

# DETAILED 2016 VISITATION AND ECONOMIC IMPACT RESULTS

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## EXECUTIVE SUMMARY

Commissioned by VISIT PHILADELPHIA, this report details Greater Philadelphia's 2016 visitation and economic impact of tourism with comparisons to previous years.

Each year, tens of millions of travelers visit the Greater Philadelphia region (Bucks, Chester, Delaware, Montgomery and Philadelphia counties) and inject billions of dollars in spending into the local economy. **For the seventh consecutive year, Greater Philadelphia's tourism industry achieved record performance** across five major industry metrics: visitation, visitor spending, economic impact, visitor-supported employment and tax revenue. The following highlights key findings for those metrics and provides contextual analysis including, historical and national trends.

## KEY FINDINGS



**Domestic visitation** to Greater Philadelphia reached a record 42 million people in 2016, an increase of 2.4% from 41 million in 2015. This represents the seventh consecutive year of visitation growth since the depth of the recession in 2009.



**Direct visitor spending** in the region totaled \$6.83 billion in 2016, an increase of 2.5% from 2015. Approximately 50% was spent in the lodging and food and beverage sectors. Lodging was the fastest-growing spending sector, at 5.5% annual growth, driven by an increase in overnight visitation and higher daily hotel rates.



**Total economic impact** from visitor spending reached a record \$11 billion in 2016, up 2.8% from \$10.7 billion in 2015. This represents \$30 million in regional impact per day. Over the past seven years, growth in visitor spending and impact has outpaced growth in visitation. Not only are more visitors coming each year, but they are becoming more impactful on a per visitor basis due to increases in their spending footprint.



**Visitor-supported employment** totaled 96,600 in 2016, a 3.5% increase over 2015. Labor income resulting from that employment totaled nearly \$3.4 billion, which also grew 3.5% over last year. One out of every three jobs in the leisure and hospitality sector is supported by visitors to the region.



**State and local taxes** generated by visitors grew by 3.7% to \$638 million in 2016, representing an annual tax savings of \$420 per household in the five-county region. Visitor-generated tax revenue directly funds public services such as, education, public safety and transportation.

**Through these impacts, Greater Philadelphia's tourism industry plays a major role in sustaining and growing the region's diversity in offerings,** which in turn, further inspire new and repeat visitors to choose Greater Philadelphia as a destination of choice and enhances the quality of life for over three million residents.



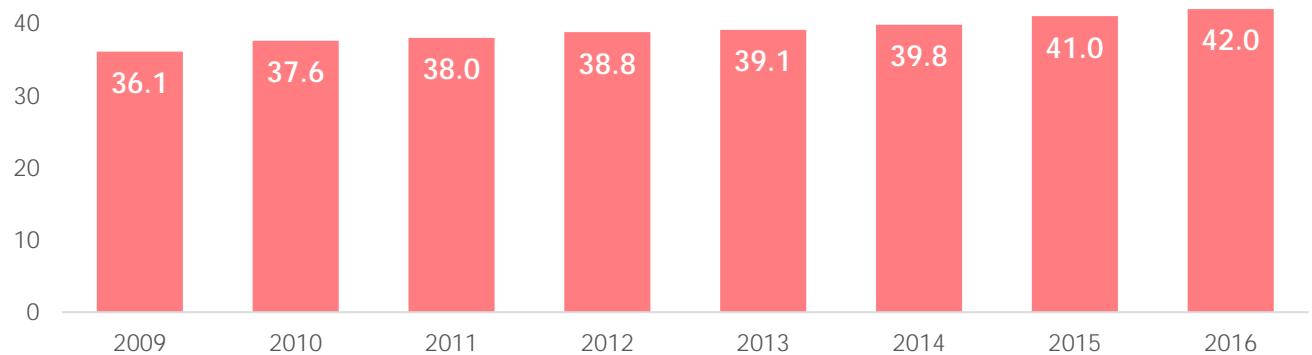
## ADDITIONAL ANALYSIS

### VISITATION

Visitation to Greater Philadelphia continues to build momentum with **seven straight years of record totals, hitting 42 million in 2016** (Figure 1). The 42 million visitors are equivalent to the total state populations of New York, Virginia and Ohio.

Since the economic crisis in 2009, domestic visitation increased by six million from 36 million to 42 million, averaging 2.2% growth per year. Growth from 2015 to 2016 was above average at 2.4%. **The one million more visitors in 2016 from 2015 accounted for the largest net increase since 2010.**

Figure 1 – ANNUAL VISITATION 2009-2016  
(in millions)



**A rise in overnight trips has been the main driver** of total visitation growth, increasing by 29% since 2009 compared to 10% for day trips (Table 1), with **overnight leisure trips growing by more than 3.3 million** over this period from 11.4 million to 14.7 million.

Table 1– ANNUAL VISITATION TO GREATER PHILADELPHIA FOR 2009, 2015 and 2016 (in millions)

Year	Total	Overnight Leisure	Day Leisure	Overnight Business <sup>1</sup>	Day Business	Overnight Total	Day Total
2009	36.01	11.35	20.50	1.80	2.36	13.15	22.86
2015	41.05	14.28	21.87	2.20	2.69	16.49	24.56
2016	42.02	14.65	22.35	2.26	2.76	16.91	25.11
% Chg 2009-2016	17%	<b>29%</b>	9%	26%	17%	<b>29%</b>	10%
% Chg 2015-2016	2.4%	2.6%	2.2%	2.7%	2.6%	2.5%	2.2%

Leisure visitation, representing 88% of total annual visitation, has also grown consistently over this period, signaling the region's development into a **destination of choice**. This steady stream of discretionary travelers provides greater stability of hotel demand across days of the week and seasons of the year.

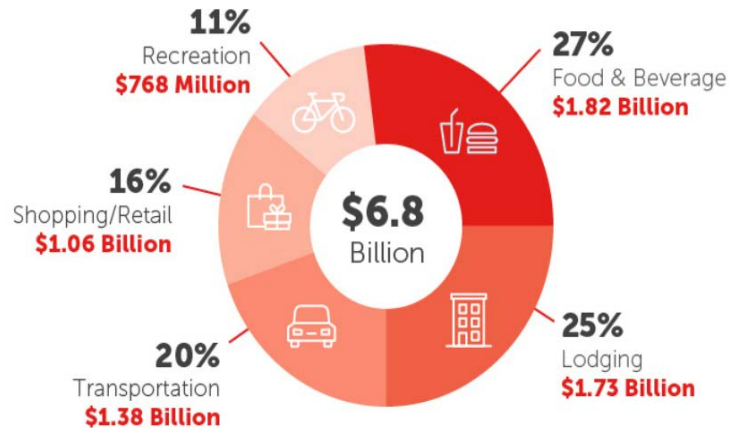
## VISITOR SPENDING

In 2016, **direct spending by visitors within Greater Philadelphia totaled \$6.83 billion, a 2.5% increase from \$6.66 billion in 2015.**

Direct spending is divided across five major sectors of the tourism economy with the two largest sectors, food and beverage and lodging, representing half of total visitor spend (Figure 2).

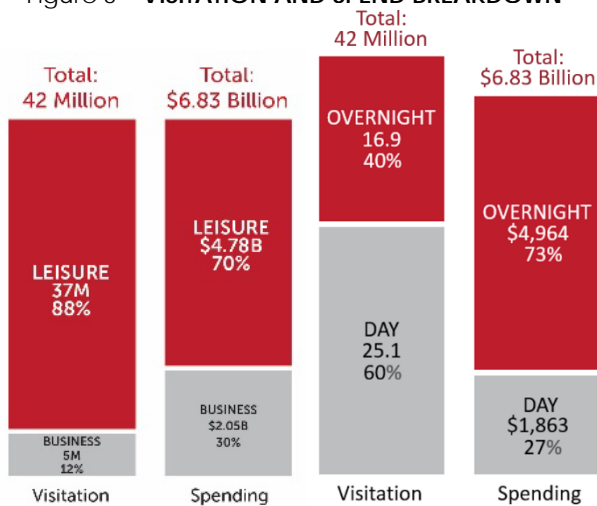
- **Lodging** was the fastest-growing sector, increasing 5.5% year over year, driven both by increases in overnight visitation and daily rates at Greater Philadelphia hotels.
- **Food & Beverage** spending totaled \$1.76 billion in 2015, a 3.6% increase over 2015. Visitors helped sustain the more than 100 new restaurants across the region in 2016.
- **Transportation** spending, down 2.6%, was the only category to fall in 2016. The continuing double-digit declines in fuel prices reduced spending on gasoline and airfare.
- **Retail and recreation sectors** saw higher growth in 2016, at almost 5% growth for both, than in 2015. Impact from reduced transportation spending is likely counterbalanced by increased spending in other sectors.

Figure 2 – 2016 DIRECT VISITOR SPENDING BY CATEGORY



Looking at visitor spending by segment type, leisure visitors and overnight visitors stand out as highly valuable guests.

Figure 3 – VISITATION AND SPEND BREAKDOWN



**Leisure travelers** make up the vast majority, 88%, of visitors to Greater Philadelphia and contribute the majority of spending impact.

**Overnight visitors** comprise under half of total visitors yet contribute almost three-quarters of total visitor spending. Overnight trips increase hotel room nights sold and draw more spending per visitor. With successful tourism marketing, the portion of overnight visitation of the total visitation continues to grow. In 2009, 36% of total visitors stayed overnight, by 2016 the share of overnight visitors grew to 40%. This growing demand led to a record occupancy level of 78% for Center City hotels in 2016.

## ECONOMIC IMPACT

**Tourism is a key export sector** of the modern economy, where the item for sale is the experience offered by a destination. Each year, millions of travelers from outside the Philadelphia region purchase the range of experiences that the region has to offer, supporting local businesses, employment and the tax base.

The total economic impact of this activity is the sum of direct visitor spending by tourists and the ripple effects that those dollars have on the local economy.<sup>2</sup>



In 2016, **economic impact of tourism in Greater Philadelphia totaled a record \$11 billion.** This was a 2.8% increase from the \$10.7 economic impact in 2015. (See Table 2 for economic impact breakdown.)

- The \$11 billion in annual impact equates to **\$30 million in economic impact** per day in the region.
- The majority of economic impact (\$6.4 billion, 58%) took place within the city of Philadelphia.
- Total regional economic impact includes 96,600 jobs supported by visitor activity and nearly \$3.4 billion in labor income.
- Over the past seven years since the recession, **growth in visitor spending and economic impact has outpaced growth in visitation.** This means that not only is the region attracting more visitors, but also that **tourists are becoming relatively more impactful on a per visitor basis** due to increases in their spending footprint.

TABLE 2 – GREATER PHILADELPHIA VISITOR ECONOMIC IMPACT, 2015-2016

Metric	Total	% Chg vs. 2015	Direct Impact	Indirect/ Induced Impact
<b>TOTAL IMPACT (\$ M)</b>	<b>\$11,033</b>	<b>+ 2.8%</b>	\$6,827	\$4,206
<b>EMPLOYMENT (jobs)</b>	<b>96,640</b>	<b>+ 3.5%</b>	71,256	25,384
<b>PERSONAL INCOME (\$ M)</b>	<b>\$3,351</b>	<b>+ 3.5%</b>	\$2,000	\$1,351

**Growth in tourism** and tourism amenities has demonstrated ancillary benefits for economic growth, quality of life, and resident attraction, since the same features that make destinations attractive to visitors make them attractive to residents, and by extension, to businesses seeking talent.

<sup>2</sup> Tourism economic impact includes direct spending (business sales of visitor purchases) indirect spending (from the supply chain of tourism-serving businesses) and induced spending (spending of labor income generated by tourism serving businesses).

## EMPLOYMENT

Visitor activity supported **96,600 jobs** in Greater Philadelphia in 2016, an increase of 3.5% from 93,300 in 2015. Growing employment indicates that Philadelphia's commitment to tourism as an economic development strategy is paying dividends and that **visitor spending is helping leisure and hospitality businesses not only to sustain themselves, but to grow in number and size.**

The tourism economy is by its nature experiential and tied to the unique qualities of a place, making it very difficult to outsource or to automate.

Visitor-supported employment cuts across multiple key sectors including accommodations, food services, arts & recreation, transportation and retail and represents a significant portion of jobs in each sector as shown below.

Table 3 – 2016 GREATER PHILADELPHIA VISITOR SUPPORTED

Sector	Total Private Employment	Visitor-Supported Employment	% Visitor-Supported
Leisure and Hospitality Sector	177,800	61,000	34%
<i>Arts, Entertainment &amp; Recreation</i>	34,300	12,200	36%
<i>Accommodations &amp; Food Service</i>	143,500	48,800	34%
Transportation	26,130	10,600	41%
Retail	194,500	7,340	4%
Other Industries	1,272,600	17,700	1%
<b>Total</b>	<b>1,670,000</b>	<b>96,600</b>	<b>5.8%</b>

Greater Philadelphia Visitor-Supported Employment as a Share of Private Employment, 2016. Sources: Bureau of Labor Statistics, Econsult Solutions, Inc., IMPLAN

### In addition:

- **6% of total private employment** in the region, 96,600 jobs, is accounted for by visitor-supported employment overall.
- **1 out of every 3 jobs in the region's leisure and hospitality sector** is supported by visitors to the region. Within the leisure and hospitality sector, 36% of jobs in the region's arts, entertainment and recreation sectors are supported by visitor spending, as are 34% of jobs in the accommodations and food sector.
- **4% of total private employment, or 7,340 jobs** is visitor-supported retail employment, a 2.5% growth from 2015. Tourism activity may remain a bright spot for this sector. Visitors are more likely to be seeking an experiential retail experience connected with the destination they are visiting, as opposed to online shopping.
- **Leisure and hospitality sector growth in Greater Philadelphia has outpaced growth elsewhere in the Commonwealth** in each of the past seven years. Employment growth within the sector has averaged 2.6% in the five-county region over this period, compared to 1.4% across the remainder of the state.



## TAX REVENUE

Out-of-town visitors contribute tax dollars to support government services that residents benefit from year-round, without having to raise taxes on local residents.

**In 2016, state and local taxes generated by visitor spending in Greater Philadelphia totaled \$638 million, an increase of 3.7% from \$615 million in 2015.**

- Local tax revenue for the city of Philadelphia and surrounding counties totaled \$414 million. Revenue generated for the Commonwealth of Pennsylvania was \$224 million.
- The state and local tax revenue equates to \$420 in tax savings for each of the 1.5 million households in the five-county region. This means that in total, Greater Philadelphia residents saved \$638 million in taxes in 2016.

Of the total visitor generated tax revenue, **\$90 million was attributed to consumption taxes**—taxes on consumed purchases such as, hotel room nights and attraction tickets—within the City of Philadelphia. As detailed in the table below, visitor-supported activity accounts for 37% of total annual tax revenues from consumption taxes.

The consumption tax revenues **directly support the School District of Philadelphia and the City of Philadelphia General Fund**, which maintains priority programs such as public safety, transportation and sanitation.

Table 4 – SHARE OF SELECTED PHILADELPHIA CONSUMPTION TAXES SUPPORTED BY VISITORS

Tax Type	Visitor Supported Revenue, 2016 (\$M)	Total City of Philadelphia Collections, FY 2016 (\$M)	Visitor Supported Proportion (%)	Use of Revenue
Hotel Tax	\$55.7	\$58.6	95%	Tourism Promotion/ Convention Center Debt
Liquor Tax	\$22.2	\$66.0	34%	School District
Amusement Tax	\$5.6	\$19.1	29%	General Fund
Vehicle Rental Tax	\$3.9	\$5.7	68%	Stadium Debt
Parking Lot Tax	\$2.5	\$92.2	3%	General Fund
<b>Total</b>	<b>\$89.9</b>	<b>\$241.6</b>	<b>37%</b>	

Sources: City of Philadelphia, ESI

Visitor revenues also support further tourism marketing efforts via the hotel tax, which funds the Pennsylvania Convention Center, the Philadelphia Convention & Visitors Bureau and VISIT PHILADELPHIA. Therefore, **tourism marketing is self-sustaining and generates major tax revenue for the city, suburbs and state.**



## DETAILED 2016 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.<sup>1</sup> 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 2016 to provide additional statistical detail and additional context for these results. It will be supplemented by additional statistical and economic analysis relevant to understanding and expressing current and future impacts.

### 1.0 DOMESTIC VISITATION

Domestic visitation to Greater Philadelphia reached a new high of 42 million in 2016, which represented the seventh consecutive year of visitation growth.<sup>2</sup> This section reviews the level and trend in domestic visitation across several dimensions:

- *Visitor segments* details the market by purpose of visit (leisure and visit) and type of stay (day and overnight);
- *Historical trends* reviews long-term patterns in visitation;
- *National context* compares visitation trends to Philadelphia with travel patterns nationwide;
- *Seasonality* compares visitation across different portions of the year.

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

<sup>2</sup> 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)



## 1.1 VISITOR SEGMENTS

Total domestic visitation was 42 million in 2016, an increase of approximately 1 million (or 2.4%) from 2015 (see Table 1.1).

- Similar growth levels were observed across the various travel segments, with both leisure and business visitation growing by 2.4% and overnight visitation growing slightly faster (2.5%) than day visitation (2.2%).
- Leisure visitation reached 37 million, with business visitation accounting for the remaining 5 million.

TABLE 1.1 – ANNUAL DOMESTIC VISITATION TO GREATER PHILADELPHIA, 2015-2016

Year	Total	Overnight Leisure	Overnight Business	Day Leisure	Day Business	Overnight	Day	Leisure	Business
2016	42.02	14.65	2.26	22.35	2.76	16.91	25.11	37.00	5.02
2015	41.05	14.28	2.20	21.87	2.69	16.49	24.56	36.15	4.90
% Chg	+ 2.4%	+ 2.6%	+ 2.7%	+ 2.2%	+ 2.6%	+ 2.5%	+ 2.2%	+ 2.4%	+ 2.4%

Source: Econsult Solutions, Inc. Longwoods International

This visitation growth is consistent with healthy metrics across the tourism industry in 2016, including strong hotel performance and increases in leisure and hospitality sector employment.<sup>3</sup>

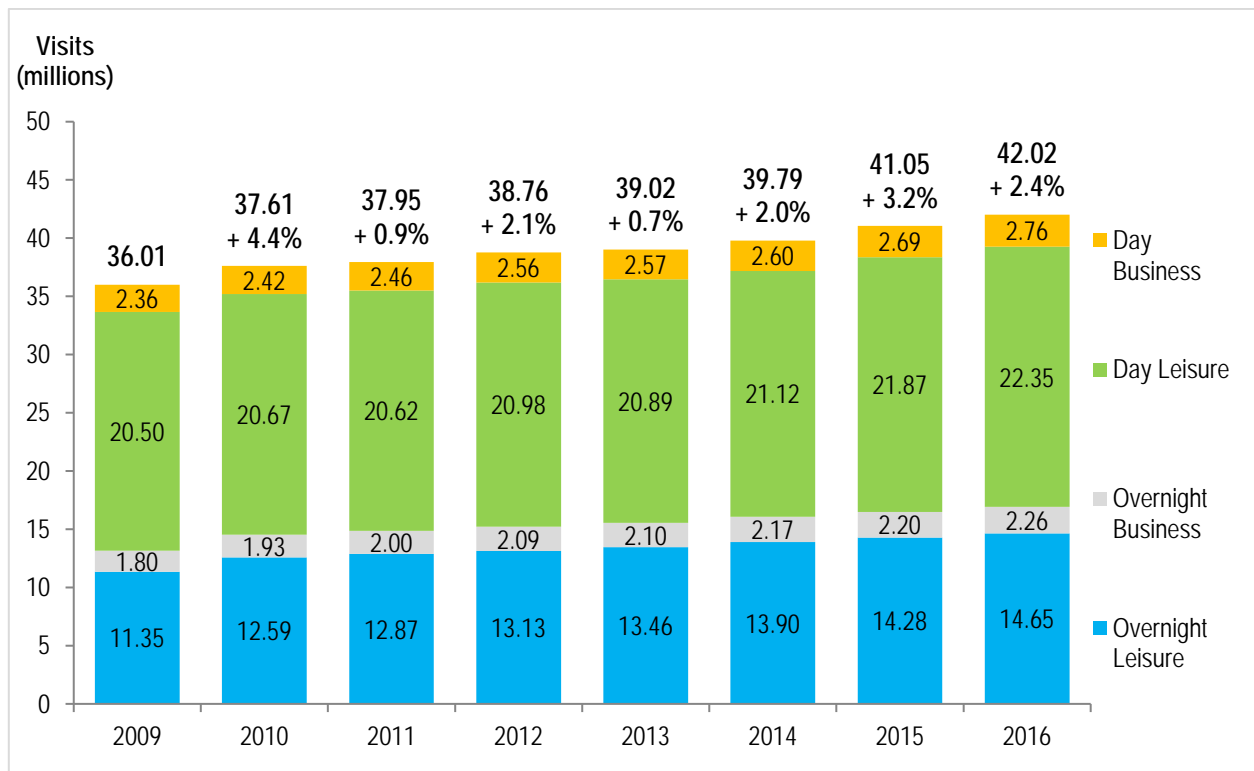
<sup>3</sup> Visitor volume estimates are derived from an index model which considers a range of industry inputs and the historic relationship between these inputs and regional visitation. See Appendix A for a detailed description of ESI's domestic visitor volume index modeling approach

## 1.2 HISTORICAL VISITATION TRENDS

2016 represented the seventh consecutive year of growth in visitor volume from its low point during the recession (see Figure 1.1).

- Domestic visitation to Greater Philadelphia increased by 6 million from 36 million in 2009 to 42 million in 2016 (an annual growth rate of 2.2% per year).
- Year over year growth of 2.4% was slightly below the 3.2% growth in 2015, but above annual growth rates from 2011-2014.

FIGURE 1.1 – ANNUAL DOMESTIC VISITATION TO GREATER PHILADELPHIA, 2009-2016



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

All segments increased visitation from 2009-2016, as well as in the 20 year period from 1997 to 2016. Over the long-term, growth has been concentrated in the overnight and leisure segments (see Table 1.2).

- Growth in overnight visitation has been more robust than day visitation, increasing by 29% from 2009-2016 and by 95% since 1997.
- Overnight leisure visitation has more than doubled from 7.3 million in 1997 to 14.65 million in 2016, the fastest growth of any segment.

TABLE 1.2 – DOMESTIC VISITATION GROWTH BY SEGMENT, 1997-2016

Year	Total	Overnight Leisure	Overnight Business	Day Leisure	Day Business
1997	26.67	7.30	1.39	15.50	2.48
2009	36.01	11.35	1.80	20.50	2.36
2016	42.02	14.65	2.26	22.35	2.76
% Chg 1997-2016	58%	101%	63%	44%	11%
% Chg 2009-2016	17%	29%	26%	9%	17%

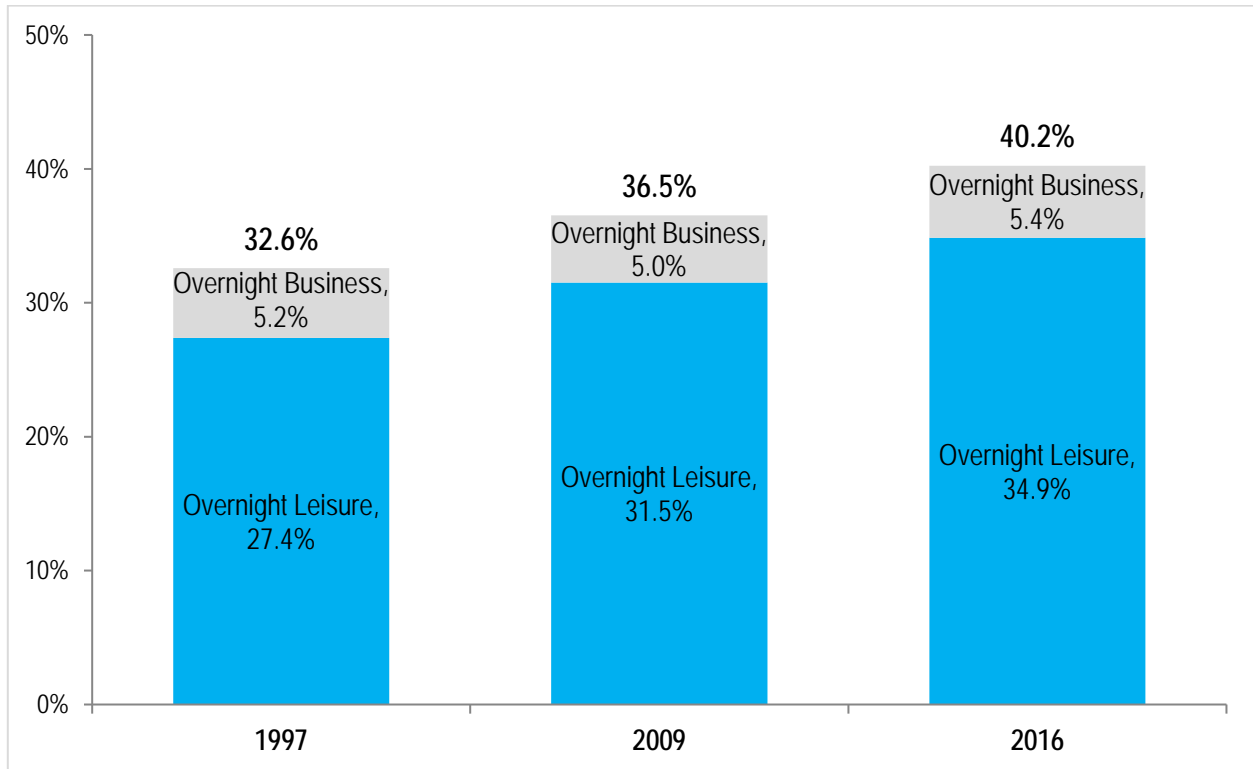
  

Year	Total	Overnight	Day	Leisure	Business
1997	26.67	8.69	17.98	22.8	3.87
2009	36.01	13.15	22.86	31.85	4.16
2016	42.02	16.91	25.11	37.00	5.02
% Chg 1997-2016	58%	95%	40%	62%	30%
% Chg 2009-2016	17%	29%	10%	16%	21%

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

As a result of these differential growth rates, overnight visitation has increased its share of total domestic visitation from 33% in 1997 to 40% in 2016, with leisure travelers representing the bulk of those overnight trips (see Figure 1.2).

FIGURE 1.2 – OVERNIGHT VISITATION AS A SHARE OF TOTAL VISITATION, 1997-2016



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

From an economic standpoint, overnight trips are particularly valuable because they draw more spending per visitor (as discussed below), and also because they create demand for hotel room nights. This demand in turn has led to increasing hotel supply in Philadelphia over time, which generates construction activity and ultimately creates jobs in the hospitality industry which span a range of salary levels.

### 1.3 VISITATION GROWTH CONTEXT

National and regional benchmarks provide context for Greater Philadelphia's visitation growth trends. One baseline question is the degree to which travel activity would be expected to increase on an annual basis due to demographic and employment growth factors. Specifically, increases in the adult population over time increase the potential pool of travelers, while increases in the employment base increases those adults that may have disposable income to travel.

Table 1.3 below shows annual rates of adult population and employment growth nationally and for the Greater Philadelphia region over the past seven years relative to growth in travel volume. Nationally, growth in domestic trips (which has averaged 2.1% over the past seven years) has exceeded both population growth (0.9%) and growth in employment (1.7%).

Population and employment growth in the Greater Philadelphia region has been slower than the national average. This is typical of regions in the northeastern part of the country, as long-term demographic trends shifting population to the southern and western parts of the country continue. Despite this, domestic travel to the Philadelphia region (which has averaged 2.2% over the past seven years) has run slightly ahead of the national trend, and significantly ahead of local growth in population (0.5%) and employment (0.9%).

TABLE 1.3 –POPULATION, EMPLOYMENT AND DOMESTIC TRAVEL GROWTH, 2010-2016

Year	National Population 18+	National Private Employment	National Domestic Trips	Greater Phila Population 18+	Greater Phila Private Employment	Greater Phila Domestic Visitors
2010	0.8%	(0.8%)	3.3%	0.5%	(0.5%)	4.4%
2011	0.3%	1.8%	1.7%	0.5%	0.9%	0.9%
2012	1.1%	2.2%	1.6%	0.7%	0.9%	2.1%
2013	1.1%	2.0%	1.4%	0.6%	0.4%	0.7%
2014	1.0%	2.2%	2.4%	0.5%	1.5%	2.0%
2015	1.0%	2.3%	3.3%	0.3%	1.5%	3.2%
2016	0.9%	1.9%	1.3%	0.3%	1.8%	2.4%
<b>Average</b>	<b>0.9%</b>	<b>1.7%</b>	<b>2.1%</b>	<b>0.5%</b>	<b>0.9%</b>	<b>2.2%</b>

Source: US Census Bureau (population), Bureau of Labor Statistics (employment), US Travel Association (national travel), Tourism Economics, Econsult Solutions, Inc. (Greater Philadelphia travel)

In addition to the volume of domestic trips, data from the US Travel Association also breaks down nationwide trips by leisure and business purpose. As in the Philadelphia region, a significant majority of trips nationally are for a leisure purpose.

Table 1.4 below shows growth rates in domestic leisure and business travel nationally and in Greater Philadelphia over the past five years. Nationally, leisure trips have grown more rapidly and consistently than business trips over this period. In Greater Philadelphia, growth rates for leisure and business segments have been more comparable, with business growth rates slightly outpacing leisure growth rates.

TABLE 1.4 – DOMESTIC TRAVEL GROWTH BY PURPOSE OF TRIP, 2012-2016

Year	National Leisure Trips	National Business Trips	Greater Phila Leisure	Greater Phila Business
2012	2.2%	(0.3%)	1.9%	4.3%
2013	1.5%	1.3%	0.7%	0.4%
2014	2.7%	1.4%	2.0%	2.1%
2015	3.6%	1.9%	3.2%	2.6%
2016	1.7%	(0.2%)	2.4%	2.5%
<b>Average</b>	<b>2.3%</b>	<b>0.8%</b>	<b>2.0%</b>	<b>2.4%</b>

Source: US Travel Association, Tourism Economics, Econsult Solution, Inc.

### 1.4 SEASONALITY OF VISITATION

Total visitation grew in each quarter on a year over year basis, with growth most robust in Q4 at 4.1% (see Figure 1.3).

- The spring and summer months, which represent the peak visitation season, saw growth of 2.3% in Q2 and 1.7% in Q3.
- Overnight leisure visitation was most robust in the second half of the year (see Figure 1.4)

FIGURE 1.3 – TOTAL DOMESTIC VISITATION TO GREATER PHILADELPHIA BY QUARTER (IN MILLIONS)

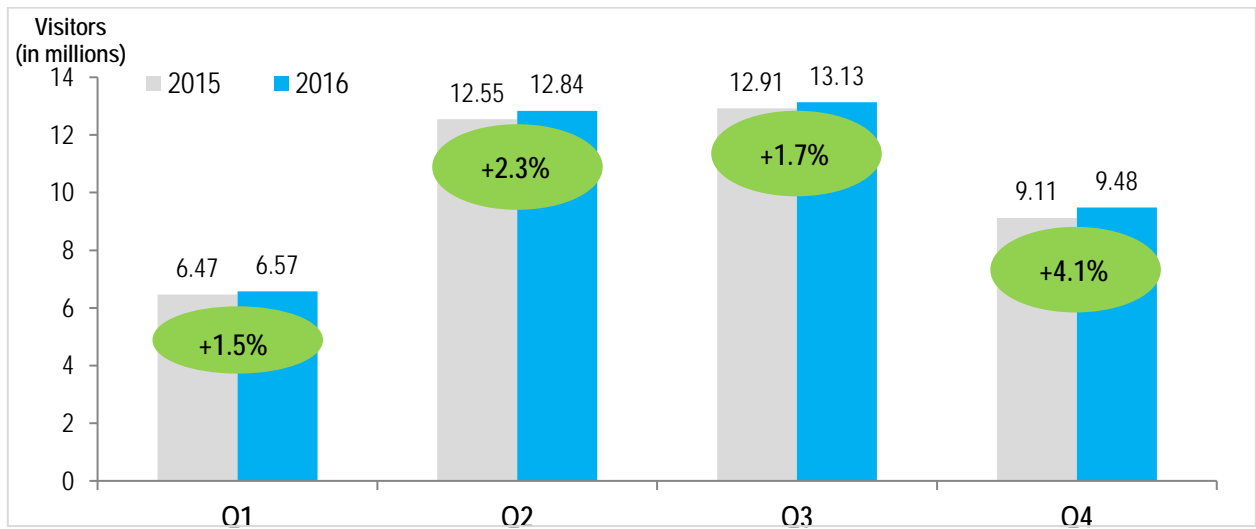
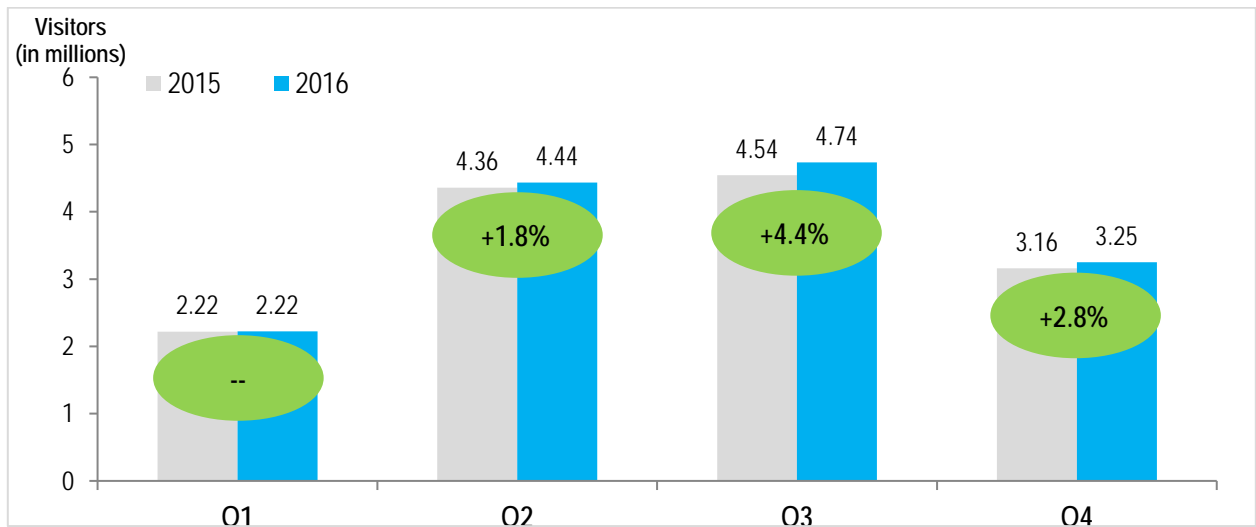


FIGURE 1.4 – DOMESTIC OVERNIGHT LEISURE VISITATION TO GREATER PHILADELPHIA BY QUARTER (IN MILLIONS)



Source: Econsult Solutions, Inc. Longwoods International



A more granular analysis of quarterly visitation trends by segment shows that the growth numbers mask some variation in growth trends by segment (see Table 1.5)

- Overnight visitation was flat in Q1 and robust in Q3, growing by 4.5%.
- Day visitation was flat in Q3 and was strongest in Q4, growing by 5.0%.

TABLE 1.5 – QUARTERLY DOMESTIC VISITATION TO GREATER PHILADELPHIA, 2015-2016 (IN MILLIONS)

Quarter	Total	Overnight Leisure	Overnight Business	Day Leisure	Day Business	Overnight	Day	Leisure	Business
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 2015	6.47	2.22	0.52	3.07	0.66	2.74	3.73	5.28	1.18
Q2 2015	12.55	4.36	0.61	6.88	0.70	4.97	7.58	11.25	1.30
Q3 2015	12.91	4.54	0.53	7.14	0.70	5.07	7.85	11.69	1.23
Q4 2015	9.11	3.16	0.55	4.77	0.63	3.71	5.41	7.93	1.18
Q1 % Chg	1.5%	0.0%	0.0%	2.6%	3.0%	0.0%	2.7%	1.5%	1.7%
Q2 % Chg	2.3%	1.8%	1.6%	3.2%	(2.9%)	1.8%	2.6%	2.7%	(0.8%)
Q3 % Chg	1.7%	4.4%	5.7%	(0.6%)	4.3%	4.5%	(0.1%)	1.4%	4.9%
Q4 % Chg	4.1%	2.8%	1.8%	4.8%	6.3%	2.7%	5.0%	4.0%	4.2%

Source: Econsult Solutions, Inc. Longwoods International

## 2.0 DIRECT VISITOR SPENDING

Direct visitor spending by Greater Philadelphia visitors totaled \$6.8 billion in 2016.<sup>4</sup> This section breaks down this spending across several dimensions:

- *Spending by Sector* details direct spending and spending growth by industry;
- *Historical Spending Trends* reviews long-term patterns in visitor spending;
- *Visitor Spending Context* examines visitor spending in light of recent inflation trends; and,
- *Spending by Visitor Type* compares spending patterns across different trip types and trip purposes.

### 2.1 SPENDING BY SECTOR

Direct visitor spending is divided across five main sectors of the economy (see Table 2.1 and Figure 2.1). For the second consecutive year, all sectors saw growth in direct spending with the exception of transportation spending, which continued to be constrained by declining gas prices. Total direct visitor spending grew by 2.5% from \$6.66 billion in 2015 to \$6.83 billion in 2016.<sup>5</sup>

- The two largest sectors of the visitor economy, food and beverage and lodging, represent approximately 50% of total visitor spending. **Lodging was the fastest growing sector, increasing 5.5% year over year, driven both by an increase in overnight visitation and increasing daily rates at Greater Philadelphia hotels.**
- The retail and recreation sectors also saw growth year over year, of 1.9% and 4.9% respectively.

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<sup>4</sup> Direct visitor spending refers to point of sale purchases by visitors in Greater Philadelphia, prior to any indirect or induced economic impacts. These estimates include spending by both domestic and international visitors.

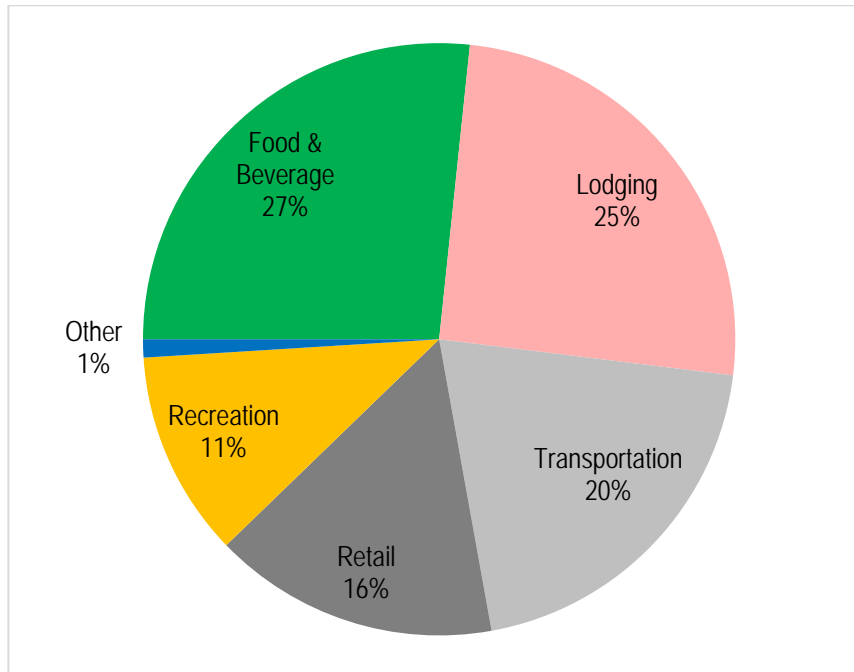
<sup>5</sup> Direct spending estimates are calculated as a function of changes in the quantity of visitors, prices within key sectors, and visitor spending patterns. Appendix B provides a detailed description of ESI's direct visitor spending modeling approach.

TABLE 2.1 – GREATER PHILADELPHIA DIRECT VISITOR SPENDING BY SECTOR, 2015-2016

Sector	2016	2015	% Chg
Food & Beverage	\$1.82 B	\$1.76 B	+ 3.6%
Lodging	\$1.73 B	\$1.64 B	+ 5.5%
Transportation	\$1.38 B	\$1.42 B	(2.6%)
Retail	\$1.06 B	\$1.04 B	+ 1.9%
Recreation	\$768 M	\$743 M	+ 4.9%
Other	\$67 M	\$64 M	+ 4.9%
Total	\$6.83 B	\$6.66 B	+ 2.5%

Source: Econsult Solutions, Inc. Longwoods International

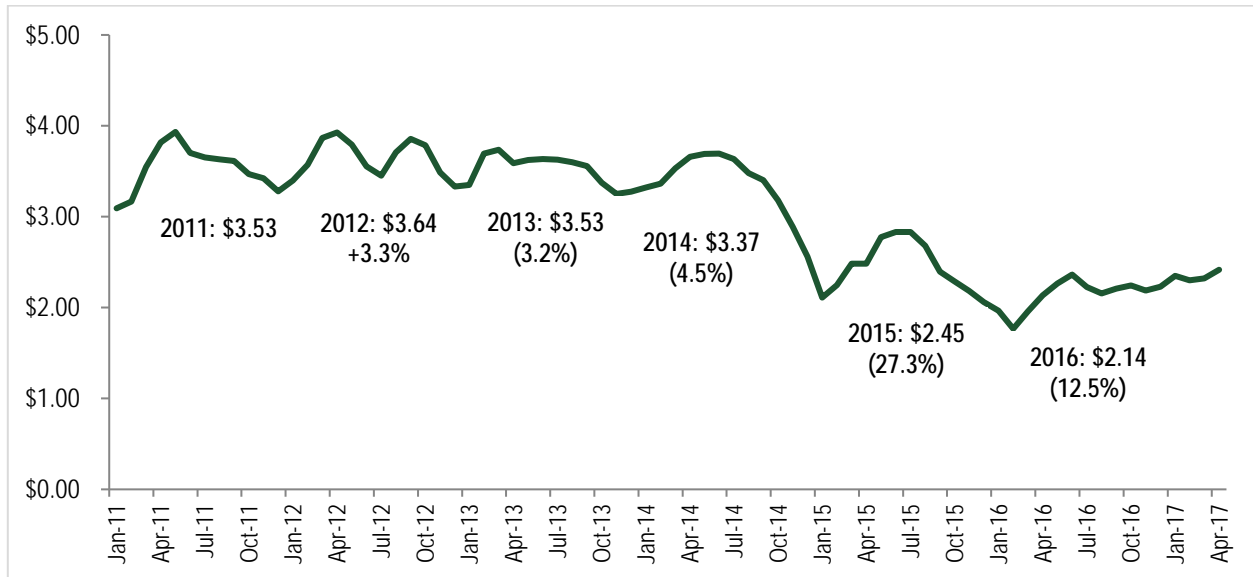
FIGURE 2.1 – DISTRIBUTION OF VISITOR SPEND BY SECTOR, 2016



Source: Econsult Solutions, Inc. Longwoods International

For the second straight year, transportation spending fell, as continued low oil prices led to drops in visitor spending at gasoline stations and on airfare. Retail gasoline prices fell 12.5% in 2016 to \$2.14, after dropping 27% in 2015 (see Figure 2.2).

FIGURE 2.2 – AVERAGE RETAIL GASOLINE PRICE, 2011-2016



Source: US Energy Information Administration

While decreases in fuel prices reduce transportation spending, reductions in the price of travel may increase the volume of trips taken, or the distance that travelers will cover. Further, some portion of these travel cost savings may be transferred to other spending categories. Growth in non-transportation categories totaled 3.8% year over year.

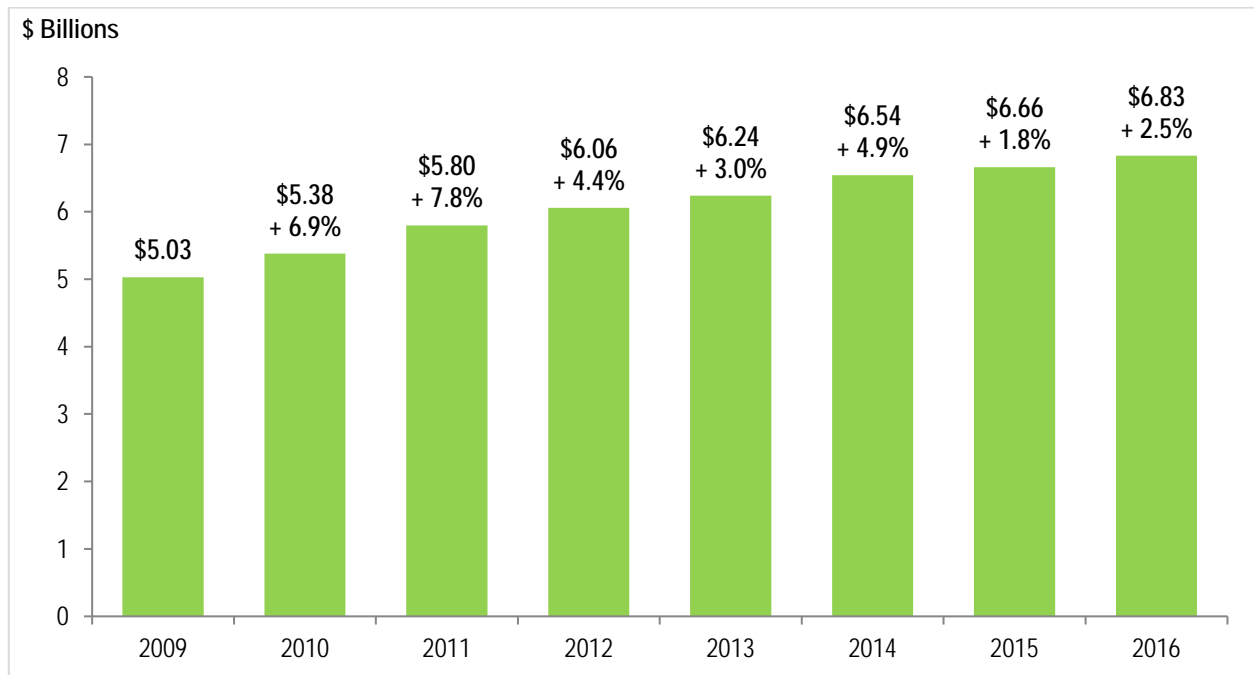
Gas prices have recovered slightly in the first part of 2017, but remain low relative to historic rates. This suggests that gas prices will not act as a constraint on transportation spending for 2017, but that transportation costs more broadly are still favorable for travel volume for 2017.

## 2.2 HISTORICAL SPENDING TRENDS

As with visitor volume, 2016 represented the seventh consecutive year of increases in visitor spending following the recession-driven low in 2009 (see Figure 2.6). Growth levels have been more modest in recent years after strong recovery years in 2010-2011.

- Direct visitor spending increased by \$1.8 billion from \$5.0 billion in 2009 to \$6.8 billion in 2016 (an annual growth rate of 4.5% per year).

FIGURE 2.3 – GREATER PHILADELPHIA DIRECT VISITOR SPENDING, 2009-2016 (\$ BILLIONS)



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

Growth was constrained in 2015 and 2016 by economic factors, notably low fuel prices (discussed above) and the strong dollar, which reduces effective purchasing power for international visitors and makes outbound foreign travel relatively more appealing for US travelers.

## 2.3 VISITOR SPENDING CONTEXT

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 2.2 below shows annual changes nationally and regionally in domestic travel volume, the consumer price index (a standard measure of inflation) and visitor expenditures. 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. Both nationally and in Greater Philadelphia, growth in visitor expenditures over the past seven years has exceeded combined growth in visitation and prices, indicating additional “real” growth in per visitor spending.

TABLE 2.2 – VISITOR EXPENDITURE GROWTH CONTEXT, 2010-2016

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%
<b>Average</b>	<b>2.1%</b>	<b>1.6%</b>	<b>4.8%</b>	<b>2.2%</b>	<b>1.4%</b>	<b>4.5%</b>

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

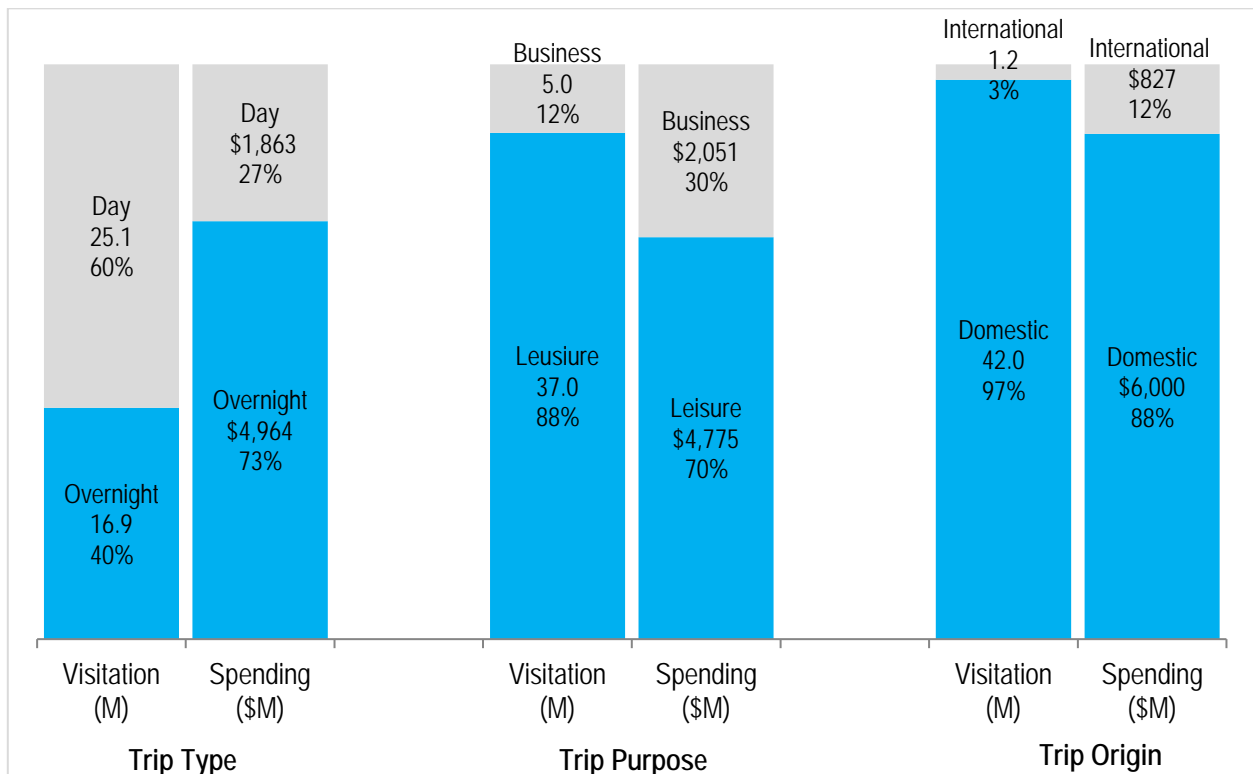
Growth in per visitor spending relative to inflation can result from visitors spending more on the same goods/services and/or visitors altering the composition of what they are spending on. At the destination level, such an increase could imply that similar visitors are spending more, or that a destination is attracting a somewhat different type of visitor over time. Whatever the causal mechanism, this comparison indicates that not only is visitation growth outpacing overall population and employment growth in Greater Philadelphia (as shown in Section 1.3), but those visitors are becoming relatively more valuable over time through increased spending.

## 2.4 SPENDING BY VISITOR TYPE

Total visitor spending by category is a function of both the number of visitors of each type and the spending profile of those visitors. Figure 2.4 below shows the categorization of direct visitor spending in Greater Philadelphia in 2016 by trip type, trip purpose, and trip origin.

- Overnight visitors represent the majority of spending impact (73%), despite the fact that day visitors represent the majority of domestic trips (60%), due to the far greater spending profile of overnight visitors.
- Leisure travelers represent the majority of spending impact (70%) as a result of their large share of total trips (88%). Business travelers have a greater per party spend.
- Similarly, domestic travelers represent the vast majority of spending impact (88%), and total trips (97%). International travelers spend more on a per person basis, due to the nature of long-haul travel (which frequently includes an extended stay and paid accommodations).

FIGURE 2.4 – GREATER PHILADELPHIA VISITATION AND DIRECT VISITOR SPENDING BY VISITOR TYPE, 2016



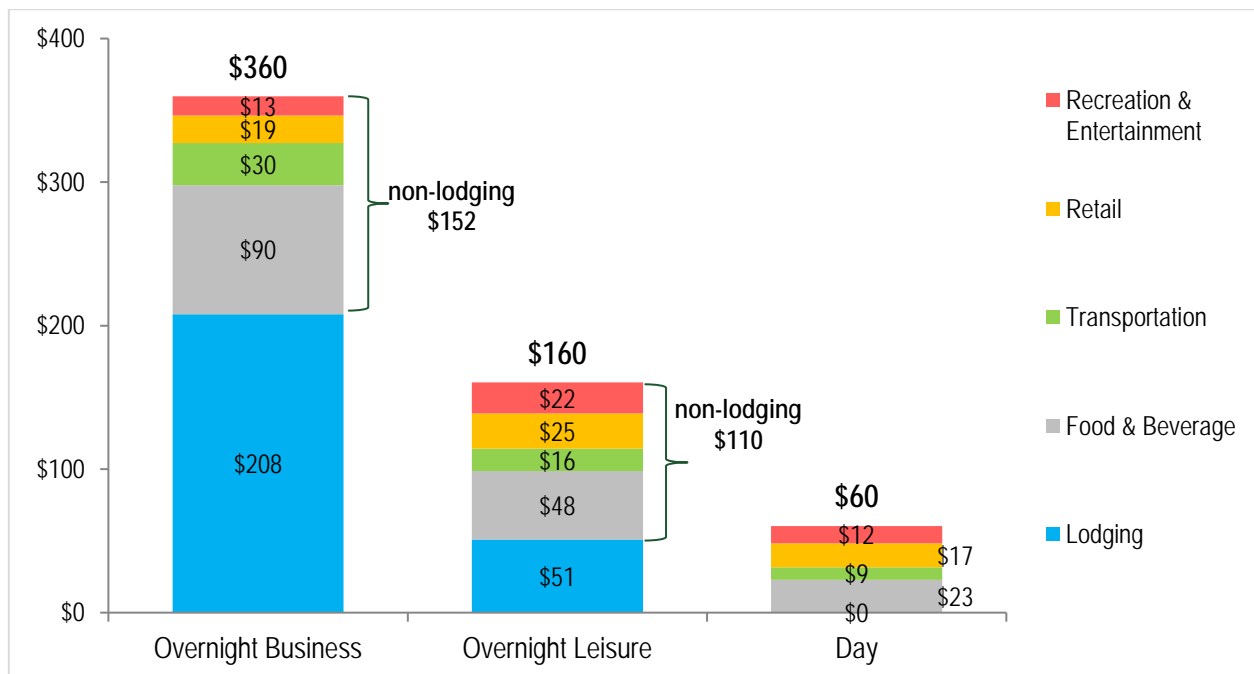
Source: Econsult Solutions, Inc, Tourism Economics for PHLCVB (PRELIMINARY)



Syndicated survey data from Longwoods International provides information on the varying spending profiles of different visitor types. Figure 2.5 below shows reported average per person spending for overnight business, overnight leisure and day visitors.<sup>6</sup>

- Overnight business visitors have the highest per visitor spend at \$360, driven by an average lodging spend of more than \$200.
- Overnight leisure travelers spend an average of \$160, per person including \$110 in non-lodging categories.
  - Notably, more than 40% of leisure visitors stayed with friends and relatives on their trip and therefore did not have any lodging spend, reducing the category average relative to business travelers.
- Day visitors spend an average of \$60 per person, with food and beverage, retail and recreation representing the largest categories.

FIGURE 2.5 – SPENDING PER PERSON BY VISITOR TYPE, 2016



Source: Longwoods International

<sup>6</sup> Per person spending is calculated as the average travel party spending divided by average travel party size. In the case of overnight visitors, spending may be spread across multiple days and nights.



## 3.0 ECONOMIC IMPACT

Direct spending by visitors has broad economic and employment impacts within the Greater Philadelphia economy. In an interconnected economy, spending has multiple forms of “spillover” impacts that support additional activity, employment and earnings beyond the initial direct spending. In the case of tourism activity, these “multiplier” effects include both indirect spending (from the supply chain of tourism-serving businesses) and induced spending (from the labor income generated by tourism-serving businesses). These effects are particularly important because tourism is by definition an “export” activity, with visitors bringing in dollars from outside the region that then enrich the local economy and support local employment.

### 3.1 TOTAL ECONOMIC OUTPUT

The total economic impact of visitors to Greater Philadelphia reached \$11 billion in 2016, an increase of 2.8% from \$10.7 billion in 2015 (see Table 3.1).<sup>7</sup> This equates to \$30 million in impact per day.

- Total employment supported was 96,640, up 3.5%, including more than 71,000 jobs supported by direct visitor spending.
- Earnings derived from that employment were \$3.4 billion, up 3.5%.

TABLE 3.1 – GREATER PHILADELPHIA VISITOR ECONOMIC IMPACT, 2015-2016

Metric	Total	Direct Impact	Indirect/ Induced
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
2015 Output (\$ M)	\$10,731	\$6,662	\$4,069
2015 Employment (jobs)	93,338	68,831	24,507
2015 Personal Income (\$ M)	\$3,237	\$1,933	\$1,304
Output % Chg	2.8%	2.5%	3.4%
Employment % Chg	3.5%	3.5%	3.6%
Personal Income % Chg	3.5%	3.5%	3.6%

Source: Econsult Solutions, Inc., IMPLAN

<sup>7</sup> “Economic impact” refers to total economic output, which is the sum of direct visitor spending and the indirect and induced impact of that spending within the Greater Philadelphia economy. These indirect and induced impacts are calculated using industry standard input-output modeling software from IMPLAN. See Appendix B for information on the methodology utilized to estimate these impacts.

The majority of the impact (\$6.4 billion, or 58%) took place within the city of Philadelphia, while \$4.6 billion (or 42%) occurred in the suburban counties in 2016. Year over year growth was slightly higher in the suburban counties, with total output growing by 3.1% compared to output growth of 2.6% in Philadelphia.

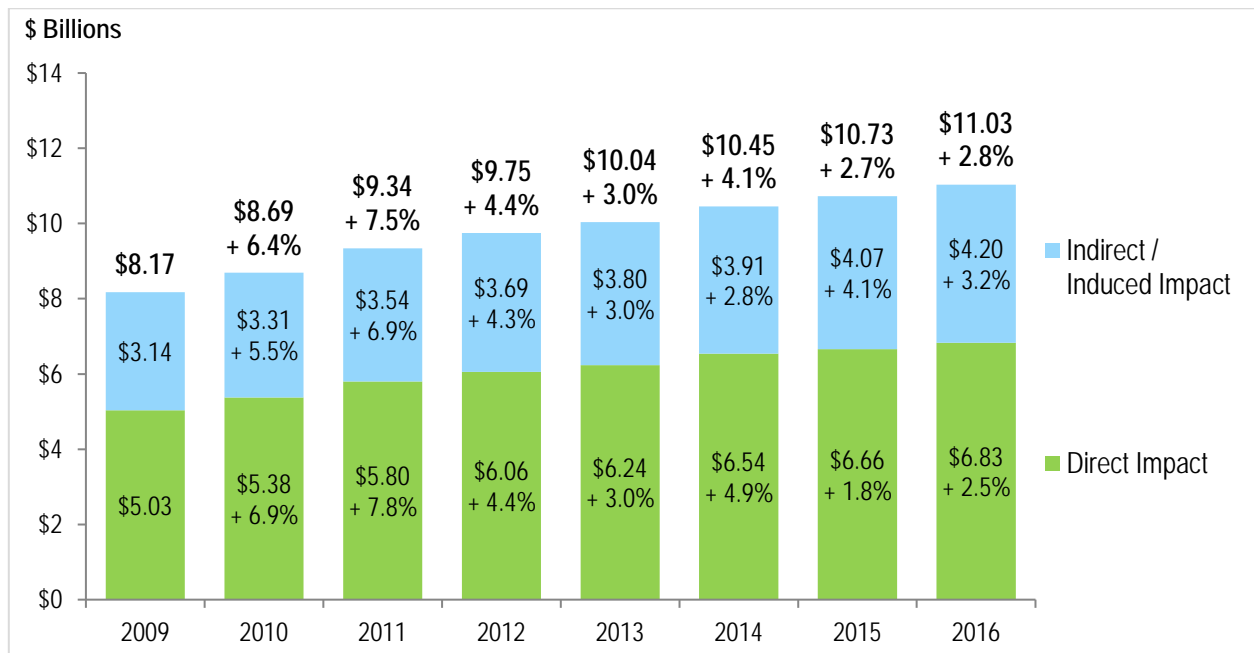
### 3.2 HISTORICAL IMPACT TREND

Growth in economic impact generally tracks with growth in direct visitor spending over the past several years (see Figure 3.1). However, indirect and induced impacts within the regional economy vary somewhat based on the distribution of direct spending by sector and location.

For 2015 and 2016, year over year growth in indirect and induced impacts outpaced growth in direct spending. This occurred in large part because overall spending growth was constrained by declines in transportation spending due to decreasing gas prices. However transportation spending has a lower capture rate within the local economy than many other categories, since fuel tends to be supplied from outside of the region (and thus generates less impact on a per dollar basis), making the category relatively less important in terms of indirect and induced impact.

- Regional economic impact increased by nearly \$3 billion from \$8.2 billion in 2009 to \$11.0 billion in 2016 (an annual growth rate of 4.5% per year).

FIGURE 3.1 – GREATER PHILADELPHIA VISITOR ECONOMIC IMPACT, 2009-2016



Source: Econsult Solutions, Inc, Tourism Economics

## 4.0 TOURISM EMPLOYMENT

Employment impacts from tourism activity can be described and quantified in two distinct ways. One approach is to track the direct, indirect and induced effects of visitor spending (as described in Section 2.3) and quantify the level of employment that visitor dollars directly and indirectly support across a variety of economic sectors. Alternately, direct employment is reported by the federal Bureau of Labor Statistics on a monthly basis for tourism-related sectors. These employment counts do not align directly with visitor activity (since employment in sectors like food and beverage and arts and recreation is supported by both local and visitor spending), but the common definitions in this data set allows for comparisons across time, geographies and sectors. This section reviews current and historical employment results under both of these measures.

### 4.1 VISITOR-SUPPORTED EMPLOYMENT BY SECTOR

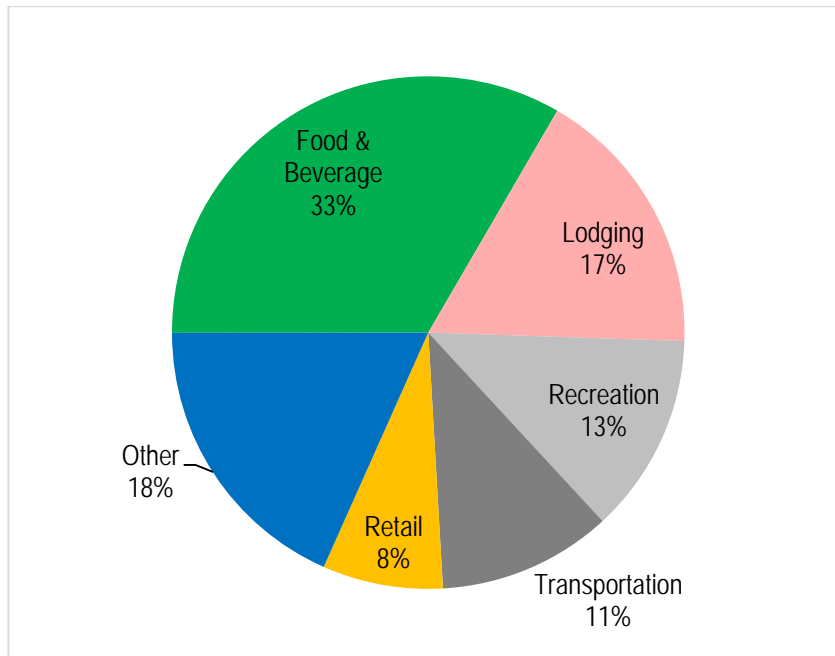
The \$11 billion in output from visitor spending supports employment throughout Greater Philadelphia both directly (in those sectors in which visitor spending takes place) and indirectly as visitor dollars circulate through the local economy. Total employment in Greater Philadelphia supported by visitor spending grew to 96,640 in 2016, an increase of 3.5% from 93,340 in 2015 (see Table 4.1).

- The largest sector for employment is food and beverage, which represents 33% of total employment supported from visitor activity (see Figure 4.1).
  - This sector is both the largest recipient of direct visitor spending, and a key sector for induced impact (spending by locals whose earnings are attributable to tourism activity).
- Employment increased in each sector year over year, led by an increase of more than 5% in the lodging sector.
- “Spillover” jobs in sectors that do not receive significant visitor spending (including professional services, education and medicine, real estate, etc.) increased by 3.6% year over year to nearly 18,000.

TABLE 4.1 – GREATER PHILADELPHIA VISITOR-SUPPORTED EMPLOYMENT BY SECTOR, 2015-2016

Sector	2016	2015	% Chg
Food & Beverage	32,270	31,160	+ 3.6%
Lodging	16,550	15,710	+ 5.3%
Recreation	12,190	11,780	+ 3.5%
Transportation	10,590	10,460	+ 1.2%
Retail	7,340	7,160	+ 2.5%
Other	17,700	17,080	+ 3.6%
<b>Total</b>	<b>96,640</b>	<b>93,340</b>	<b>+ 3.5%</b>

FIGURE 4.1 – DISTRIBUTION OF VISITOR-SUPPORTED EMPLOYMENT BY SECTOR, 2016



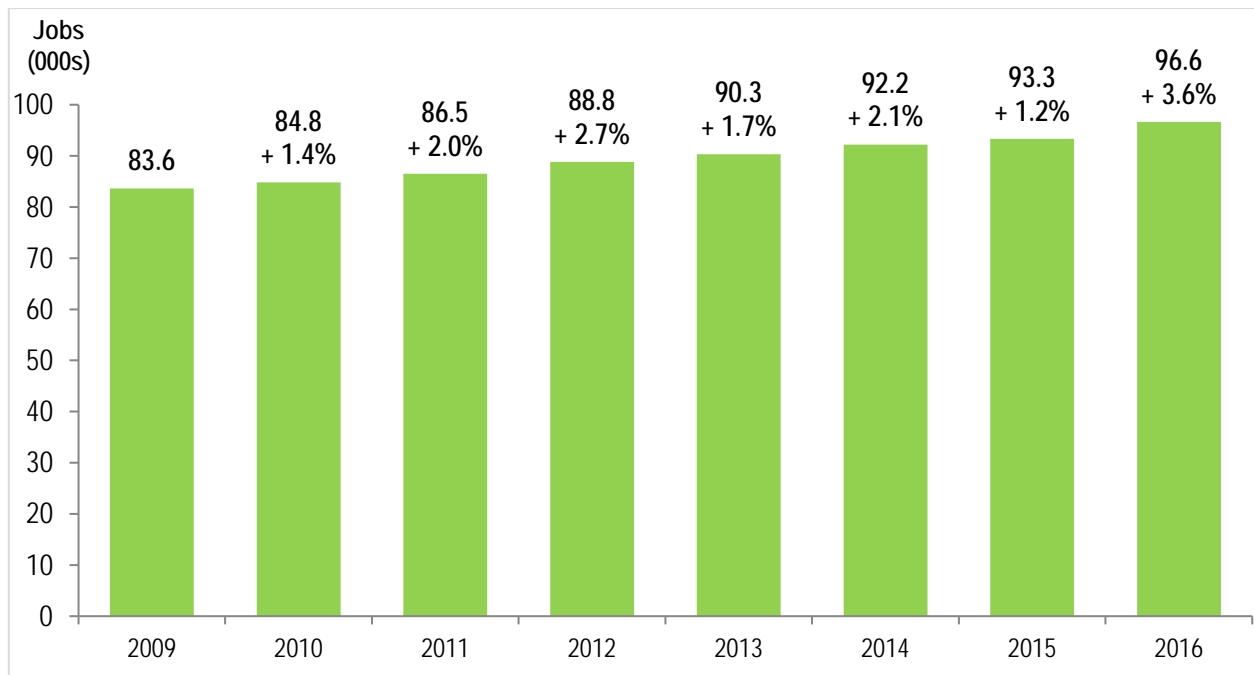
Source: Econsult Solutions, Inc, IMPLAN

Notably, visitor-supported employment in the retail sector grew by 2.5% on an annualized basis. This growth came in the context of deteriorating conditions for the sector, as long-term trends in online purchasing take a toll on traditional retailers like department stores. Overall retail employment was effectively flat in the region and state in 2016, and reported job losses in the sector nationally have been heavy thus far in 2017. Tourism activity may remain a bright spot for these sectors, since visitors are more likely to be seeking an experiential retail experience connected with the destination they are visiting, a process that cannot easily be automated or replicated online.

Figure 4.2 below shows the trend in visitor-supported employment from 2009 to 2016. Interestingly, while employment increased in each year, gains were greatest in 2016 on a percentage basis, growing by 3.6%. This increase reflects in part the continued strengthening of the job market, which allows visitor dollars to translate more directly into employment gains.

- Regional visitor-supported employment increased by 13,000 from 83,600 in 2009 to 96,600 in 2016 (an annual growth rate of 2.1% per year).

FIGURE 4.2 – GREATER PHILADELPHIA VISITOR-SUPPORTED EMPLOYMENT, 2009-2016



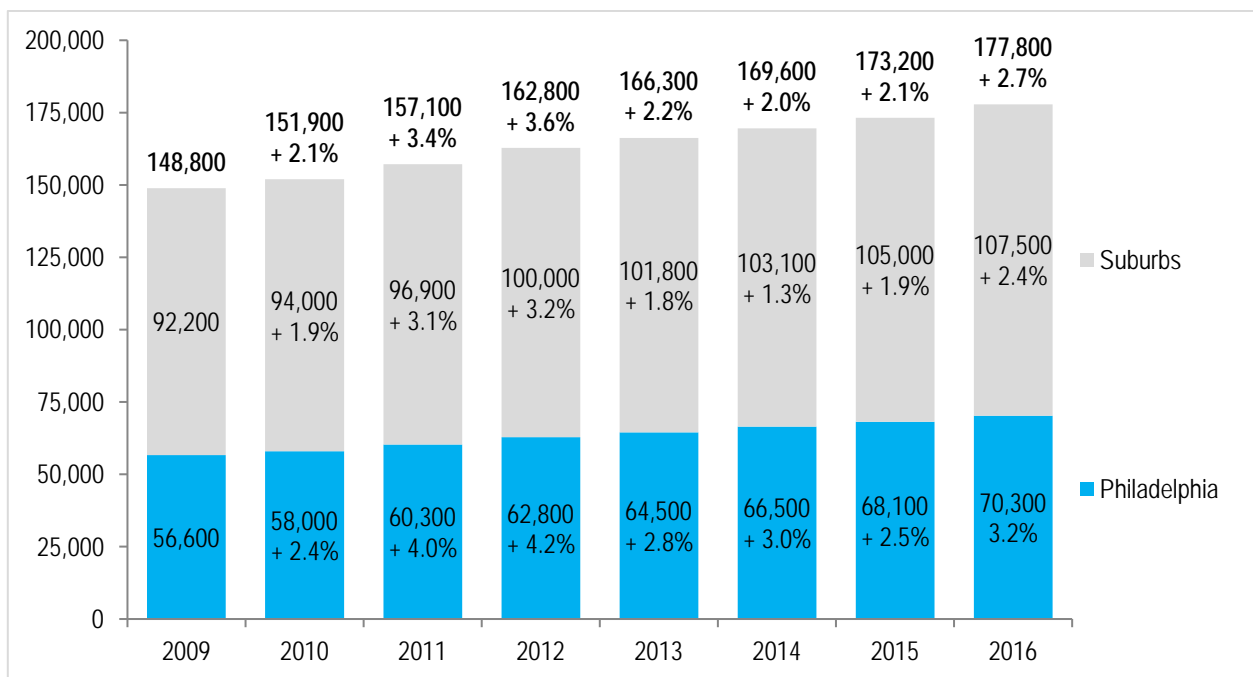
Source: Econsult Solutions, Inc, Tourism Economics

## 4.2 LEISURE AND HOSPITALITY SECTOR EMPLOYMENT

Government data can also be used to quantify employment in the “Leisure and Hospitality” super sector, which is comprised of the industries that capture the bulk of visitor spending. The Bureau of Labor Statistics (BLS) includes the Accommodations, Food Service, Arts, Recreation and Entertainment sectors within this grouping, and reports monthly and annual employment at the county level. This data set can be used comparatively between geographies and over time. As noted above, however, this employment is not all attributable to visitors, since employment in these sectors is also supported by local spending.

Figure 4.3 shows total leisure and hospitality employment for the five-county region, broken out between jobs in Philadelphia and those in suburban counties. Total employment was nearly 178,000 in 2016, an increase of 2.7% year over year. Of those jobs, around 70,000 (or 40%) were in the city of Philadelphia, and nearly 108,000 were in the four suburban counties. Employment has grown somewhat more rapidly in the city than suburbs since 2009, increasing by 24% (or 3.1% annually) in Philadelphia and 17% (or 2.2% annually) in the suburbs over this period.

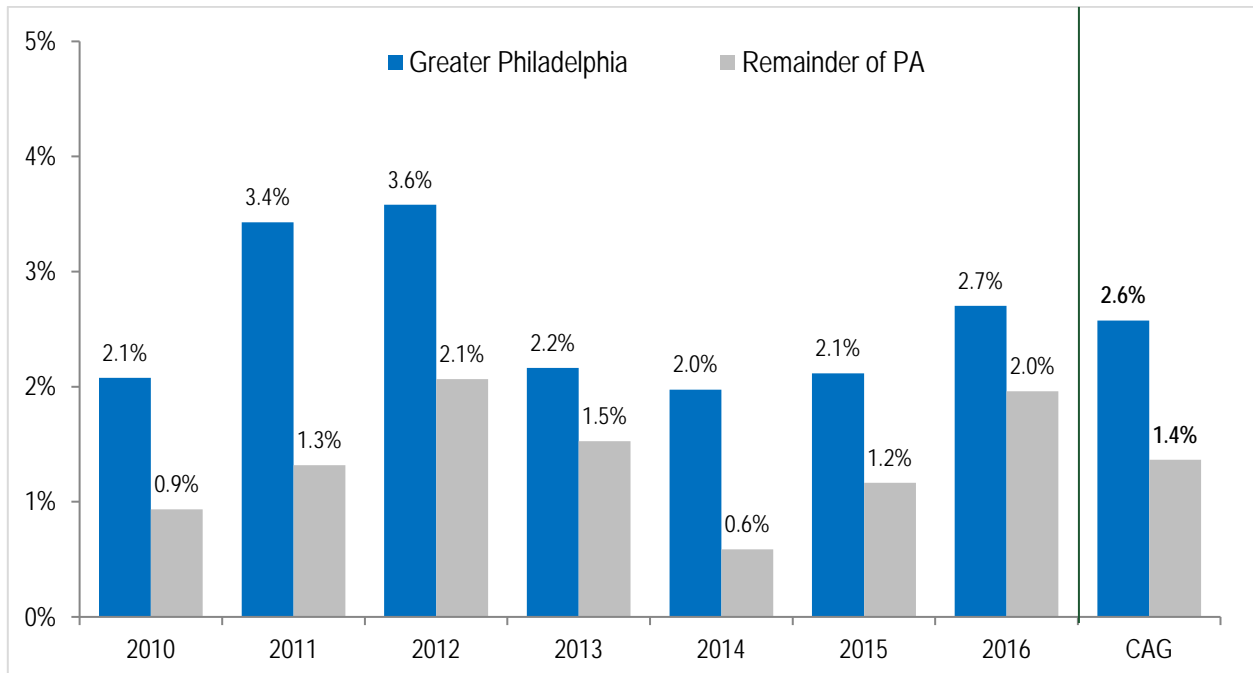
FIGURE 4.3 – GREATER PHILADELPHIA ANNUAL LEISURE AND HOSPITALITY SECTOR EMPLOYMENT, 2009-2016



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

Leisure and hospitality sector growth in Greater Philadelphia has outpaced growth elsewhere in the Commonwealth in each of the past seven years (see Figure 4.4). Employment growth within the sector has averaged 2.6% in the five county region over this time period, compared to 1.4% across the remainder of the state.

FIGURE 4.4 – ANNUAL GROWTH IN LEISURE AND HOSPITALITY EMPLOYMENT, 2010-2016, GREATER PHILADELPHIA AND REMAINDER OF PENNSYLVANIA



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

These growing job counts indicate that Philadelphia's commitment to tourism as an economic development strategy is paying dividends, and that visitor spending is helping to enable leisure and hospitality businesses not only to sustain themselves, but to grow in number and size. In other words, tourist spending helps to provide locals with expanding menu of restaurant and entertainment options within their community. Importantly, in an increasingly automated and globalized economy, the tourism economy is by its nature experiential and tied to the unique qualities of a place, making it very difficult to outsource or to automate.

### 4.3 SHARE OF EMPLOYMENT

As noted above, employment within the leisure and hospitality industry is supported by both visitor and local spending. Further, visitor dollars support employment in jobs outside of the leisure and hospitality sector, whether directly (such as in the retail sector) or indirectly (through the internal circulation throughout a variety of sectors of dollars spent by tourists).

Table 4.2 below shows the proportion of total private employment in key sectors that are supported (directly or indirectly by visitor spending).

- 1 out of every 3 jobs in the region's arts, entertainment and recreation and accommodations and food service sectors are supported by visitors to the region.
- Overall, visitor-supported employment accounts for approximately 6% of total private employment in the five-county region, or 1 out of every 17 jobs in the region.

TABLE 4.2 – GREATER PHILADELPHIA VISITOR-SUPPORTED EMPLOYMENT AS A SHARE OF PRIVATE EMPLOYMENT, 2016

Sector	Total Private Employment	Visitor-Supported Employment	% Visitor-Supported
Leisure and Hospitality Sector	177,800	61,000	34%
<i>Arts, Entertainment &amp; Recreation</i>	34,300	12,200	36%
<i>Accommodations &amp; Food Service</i>	143,500	48,800	34%
Retail	194,500	7,340	4%
Other Industries	1,297,700	28,300	2%
<b>Total</b>	<b>1,670,000</b>	<b>96,600</b>	<b>5.8%</b>

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

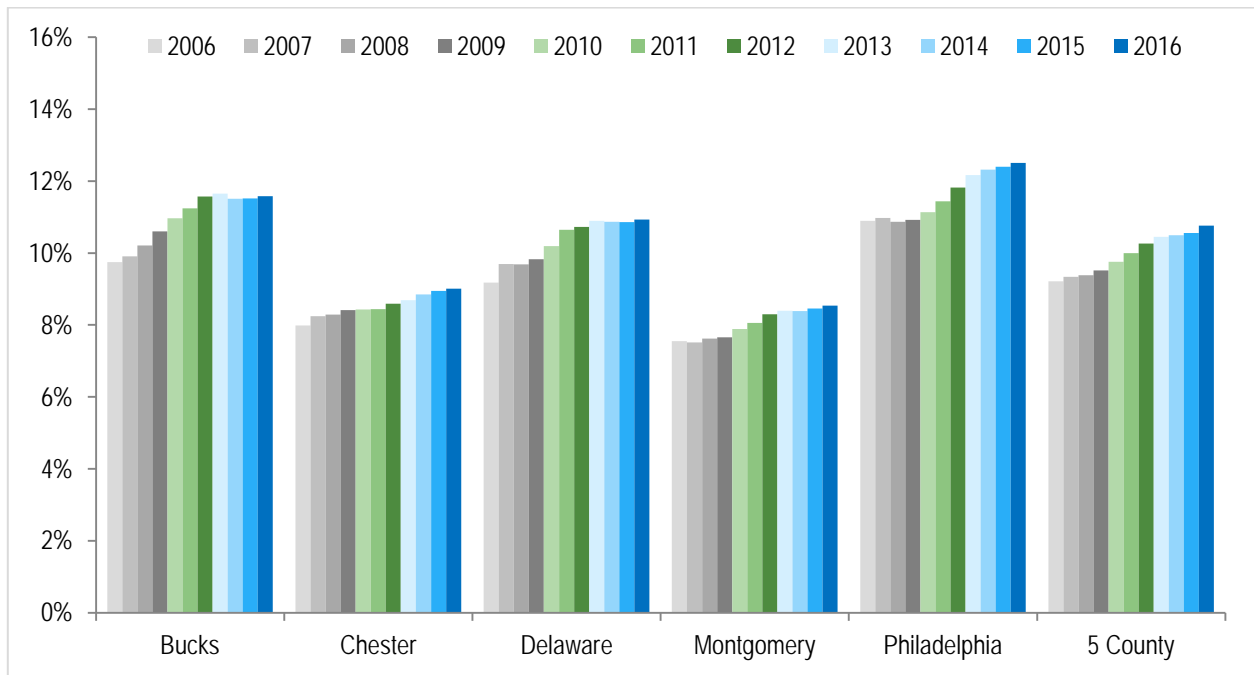
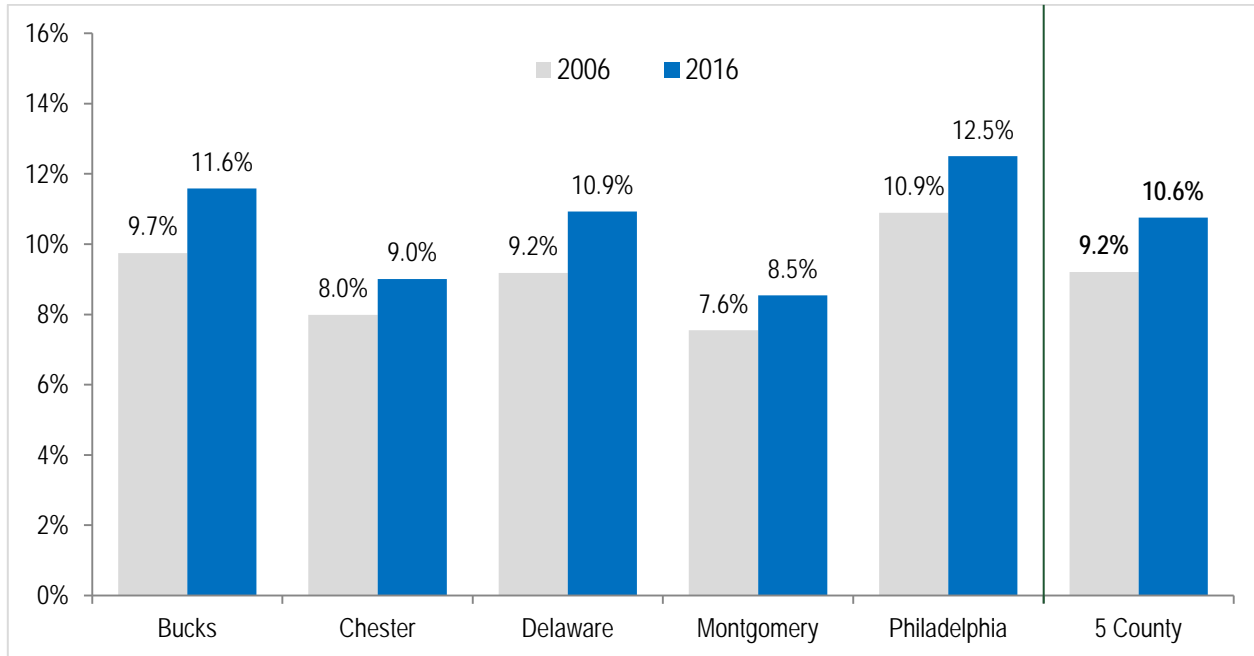
Since the tourism industry is not categorized as a single sector in government statistics (but rather supports activity in a variety of sectors), apples to apples comparisons of employment activity to other sectors are challenging. However, a comparison of direct visitor supported employment to industry employment counts provided by the BLS indicates that tourism supports more direct jobs within the five-county region (71,260) than major sectors like construction (70,200), wholesale trade (66,800) and information (33,100).<sup>8</sup>

<sup>8</sup> See Appendix B for further information on employment ranking by sector.



Another useful benchmark is the proportion of total employment represented by the leisure and hospitality industry. Over the past ten years, leisure and hospitality has increased its share of private employment across the five-county region from 9.2% in 2006 to 10.6% in 2016 (see Figure 4.4). This growth has been consistent across counties and across years.

FIGURE 4.4 – LEISURE AND HOSPITALITY AS A SHARE OF PRIVATE EMPLOYMENT BY COUNTY, 2006-2016

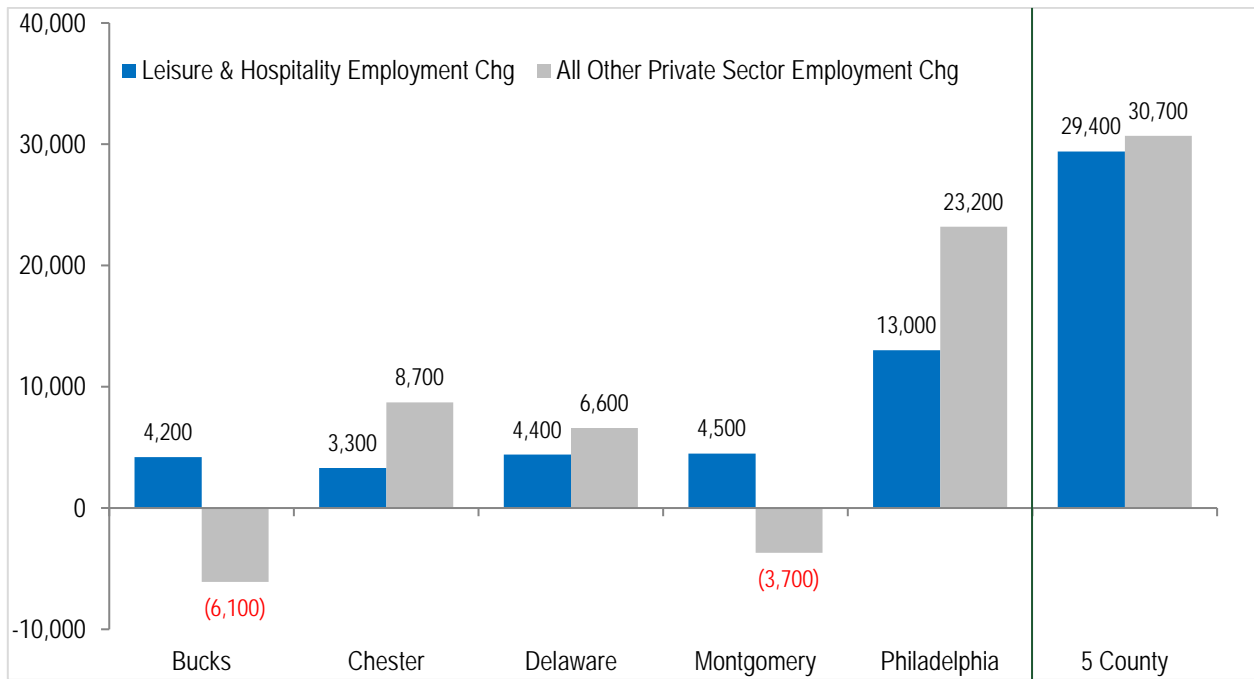


Source: Bureau of Labor Statistic QCEW

The increasing share of local employment underscores the importance of tourism activity in the broader restructuring of the regional economy. Long-term downward trends in industries like manufacturing and trade/transport have necessitated replacement industries to emerge which attract dollars from outside the region and support local employment. Tourism has filled this role for the Greater Philadelphia region, and serves as an effective complement to the dominant (and growing) education and medicine sector.

Figure 4.5 below shows net change in leisure and hospitality employment from 2006 to 2016 relative to net change in private employment in all others sector for each county. In Bucks County and Montgomery County, non-tourism jobs have decreased over this time period, a decline which has been largely offset by increases in tourism employment. In Chester, Delaware and Philadelphia counties, leisure and hospitality growth has represented a significant share of overall employment growth. Across the five-county region, net growth in leisure and hospitality employment (29,400 jobs) is nearly as large as net private employment growth across all other sectors (30,700).

FIGURE 4.5 – NET CHANGE IN LEISURE AND HOSPITALITY AND TOTAL PRIVATE EMPLOYMENT BY COUNTY, 2006-2016



Source: Bureau of Labor Statistics QCEW

#### 4.4 COMPARATIVE GROWTH TRENDS

After several consecutive years of growth in key visitation and impact metrics, it is informative to compare growth rates from that time period across categories. Table 4.3 compares total and annualized growth from 2009-2016 from domestic visitation, direct visitor spending, economic output, visitor-supported employment, and leisure and hospitality employment.

- Visitation grew by 2.2% annually over the period, similar to the growth rate in employment (as measured by either visitor supported employment, which grew at 2.1% annually, or leisure and hospitality employment, which grew at 2.6% annually).
- Visitor spending and economic impact grew more rapidly, at 4.5% and 4.4% annually over the period.

TABLE 4.3 – GREATER PHILADELPHIA TOURISM GROWTH METRICS BY SEGMENT, 2009-2016

Year	Domestic Visitation	Direct Visitor Spending	Economic Impact	Visitor-Supported Employment	Leisure & Hospitality Employment
2009	36.01 million	\$5.03 billion	\$8.17 billion	83,600	148,800
2016	42.02 million	\$6.83 billion	\$11.03 billion	96,600	177,800
% Chg 2009-2016	17%	36%	35%	16%	19%
Annual Growth (CAG)	2.2%	4.5%	4.4%	2.1%	2.6%

The variance in growth rates between visitor volume and spending/impact from those visitors is expected in a healthy tourism economy, because gains in spending and impact are driven by both increases in the number of visitors and increases in the amount that those visitors spend per person. Employment would also be expected to track more closely with visitor volume than spending, since increases in spending will manifest in the labor market through a combination of additional hiring and increases in wages to existing employees.

Nonetheless, as reviewed throughout this report, growth in the regional tourism industry has been impressive within the context of broader demographic and economic trends. Growth in domestic trips to Greater Philadelphia has outpaced growth in the adult population and the private employment base both nationally and locally, suggesting that Philadelphia is gaining a greater share of the potential traveling population. Further, the significant spread between visitation and impact growth in a low inflation environment indicates that tourists are becoming relatively more impactful on a per visitor basis due to increases in their spending footprint.

## 5.0 TAX REVENUE IMPACT

Tourism activity is also a major generator of tax revenue for state and local governments and school districts. The direct and indirect activity associated with visitor spending supports the crucial income, sales and property tax bases, generating millions in state and local revenue each year. Furthermore, visitor activities disproportionately bear a number of local consumption taxes and fees, generating additional revenue for municipalities and school districts to support essential services without raising taxes on residents.

In total, state and local tax generation attributable to visitor spending was \$638 million in 2016, an increase of 3.7% from \$615 million in 2015 (see Table 5.1).<sup>9</sup> This revenue equates to \$420 in tax savings for each of the 1.5 million households in the five-county region.

- State revenue to the Commonwealth of Pennsylvania totaled \$224 million, an increase of 3.5% over \$216 million in 2015.
- Local tax revenue to the City and School District of Philadelphia and suburban municipalities and districts was \$414 million, including \$291 million in Philadelphia and \$123 million within suburban counties.
- Consumption taxes borne disproportionately by visitors within the City of Philadelphia (hotel tax, liquor tax, amusement tax, vehicle rental tax and parking tax) generated \$90 million in revenue, and grew by 5.2% year over year.

TABLE 5.1 – STATE AND LOCAL TAX REVENUE GENERATED BY VISITOR SPENDING, 2016 (\$M)

Jurisdiction	2016 Revenue	2015 Revenue	% Chg vs. 2014
Commonwealth of Pennsylvania	\$224 M	\$216 M	+ 3.5%
Philadelphia City and Schools	\$291 M	\$281 M	+ 3.8%
Philadelphia City and Schools – Consumption Taxes	\$90 M	\$85 M	+ 5.2%
Philadelphia City and Schools – Other	\$201 M	\$195 M	+ 3.2%
Suburban Municipalities and Schools – Total	\$123 M	\$119 M	+ 3.7%
<b>Total – State and Local</b>	<b>\$638 M</b>	<b>\$615 M</b>	<b>+ 3.7%</b>
<b>Local Total (City + Suburbs)</b>	<b>\$414 M</b>	<b>\$399 M</b>	<b>+ 3.8%</b>

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

<sup>9</sup> See Appendix B for information on the methodology utilized to estimate fiscal impacts.

Table 5.2 below breaks down the revenue generated in 2016 and the year over year percentage change for each tax type and geography.

TABLE 5.2 – DETAILED STATE AND LOCAL TAX REVENUE GENERATION BY LINE ITEM, 2016

Revenue Source	Pennsylvania	Local – Philadelphia	Local – Suburban	Total State & Local	Total Local (City + Suburb)
Personal Income/Wage Taxes	\$114.8 M	\$61.6 M	\$18.4 M	\$194.9 M	\$80.1 M
Sales and Use Taxes	\$87.7 M	\$10.6 M	--	\$98.3 M	\$10.6 M
Business Taxes	\$21.3 M	\$16.5 M	--	\$37.8 M	\$16.5 M
Property Tax	--	\$112.8 M	\$94.5 M	\$207.3 M	\$207.3 M
Consumption Taxes					
Hotel Tax	--	\$55.7 M	\$10.0 M	\$65.7 M	\$65.7 M
Liquor Tax	--	\$22.2 M	--	\$22.2 M	\$22.2 M
Amusement Tax	--	\$5.6 M	--	\$5.6 M	\$5.6 M
Vehicle Rental Tax	--	\$3.9 M	--	\$3.9 M	\$3.9 M
Parking Lot Tax	--	\$2.5 M	--	\$2.5 M	\$2.5 M
<b>Total</b>	<b>\$223.9 M</b>	<b>\$291.3 M</b>	<b>\$122.9 M</b>	<b>\$638.1 M</b>	<b>\$414.2 M</b>
<b>2015 Total</b>	<b>\$216.3 M</b>	<b>\$280.6 M</b>	<b>\$118.5 M</b>	<b>\$615.4 M</b>	<b>\$399.1 M</b>
<b>Total % Chg</b>	<b>3.5%</b>	<b>3.8%</b>	<b>3.7%</b>	<b>3.7%</b>	<b>3.8%</b>
Income/Wage Taxes % Chg					
Income/Wage Taxes % Chg	3.5%	3.4%	3.7%	3.5%	3.5%
Sales and Use Taxes % Chg					
Sales and Use Taxes % Chg	3.5%	3.3%		3.4%	3.3%
Business Taxes % Chg					
Business Taxes % Chg	3.5%	3.3%		3.4%	3.3%
Property Tax % Chg					
Property Tax % Chg		3.1%	3.6%	3.3%	3.3%
Consumption Taxes					
Hotel Tax % Chg		6.1%	4.6%	5.9%	5.9%
Liquor Tax % Chg		3.3%		3.3%	3.3%
Amusement Tax % Chg		3.1%		3.1%	3.1%
Vehicle Rental Tax % Chg		7.3%			3.5%
Parking Tax % Chg		3.5%		3.5%	3.8%

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

Within the City of Philadelphia, tax revenue impacts from the total economic output associated with visitor activity (notably wage tax revenue for the city and property tax revenue for the city and school district) are supplemented by local consumption taxes borne disproportionately by visitors.

Table 5.3 below shows the proportion of total tax collection from these five tax sources generated by visitor activity, as well as the funds and uses to which this revenue accrues. Overall, \$90 million in revenue from the hotel, liquor, amusement, vehicle rental and parking lot taxes are estimated to be generated by visitor activity, 37% of annual revenue from these five sources.

TABLE 5.3 – SHARE OF SELECTED PHILADELPHIA CONSUMPTION TAXES SUPPORTED BY VISITORS

Sector	Visitor Supported Revenue, 2016 (\$M)	Total City of Philadelphia Collections, FY 2016 (\$M)	Visitor Supported Proportion (%)	Use of Revenue
Hotel Tax	\$55.7	\$58.6	95%	Tourism Promotion/ Convention Center Debt
Liquor Tax	\$22.2	\$66.0	34%	School District
Amusement Tax	\$5.6	\$19.1	29%	General Fund
Vehicle Rental Tax	\$3.9	\$5.7	68%	Stadium Debt
Parking Lot Tax	\$2.5	\$92.2	3%	General Fund
<b>Total</b>	<b>\$89.9</b>	<b>\$241.6</b>	<b>37%</b>	

Source: City of Philadelphia, ESI

This local revenue generation represents an important dimension of tourism's impact on quality of life for regional residents. In addition to stimulating the local economic and employment base and enabling amenities that residents enjoy, out of town visitors contribute tax dollars to support government services that residents benefit from year-round.

## 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 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 – 2015. 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
<b>Hotels</b>				
Rooms Sold – 5 County	✓	✓	✓	✓
Rooms Sold – CC	✓	✓	✓	✓
CC Leisure Demand	✓	✓	✓	
CC Commercial Demand			✓	✓
CC Group Demand	✓	✓	✓	✓
<b>Attractions</b>				
INHP Attractions	✓	✓		✓
Other Attractions	✓	✓		✓
<b>Transportation</b>				
PHL Domestic Scheduled Arrivals	✓	✓	✓	
AMTRAK non-commuter Arrivals	✓	✓	✓	✓
<b>Employment</b>				
Tourism Sectors	✓	✓	✓	
Business Sectors			✓	✓
<b>Weighting Key</b>				
High Weight	[Green Box]			
Medium Weight	[Medium Green Box]			
Low Weight	[Grey Box]			

Index results were calculated quarterly by segment, and are expressed as a percentage change in visitation from the same quarter in the previous year (2015). 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.

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 2015 baseline to yield estimates for 2016.

## 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 2015 and 2016 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). 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.

As noted within the report, tourism employment can also be evaluated through government statistics on employment by sector. However, employment in the leisure and hospitality sector matches imperfectly with visitor-supported employment, since there is a considerable volume of local spending in these sectors as well. Similarly, it is challenging to compare visitor-supported employment to other sectors, because tourism is ultimately a contributor to many of those sectors. Further, an apples to apples comparison necessitates comparing only direct employment supported by visitors to employment counts in other sectors, since those sectors also have indirect and induced effects which would require their own unique analysis. Table B.1 presents five county direct employment by sector, and illustrates where the tourism sector (as represent by direct visitor-supported activity) would rank on this list.

TABLE B.1 – DIRECT EMPLOYMENT BY SECTOR, GREATER PHILADELPHIA, 2016

	Super Sector	Total
1	Health care and social assistance	347,100
2	Retail trade	194,500
3	Professional and technical services	155,900
4	Accommodation and food services	143,500
5	Manufacturing	124,400
6	Finance and insurance	104,400
7	Administrative and waste services	100,600
8	Educational services	88,900
	<b>Tourism (Direct Visitor-Supported)</b>	<b>71,260</b>
9	Construction	70,200
10	Other services, except public administration	67,900
11	Wholesale trade	66,800
12	Transportation and warehousing	53,800
13	Management of companies and enterprises	45,800
14	Arts, entertainment, and recreation	34,300
15	Information	33,100
16	Real estate and rental and leasing	26,100
	Other	12,700
	<b>Total</b>	<b>1,670,000</b>

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

### 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, liquor by the drink tax, amusement 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.

