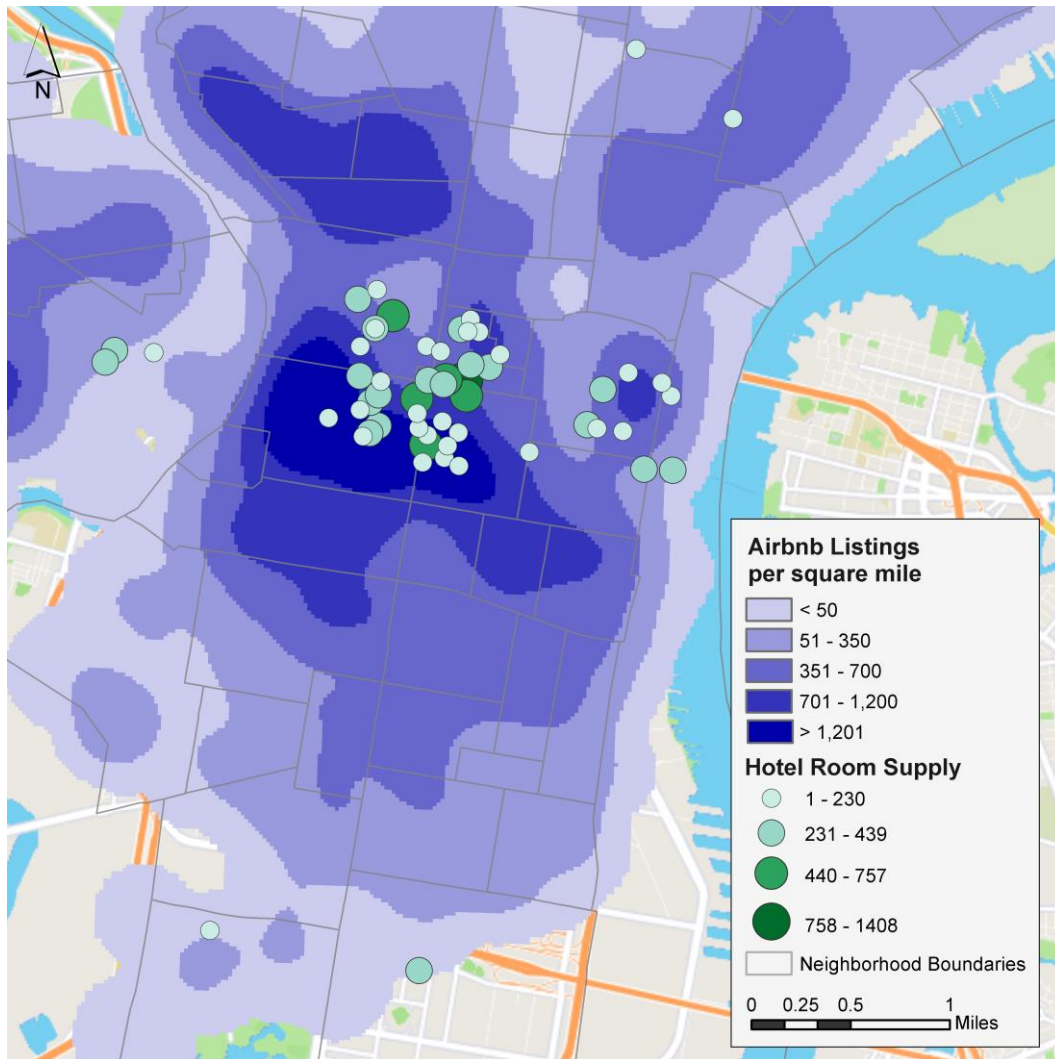
FIGURE 6.3 – DENSITY OF ACTIVE LIQUOR LICENSES IN PHILADELPHIA



Source: ESI Visualization of Pennsylvania Liquor Control Board Data, August 2018

Figure 6.4 maps listings on Airbnb as of May 2017 relative to the hotel supply in Greater Center City.²³ While hotel product is largely clustered in the core downtown, Airbnb supply is dense throughout the residential neighborhoods of Greater Center City like Fairmount, Fishtown, Graduate Hospital and Bella Vista. When factoring in availability by night, Airbnb supply represents 12-14% of the total accommodations supply (hotel supply + Airbnb supply) in the City of Philadelphia, a figure that has grown materially in recent years.

FIGURE 6.4 – DISTRIBUTION OF AIRBNB SUPPLY AND HOTEL SUPPLY IN GREATER CENTER CITY

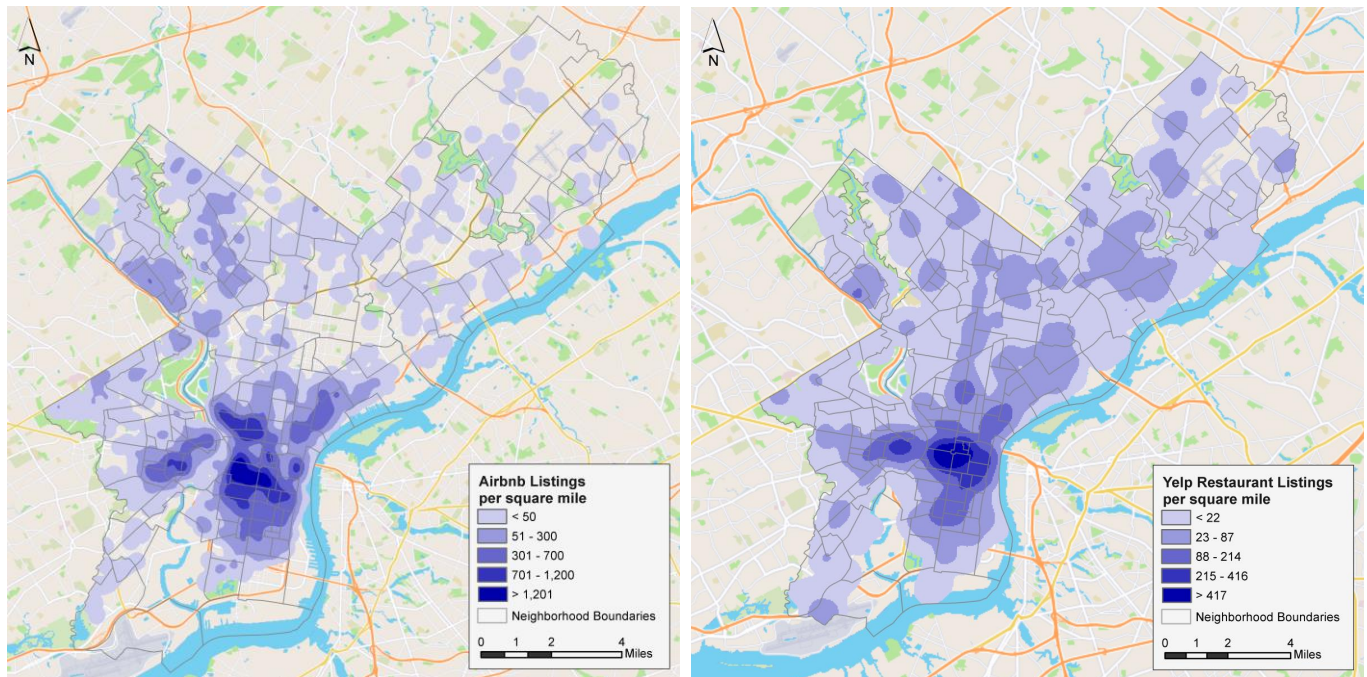


Source: ESI Visualization of Airbnb Data via Tom Slee, May 2017 and hotel data via Visit Philly

²³ Listings data are published online by researcher Tom Slee based on periodic “scraping” of live Airbnb listings in different cities. (See: tomslee.net, *Airbnb Data Collection: Get the Data*. <<http://tomslee.net/airbnb-data-collection-get-the-data>>). This process was discontinued in summer 2017, meaning that more recent data is not available through this method.

Figure 6.5 maps the same Airbnb listings across all of Philadelphia and displays them next to the Yelp restaurant listings shown in Figure 6.1. In this view, clusters of Airbnb activity around the edges of Center City are still evident, as are clusters of supply in West, Northwest and South Philadelphia. This clustering pattern aligns well with the density of restaurant listings, illustrating the synergy between restaurant activity and the appeal of residential neighborhoods to visitors.

FIGURE 6.5 – DENSITY OF AIRBNB LISTINGS AND YELP RESTAURANT LISTINGS IN PHILADELPHIA



Source: ESI Visualization of Airbnb Data via Tom Slee, May 2017 and Yelp Data, August 2018

Visitors staying in an Airbnb or other alternative lodging type may be seeking a different visitor experience than downtown hotel visitors. Further, they may have additional dollars available in their travel budget due to savings on lodging costs relative to a hotel. These attributes make these visitors natural customers for locally owned neighborhood businesses. This trend thus increases the number of businesses dispersed throughout the city that can share directly in the benefits of tourism activity.

6.2 GROWTH IN RESTAURANTS AND BARS

Food and drink have become an increasingly sought after part of the visitor experience, and Philadelphia's food scene has helped fuel its growth as a destination. Restaurants and bars are widely distributed throughout Philadelphia's neighborhoods (as illustrated in Section 6.1), helping to draw tourists (and their spending) to varied corners of the city. Further, they employ a cross-section of residents living throughout the city (as illustrated in Section 5.4).

Table 6.2 below shows data from the Bureau of Labor Statistics indicates that this important sector of the visitor economy has grown substantially in recent years. From 2009 to 2017:

- The number of restaurant and bar establishments grew by 11%, reaching more than 3,000 in 2017
- Employment at these establishments grew by 31%, adding nearly 10,000 jobs over this period
- Wages for these employees grew by 62%, twice the rate of growth in the number of employees

TABLE 6.2 – GROWTH IN RESTAURANT AND BAR ACTIVITY IN PHILADELPHIA, 2009-2017

| | Full-service restaurants | Limited-service restaurants | Drinking places | Total |
|-----------------------|-----------------------------|--------------------------------|-----------------|---------------|
| Establishments | | | | |
| 2009 | 903 | 1,239 | 571 | 2,713 |
| 2017 | 1,090 | 1,423 | 496 | 3,009 |
| % Chg 2009-2017 | 21% | 15% | (13%) | 11% |
| Employees | | | | |
| 2009 | 17,387 | 10,596 | 2,397 | 30,380 |
| 2017 | 23,185 | 13,644 | 3,114 | 39,943 |
| % Chg 2009-2017 | 33% | 29% | 30% | 31% |
| Wages | | | | |
| 2009 | \$324 million | \$148 million | \$34 million | \$506 million |
| 2017 | \$538 million | \$221 million | \$61 million | \$819 million |
| % Chg 2009-2017 | 66% | 50% | 81% | 62% |

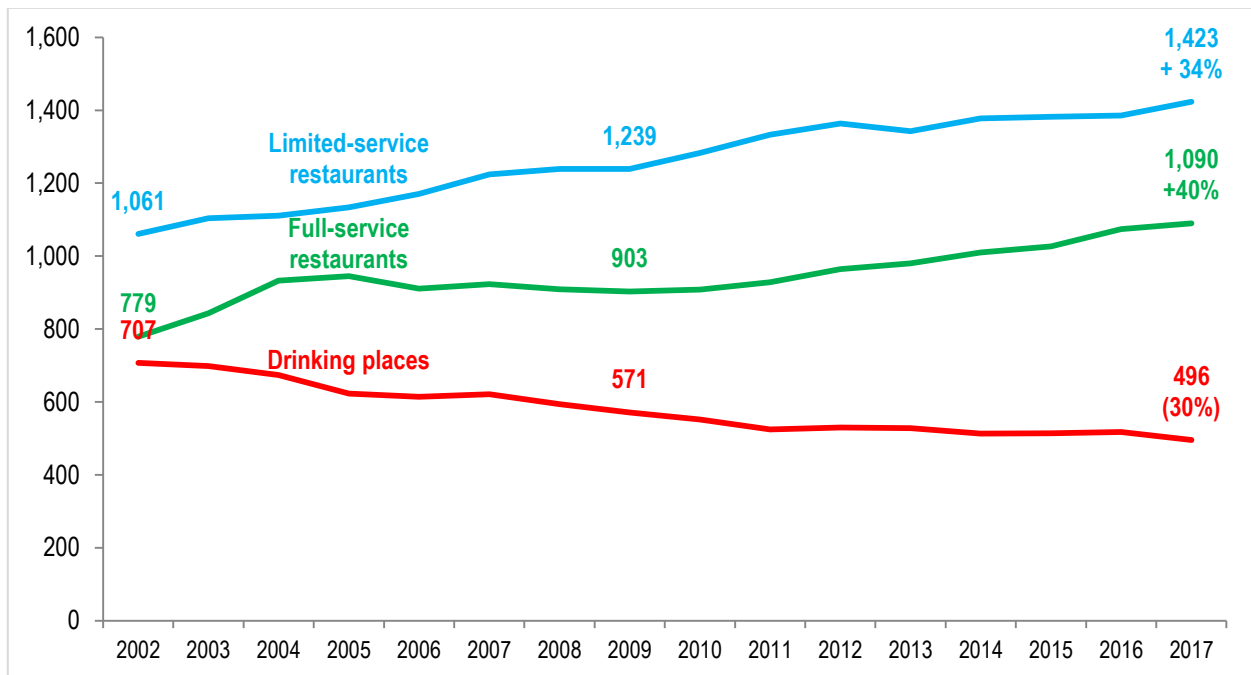
Source: ESI Analysis of Bureau of Labor Statistics QCEW data

These trends indicate robust growth in the contribution of this tourism-supported sector to the overall economy of Philadelphia. The rate of increase in employment is well above the increase in number of locations, indicating more employees per location, and the rate of wage growth is well above employment growth, indicating better pay and/or more hours for employees. These indicators are consistent with greater spending and economic impact for this sector.

The figures below show trends in activity by sub-category over time.²⁴ Trends are shown from 2002-2017, with labels also indicating data for the recessionary low point of 2009. Data is drawn from the Quarterly Census of Employment and Wages (QCEW) issued by the federal Bureau of Labor Statistics (BLS).

Figure 6.6 shows the count of establishments by sector. Restaurant counts have grown substantially prior to the recession, then after a dip (in the case of full service) or flat period (in the case of limited service) resumed a growth trend in recent years. Drinking places, by contrast, declined steadily over the period, declining by 30% from more than 700 in 2002 to less than 500 in 2017.

FIGURE 6.6 – RESTAURANT AND BAR ESTABLISHMENTS IN PHILADELPHIA, 2002-2017



Source: ESI Analysis of Bureau of Labor Statistics QCEW data

²⁴ These categories are defined as follows in the North American Industry Classification System (NAICS):

NAICS 722513 Limited Service Restaurants: This U.S. industry comprises establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to the customer's location. Some establishments in this industry may provide these food services in combination with selling alcoholic beverages.

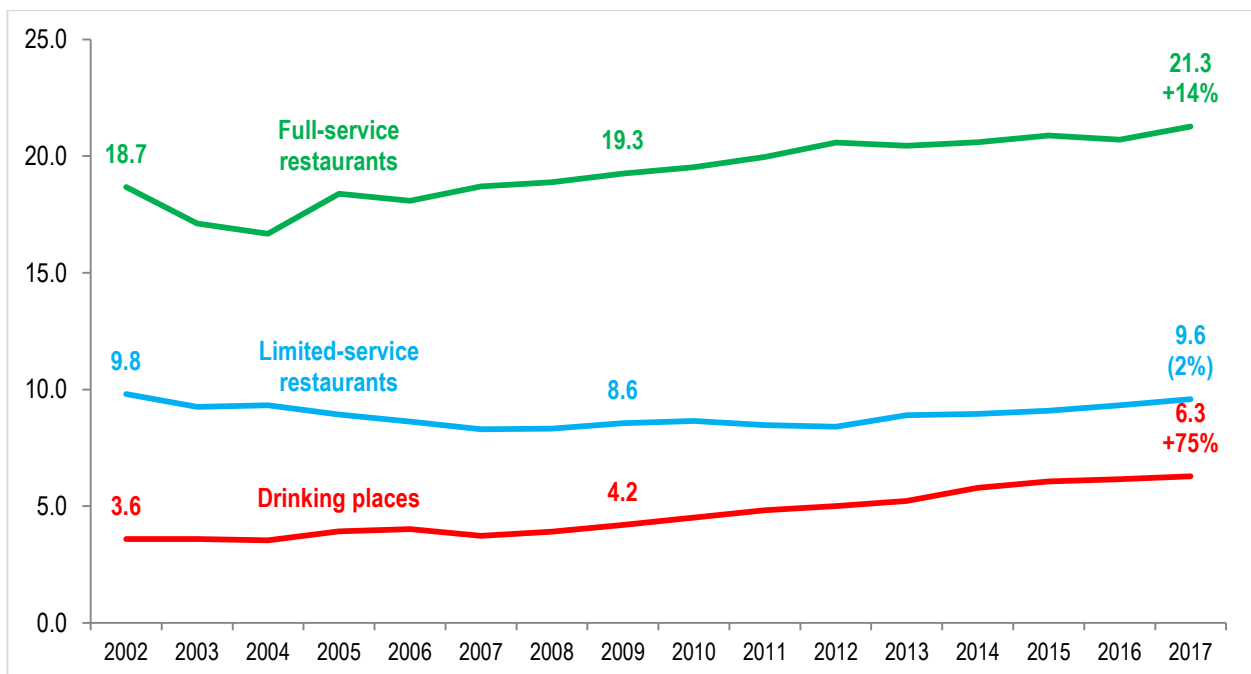
NAICS 722511: Full Service Restaurants: This U.S. industry comprises establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating. These establishments may provide this type of food service to patrons in combination with selling alcoholic beverages, providing carryout services, or presenting live nontheatrical entertainment.

NAICS 722410: Drinking Places (Alcoholic Beverages): This industry comprises establishments known as bars, taverns, nightclubs, or drinking places primarily engaged in preparing and serving alcoholic beverages for immediate consumption. These establishments may also provide limited food services.

Figure 6.7 shows the average number of employees per establishment in each sector over this period. While the number of drinking places fell materially, the number of employees per establishment increased substantially (growing by 75% from 3.6 in 2002 to 6.3 in 2017), suggesting that the decline in locations indicates consolidation rather than contraction in this sector. This trend is consistent with (though more pronounced than) national data for this industry. Nationally, the number of drinking places establishments declined by 19% from 2002 to 2017, while the number of employees per establishment increase by an offsetting amount, resulting in a similar employment level at the beginning and end of the period.

Average employee counts in limited service restaurants were relatively steady, while employment counts grew steadily in full-service restaurants after an initial decline, and averaged 21.3 employees per establishment in 2017.

FIGURE 6.7 – EMPLOYEES PER ESTABLISHMENT IN PHILADELPHIA, 2002-2017



Source: ESI Analysis of Bureau of Labor Statistics QCEW data

Growth in the number of establishments and the number of employees per establishment has led to significant growth in employment counts in these industries. Figure 6.8 below shows employment counts by industry in Philadelphia annually for 2002-2017. Full-service restaurants have been the main driver of growth, adding more than 8,500 jobs and growing by nearly 60%. Limited service restaurants and drinking places have also grown their employment footprint steadily.

Figure 6.9 presents employment trends for the bar and restaurant sector nationally over the same time period for the purpose of comparison. Employment in this sector increased by 36%

nationally over this period, compared to an increase of 45% in Philadelphia. Notably, while the sector experienced employment losses nationally during the recession (evident in the dip in employment in 2009), Philadelphia’s restaurants and bars fared better during this difficult period, posting small increases in employment each year.

FIGURE 6.8 – RESTAURANT AND BAR EMPLOYMENT IN PHILADELPHIA, 2002-2017

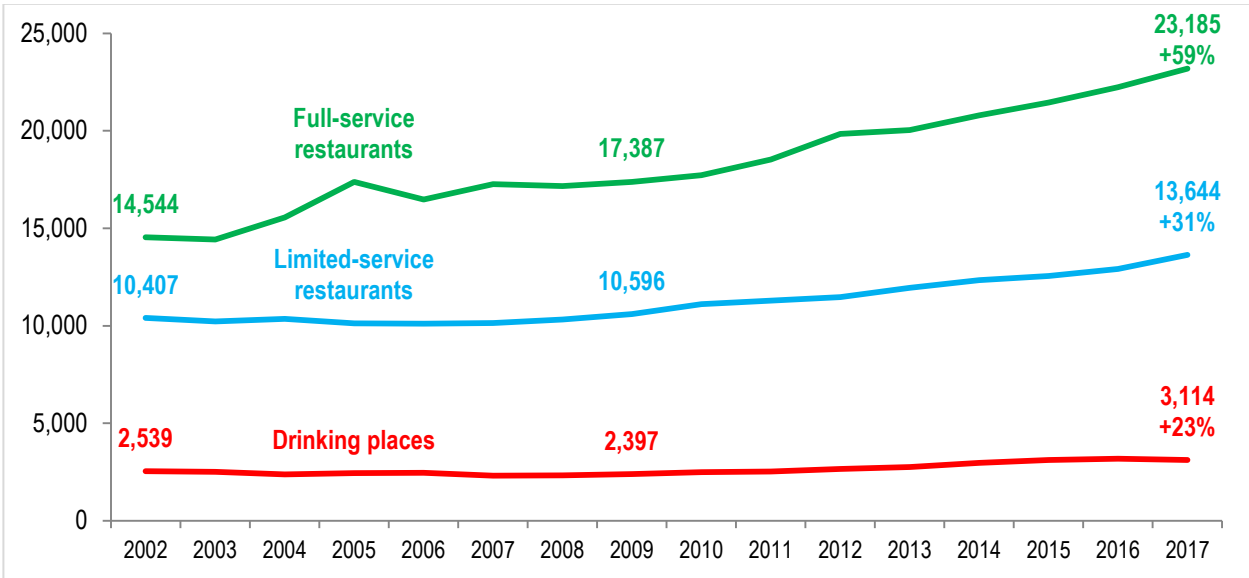
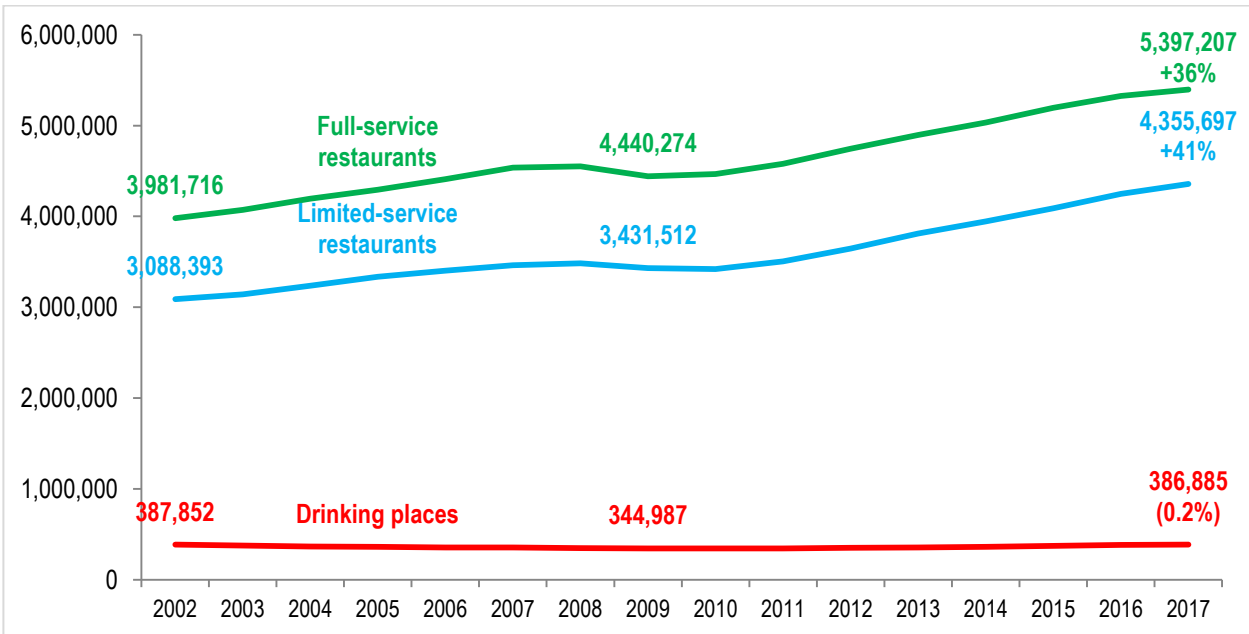


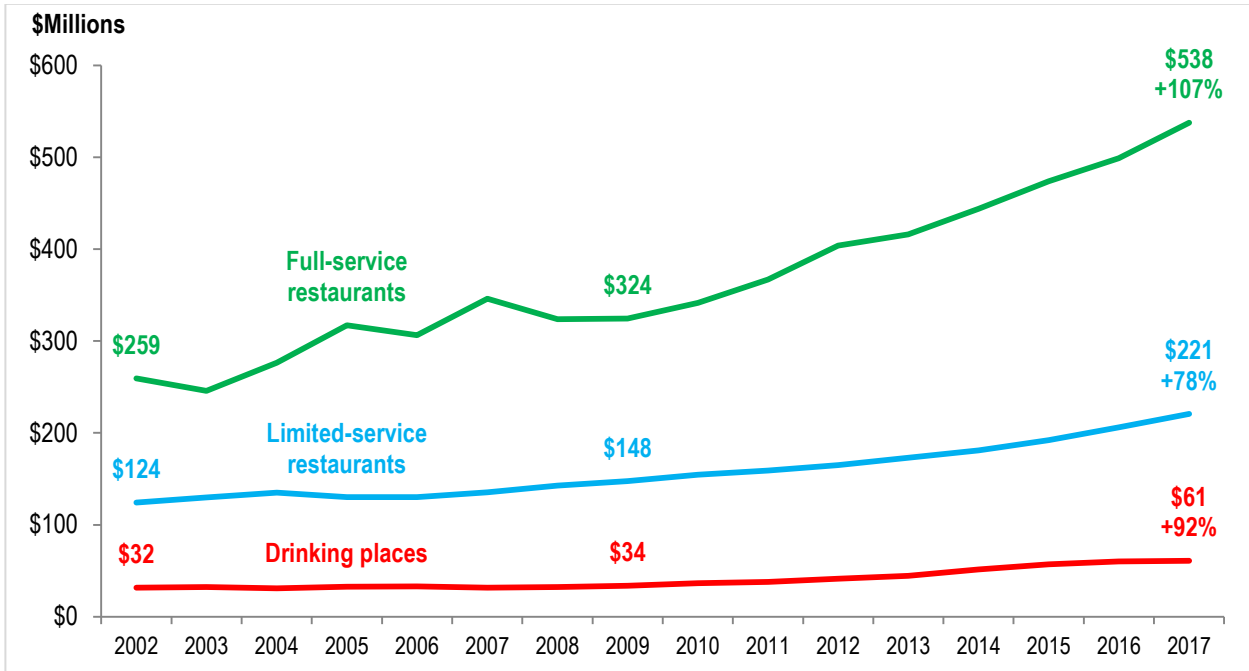
FIGURE 6.9 – NATIONAL RESTAURANT AND BAR EMPLOYMENT, 2002-2017



Source: ESI Analysis of Bureau of Labor Statistics QCEW data

Importantly, employment growth in these industries has led to even more substantial growth in wages within these sectors. Figure 6.10 shows that wages in each of the three sectors have grown by more than 50% since 2009, with wages for full-service restaurants jumping from \$324 million in 2009 to \$538 million in 2017.

FIGURE 6.10 – RESTAURANT AND BAR WAGES IN PHILADELPHIA, 2002-2017 (\$MILLIONS)



Source: ESI Analysis of Bureau of Labor Statistics QCEW data

Wage growth is a strong indicator of increased expenditures in service industries, since these establishments typically operate on low margins and cannot increase hours or hourly pay for their employees without growth in customers. Increased visitor spending in this sector (as illustrated in Section 3.3) is an important part of this mix, with regional visitors spending more than \$1.9 billion on food and beverage in 2017, an increase of 45% since 2009. The demand for food and drink from locals and visitors is complementary, helping to support a growing restaurant scene that is not only an amenity for locals and a key draw for visitors, but also an important (and growing) source of employment for residents throughout the city.

APPENDIX A – DETAILED VISITOR VOLUME INDEX MODEL METHODOLOGY

Index modeling is a frequently applied technique in economic forecasting that combines a variety of inputs to develop a composite estimate of year over year change for a given metric. For estimating visitor volume to a destination, this approach offers certain methodological advantages over estimates derived from survey panel data alone.

- While panel data is balanced to attempt to achieve representativeness of the full population (in this case all visitors to Greater Philadelphia) that it seeks to describe, sample bias may still occur.
- In addition, even a perfectly representative sample is subject to a margin of error in extrapolating to the full population.
- Finally, a number of assumptions are required to extrapolate the results from the sampled population to the entire population.

Panel data remains an invaluable source of information on travel behavior and preferences, and it is utilized within this methodology as the base source for the level of visitation to the destination. However, annual changes in visitation are typically small relative to the full volume of visitors (generally just a few percentage points in either direction). Such a calculation magnifies the weaknesses of panel data relative to “on the ground” metrics of visitor activity. A single data source with an acknowledged margin of error may show percentage changes that conflict with observed and tracked visitor activity in hotels, attractions, transportation providers, and employment in the tourism sector. While any one such indicator is by itself far from sufficient to determine trends in visitation (as each contains its own weaknesses and biases), collectively, such indicators are highly correlated with tourism activity, and can serve as a more reliable benchmark of annual changes in visitation.

Building on the work of Tourism Economics, which developed and implemented a visitor volume index model for Visit Philadelphia to produce estimates of the annual change in domestic travel volume by segment for several years, ESI analyzed the relationship between relevant and available indicators of tourism activity and travel volume by segment as reported by Longwoods International for travel years 2009 to 2016. This statistical exercise yielded insight into the nature and strength of the relationship between various inputs and visitation in the various segments, which were used to define the weight given to the observed changes in each metric on a year over year basis in estimating changes in volume.

Table A.1 below shows index components by visitor segments. Input data was provided on a quarterly basis by Visit Philadelphia, with the original source frequently the travel service provider

itself (attraction, hotel, transportation provider, etc.). Index components with the highest weight are highlighted in green while those with the lowest weight are highlighted in gray

TABLE A.1 – ESI GREATER PHILADELPHIA VISITOR VOLUME INDEX MODEL COMPONENTS

| Year | Overnight Leisure | Day Leisure | Overnight Business | Day Business |
|---------------------------------|-------------------|-------------|--------------------|--------------|
| Hotels | | | | |
| Rooms Sold – 5 County | ✓ | ✓ | ✓ | ✓ |
| Rooms Sold – CC | ✓ | ✓ | ✓ | ✓ |
| CC Leisure Demand | ✓ | ✓ | ✓ | ✓ |
| CC Commercial Demand | | | ✓ | ✓ |
| CC Group Demand | ✓ | ✓ | ✓ | ✓ |
| Attractions | | | | |
| INHP Attractions | ✓ | ✓ | | ✓ |
| Other Attractions | ✓ | ✓ | | ✓ |
| Transportation | | | | |
| PHL Domestic Scheduled Arrivals | ✓ | ✓ | ✓ | |
| AMTRAK non-commuter Arrivals | ✓ | ✓ | ✓ | ✓ |
| Employment | | | | |
| Tourism Sectors | ✓ | ✓ | ✓ | |
| Business Sectors | | | ✓ | ✓ |
| Weighting Key | | | | |
| High Weight | | | | |
| Medium Weight | | | | |
| Low Weight | | | | |

Index results were calculated quarterly by segment, and are expressed as a percentage change in visitation from the same quarter in the previous year (2016). These incremental changes were applied to volume levels by quarter by segment reported by Tourism Economics for Visit Philly, using a similar index model approach. Volume levels are set to estimates developed and reported by Longwoods International for travel year 2009, with incremental change estimates applied to each subsequent year.

APPENDIX B – DETAILED SPENDING, ECONOMIC AND FISCAL IMPACT METHODOLOGY

Direct spending estimates by sector are a function of changes in the quantity of visitors, prices within these sectors, and visitor spending patterns. After deriving visitation estimates through the index modeling approach, ESI uses a broad “basket” of indicators to derive estimates of changes in prices and spending patterns by sector. This balanced approach accounts for available and relevant data, and prevents variances in any one data source from overweighting spending estimates. Key inputs include:

- Survey panel data from Longwoods International, which provides reported per visitor spending for Greater Philadelphia visitors, and also information on the distribution of visitation and spending between the city of Philadelphia and suburban counties;
- Aggregated credit card transaction from Visa Vue, which provides observed data on Visa card spending within the City of Philadelphia by cardholders originating from outside of the city, including breakdowns of per transaction spending by sector;
- National data by sector from the BEA National Income and Product Account (NIPA) and the BLS Consumer Price Index (CPI), which measure value changes (i.e. inflation) in the type of goods and services purchased by households; and
- Industry and location-specific data where available, such as hotel rates at various geographies reported by Smith Travel Research, airfare data specific to flights originating from PHL and gas price data by geography.

International visitor spending estimates are provided to Visit Philly by the Philadelphia Convention and Visitors Bureau (PHLCVB) based on preliminary calculations from Tourism Economics’ Global City Travel service. This aggregate spending is distributed by sector based on Visa Vue data on international visitor spending by category.

Historical Direct Spending by Sector

Figures B.1 – B.5 below show the annual growth trends for each major sector of the tourism economy (supplementing Table 3.5 within the report). These trends illustrate the continuity of the time series between analyses done by Tourism Economics through 2014 and by ESI for the years 2015-2017.

FIGURE B.1 – FOOD AND BEVERAGE SPENDING GROWTH, 2009-2017

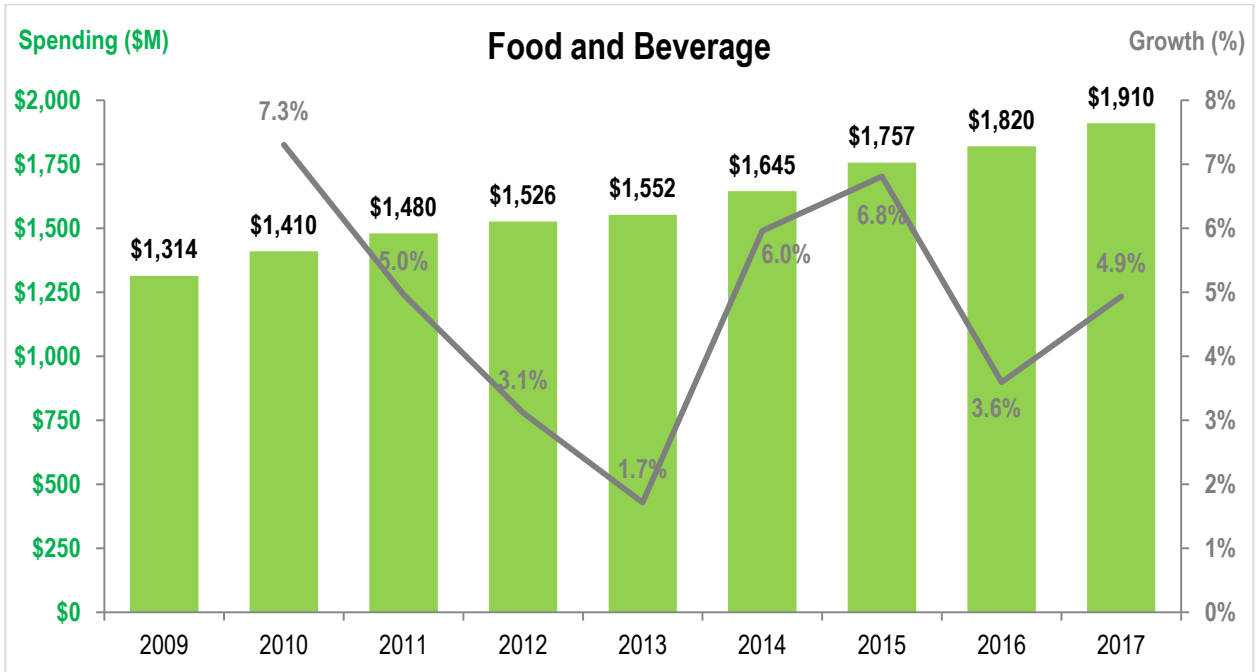
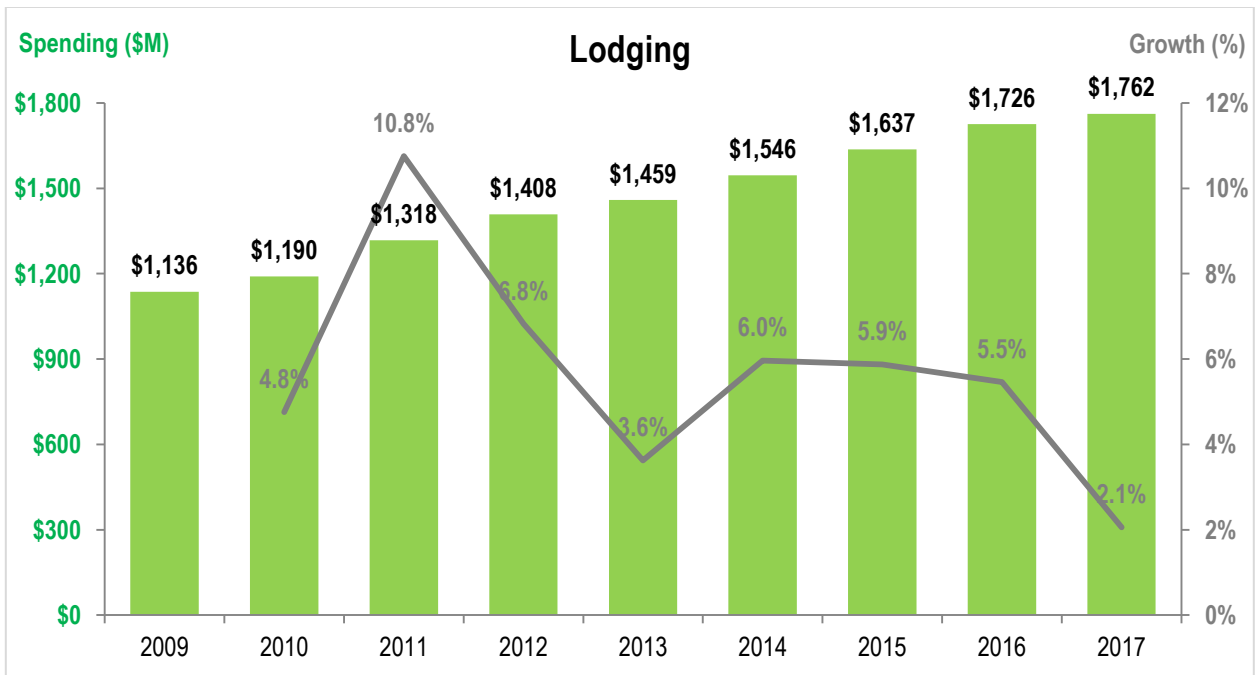


FIGURE B.2 – LODGING SPENDING GROWTH, 2009-2017



Source: Econsult Solutions, Inc. Tourism Economics

FIGURE B.3 – TRANSPORTATION SPENDING GROWTH, 2009-2017

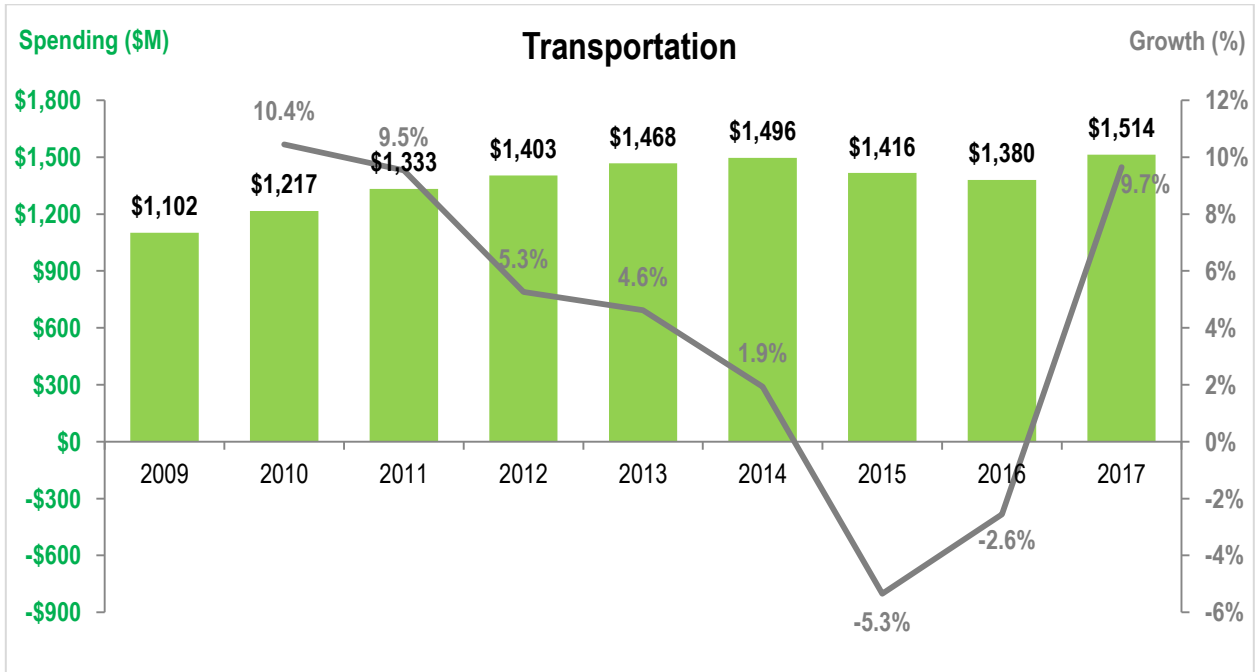
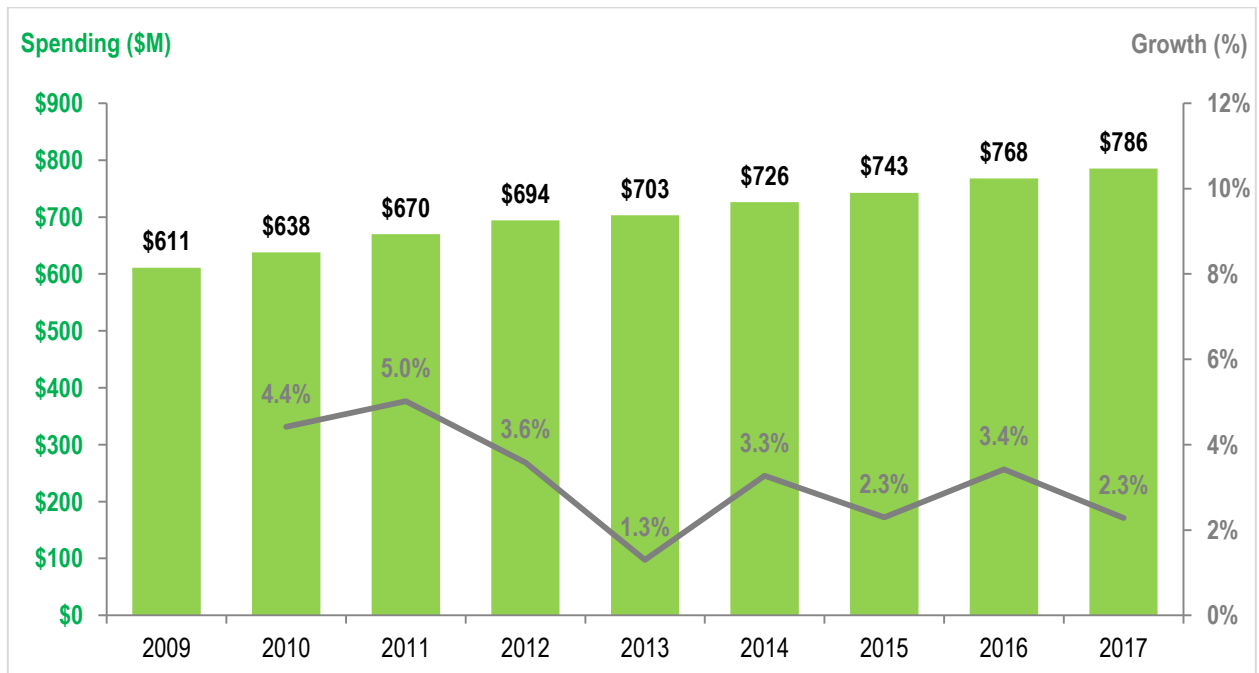


FIGURE B.4 – RETAIL SPENDING GROWTH, 2009-2017



Source: Econsult Solutions, Inc. Tourism Economics

FIGURE B.5 – RECREATION SPENDING GROWTH, 2009-2017



Source: Econsult Solutions, Inc. Tourism Economics

The scale and scope of tourism activity makes it an important component of the regional economy. This report articulates and quantifies the direct spending impacts within the city and regional economy across a number of categories (as described above). Input-output modeling is then used to estimate the spillover (indirect and induced) impacts of that direct spending within the regional economy, and to translate those impacts into employment and labor earnings supported. A custom fiscal model is then used to estimate the impact of that direct, indirect and induced economic activity on state and local tax bases.

Input-Output Theory

In an inter-connected economy, every dollar spent generates two spillover impacts:

- First, some amount of the proportion of that expenditure that goes to the purchase of goods and services gets circulated back into an economy when those goods and services are purchased from local vendors. This represents what is called the “indirect effect,” and reflects the fact that local purchases of goods and services support local vendors, who in turn require additional purchasing with their own set of vendors.
- Second, some amount of the proportion of that expenditure that goes to labor income gets circulated back into an economy when those employees spend some of their earnings on various goods and services. This represents what is called the “induced effect,” and

reflects the fact that some of those goods and services will be purchased from local vendors, further stimulating a local economy.

The role of input-output models is to determine the linkages across industries in order to model out the magnitude and composition of spillover impact to all industries of a dollar spent in any one industry. Thus, the total economic impact of visitor spending in Greater Philadelphia is the sum of direct spending (and its attendant economic footprint) plus the indirect and induced effects generated by that direct spending.

Input-Output Model Mechanics

To model the impacts resulting from the direct visitor expenditures, ESI developed a customized economic impact model using the IMPLAN input/output modeling system. IMPLAN represents an industry standard approach to assess the economic and job creation impacts of economic development projects, the creation of new businesses, and public policy changes.

IMPLAN is one of several popular choices for regional input-output modeling. Each system has its own nuances in establishing proper location coefficients. IMPLAN uses a location quotient to determine its regional purchase coefficient (RPC). This represents the proportion of demand for a good that is filled locally; this assessment helps determine the multiplier for the localized region. Additionally, IMPLAN also accounts for inter-institutional transfers (e.g. firms to households, households to the government) through its Social Account Matrix (SAM) multipliers. IMPLAN takes the multipliers and divides them into 536 industry categories in accordance to the North American Industrial Classification System (NAICS) codes.

Similarly to the methodologies employed for visitation and direct visitor spending described in Appendix A and Appendix B, input-output results were calculated on an incremental change basis, and this modeled change was applied to reported results for travel year 2015. To derive a comparable percentage change, direct visitor spending estimates for 2015 and 2016 were input into the same input-output model, and the resulting percentage changes in indirect and induced economic activity and employment and wages were observed. These proportionate changes were then applied to the established 2016 baseline to yield estimates for 2017.

Employment Impacts

Part of the total expenditure effect is actually the increase in total wages and salaries (usually referred to as labor income), which the model can separate from the expenditure estimates. Direct payroll estimates are fed into the "household" industry of the input-output model. Impacts of this industry are estimated using the personal consumption expenditure breakdown of the national input-output table and are adjusted to account for regional consumption spending and leakages from personal taxes and savings. The direct, indirect, and induced labor income represent a component of the total economic impact attributable to wages and salaries. Finally,

the model calculates the total expenditures affecting the various industries and translates this estimate into an estimate of the total labor (or jobs) required to produce this output. Since these indirect and induced impacts are generated by supply chain and employee spending, they tend to ripple across a wide range of industries within the broader economy, well beyond the categories like lodging and food and beverage that capture the bulk of the initial spending.

As described above, annual employment change attributable to tourism activity was estimated by modeling direct expenditures for 2016 and 2017 in parallel and observing the percentage change in results to yield estimates of total direct, indirect and induced employment. Incremental change was also calculated by sector, by category (direct and indirect/induced) and by geography (city vs. suburban counties). To do so, a statistical process was applied to derive the combination of incremental change by sector, category and geography that most closely matched modeled incremental change at each level while summing to the total modeled incremental change. In the case of the analysis by geography, results within the existing time series were deemed inaccurate based on the misalignment between the distribution of employment and other indicators like earnings and output. Accordingly, this distribution was re-estimated for 2017, and results were applied retroactively to 2016 based on the incremental year over year change.

Fiscal Impacts

The economic impacts described above in turn produce one-time or ongoing increases in various tax bases, which yield temporary or permanent increases in various tax revenues. The IMPLAN model does provide a rough estimate of the fiscal impact of this increase activity on state and local governments. To develop more precise estimates in certain categories, ESI has developed a custom fiscal model for the City of Philadelphia and Commonwealth of Pennsylvania that translates total economic impacts (as estimated by the IMPLAN model described above) into their commensurate tax revenue gains for the City and Commonwealth by calculating the effective tax rate on various types of economic activity.

Further, ESI's analysis recognizes that certain specific local taxes are borne disproportionately by out of town visitors and merit specific analysis. For the City of Philadelphia, these include the hotel tax, sales tax, liquor by the drink tax, amusement tax, vehicle rental tax and parking tax. Estimates for these taxes are developed using a bottom up approach, in which IMPLAN estimates of spending in the relevant categories are assigned a taxable proportion estimate, which is multiplied by the tax rate to yield a revenue estimate. This estimate is then compared to total collections for each tax to ensure that the proportion attributed to visitor activity is reasonable.

APPENDIX C – ABOUT ECONSULT SOLUTIONS, INC.

This report was produced by Econsult Solutions, Inc. (“ESI”). ESI is a Philadelphia-based economic consulting firm that provides businesses and public



policy makers with economic consulting services in urban economics, real estate economics, transportation, public infrastructure, development, public policy and finance, community and neighborhood development, planning, as well as expert witness services for litigation support. Its principals are nationally recognized experts in urban development, real estate, government and public policy, planning, transportation, non-profit management, business strategy and administration, as well as litigation and commercial damages. Staff members have outstanding professional and academic credentials, including active positions at the university level, wide experience at the highest levels of the public policy process and extensive consulting experience.