THE ECONOMIC IMPACT FROM NON-ARTS INVESTMENT IN THE AVENUE OF THE ARTS



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EXECUTIVE SUMMARY

Avenue of the Arts is the epicenter of arts and culture in Philadelphia. Anchored by Broad Street, it is home to many of the city's theaters and performance spaces. The economic impact from arts and culture, as an industry, is well documented and significant. Over the last several years, a new, diversified commitment and investment into Avenue of the Arts has been made. Major new residential, hotel, and retail developments have been proposed with many well underway. It is these capital investments that rounds out the experience along the Avenue of the Arts and adds to the economic impact and important of Avenue of the Arts to the city. The influence of Avenue of the Arts reaches well beyond the boundaries of South Broad Street.

The current amount of actual and proposed investment to the buildings and properties along South Broad Street will continue to transform the Avenue of the Arts and redefine it as offering more than arts and entertainment, but residences, retail, restaurants, and hotels catering to residents, business travelers, and tourists alike. Seven large developments are either underway or proposed along South Broad Street. The estimated construction costs of these projects were used to predict the overall economic impact of the residential and commercial growth along the Avenue of the Arts.

The estimated $810 million in direct construction investment for the residential, hotel, and retail projects along South Broad Street will potentially generate over $1.3 billion in economic impact to the City of Philadelphia and $21 million in fiscal impact over the construction period for all projects modeled. This includes supporting 1,420 direct, indirect, and induced jobs each year of construction. Additional, the projects will generate an estimated $21 million in tax revenues to the City and $33 million in tax revenues to the Commonwealth (see Table ES.1).

TABLE ES.1 – POTENTIAL ECONOMIC IMPACT FROM CONSTRUCTION OF RESIDENTIAL AND COMMERCIAL PROJECTS ALONG THE AVENUE OF THE ARTS

Impact Type	City of Philadelphia	Commonwealth of Pennsylvania
Total Output ($M)	$1,330	$1,480
Employment Supported (Annual FTEs)	1,420	1,560
Fiscal Impact ($M)	$21	$33

1.0 INTRODUCTION

1.1 AVENUE OF THE ARTS

The Avenue of the Arts is the cultural and arts district of Philadelphia and is home to many of the city's most renowned theatres, performance venues, restaurants, and hotels. The district, which is anchored by Broad Street and runs from City Hall to Washington Avenue, has evolved dramatically since 1978 when early development began on the quiet corridor. With the help of Mayor Ed Rendell in 1993, the area has transformed due to both public and privately funded revitalization projects. South Broad Street is now the location of, most notably, the Kimmel Center, the Wilma Theater, the Academy of Music, the Merriam Theater, and the Suzanne Roberts Theatre. In addition to arts and culture related venues, commercial, office, retail, educational and residential developments now fill the vibrant strip along South Broad Street.

1.2 MORE THAN JUST THE ARTS

There have been many studies conducted to calculate the economic impact of the arts, including studies done by Econsult Solutions, Inc. and DataArts (formerly the Cultural Data Project). The findings are robust, significant, and positive. In 2015, DataArts found that the 2.8 million attendees who attended arts or cultural events along the Avenue of the Arts generated $795 million in total economic impact, supporting 10,900 jobs and $265 million in wages. Public and private investment in arts and cultural programming and developments have helped the city socially, economically, and aesthetically. The arts organizations along South Broad Street are important parts of Philadelphia, as they attract tourists, increase the quality of life for residents by providing world class entertainment and recreation, and support jobs and local businesses.

In addition to the economic impact of the Avenue of the Arts artistic organizations, the attractiveness and visibility, including non-arts specific business activity have increased along South Broad Street and the surrounding area, especially east of Broad Street and south of Pine Street. Over the last decade, the Avenue of the Arts has become more attractive for residential, entertainment and commercial investment. While this is not solely due to the Avenue of the Arts, it has clearly made these investments more attractive by increasing demand along South Broad Street.

1.3 OVERVIEW OF REPORT

The purpose of this report is to estimate the economic impact from the non-arts developments along South Broad Street. This report discusses how investment in the Avenue of the Arts has helped and will also benefit from new developments immediately on and near South Broad Street. Section 2 describes the population growth and demographic shifts occurring in the city, and in particular within the Avenue of the Arts corridor. Section 3 details the major commercial

development projects in proximity to Avenue of the Arts. Section 4 analyzes the economic, jobs, and fiscal impact from the seven large commercial, non-arts, developments on the Avenue of the Arts. Section 5 concludes the report emphasizing the significance of the concentration and amount of commercial and residential development that is occurring right now in the Avenue of the Arts.

2.0 ECONOMIC AND DEMOGRAPHIC TRENDS IN PHILADELPHIA

2.1 DEMOGRAPHIC TRENDS

CITY OF PHILADELPHIA

The City of Philadelphia is experiencing revitalization as recent population growth and a burgeoning dining and recreational scene has generated much excitement. Philadelphia's population has been increasing for the last nine years after experiencing massive population loss during the 60 years prior.[1] However, since 2010 Philadelphia's population has grown by over 34,000 individuals and is forecasted to continue to grow (see Table 2.1).

TABLE 2.1 – POPULATION PROJECTIONS, 2020 – 2035

Forecast	2020	2025	2030	2035	Percent Change (2020-2035)
DVRPC City Forecast[2]	1,551,247	1,572,342	1,599,436	1,618,512	+4%
DVRPC Regional Forecast[3]	5,777,661	5,935,259	6,098,853	6,197,417	+7%

Source: PCPC (2011), DVRPC (2012), ESRI (2016), Econsult Solutions, Inc. (2016)

The composition of the city's population is changing significantly. There have been significant shifts in age distribution of the population. The percentage of millennials (ages 20 to 34 years old) and seniors (ages 55 years old and above) is increasing in Philadelphia. From 2010 to 2014, the millennial population grew by five percent, driving the overall population growth in Philadelphia (see Table 2.2). Philadelphia experienced the largest growth in millennials of large US cities.[4]

The only other population segment that grew during the same period was those aged 50 to 69, increasing by roughly seven percent. Many in this age bracket are moving back into the city after their children have left home, seeking amenities, dining, entertainment, and ease of transit.

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[1]Central Philadelphia Development Corporation and the Center City District, Leading the Way: Population Growth Downtown, 2011:https://www.centercityphila.org/docs/CCR_Demographics2011.pdf

[2] The Delaware Valley Regional Planning Commission, 2040 DVRPC Forecasts , 2010: http://www.dvrpc.org/asp/CountyProfiles/Philadelphia.aspx

[3] The Delaware Valley Regional Planning Commission, Our Region , 2010: http://www.dvrpc.org/OurRegion/

[4] Pew Charitable Trusts, "Millennials in Philadelphia," January, 2014: http://www.pewtrusts.org/~/media/legacy/uploadedfiles/wwwpewtrustsorg/reports/philadelphia_research_initiative/PhillyMillennialsReport012214pdf.pdf

TABLE 2.2 POPULATION GROWTH BY AGE FOR PHILADELPHIA, 2010-2014

Age Group	2010		2014		2010 to 2014 Growth	
	Number	Percent of Total Population	Number	Percent of Total Population	Absolute Growth	Percent Growth
0 to 19 years	400,817	26%	393,543	25%	(7,274)	-1.8%
20 to 34 years	392,779	25%	413,171	26%	20,392	5.2%
35 to 49 years	286,409	19%	283,614	19%	(2,795)	-0.1%
50 to 69 years	313,883	21%	337,598	22%	23,715	7.5%
70 years and over	132,118	9%	132,371	8%	253	0.2%
Total Population	**1,526,006**		**1,560,297**		**34,291**	

Source: US Census (2016), Econsult Solutions, Inc. (2016)

Millennials are impacting the mix of recreation and dining amenities in the city and provide an immediate base for many events. Millennials view Philadelphia as an exciting city with opportunities for professional careers. The millennial population moving to Philadelphia is coming not just from the region, but primarily from other states (see Table 2.3). Where those in the area may have a natural tendency to move to Philadelphia, those from other states have more options, but are choosing Philadelphia instead.

TABLE 2.3 – NEWLY ARRIVED RESIDENTS, 2014

Previous Place of Residence	18- to 34-year-olds	Other age groups	Across All Age Groups
Another county in Pennsylvania	15,826	8,968	24,794
Different state	22,278	12,297	34,575
Foreign country	8,676	8,980	17,656
Total	**46,780**	**30,245**	**77,025**

Source: U.S. Census Bureau (2014) [5]

[5] American Community Survey, One-Year Estimate, 2014, "Geographical Mobility in The Past Year by Age for Current Residence in The United States"

AVENUE OF THE ARTS CORRIDOR

Avenue of the Arts is anchored by South Broad Street, but its activity and investment directly impacts a wider area. Although most of its main attractions sit along South Broad Street, it's impact is not bounded by the singular strip. For the purposes of this report, two areas surrounding South Broad Street were analyzed in order to provide a more comprehensive evaluation of the adjacent neighborhoods that benefit from their proximity to South Broad Street. The two areas are defined as follows:

- **Area 1**, the smaller of the two areas, stretches from Washington Avenue to Market Street and from 13th Street to 15th Street
- **Area 2** fully encompasses Area 1 but stretches further east and west from 11th Street to 17th Street (see Figure 2.1).

FIGURE 2.1 – GEOGRAPHIES OF INTEREST



Source: Google Maps (2016), Econsult Solutions, Inc. (2016)

Overall, the area is experiencing both a growth in population and in new multi-family rental apartment and for-sale condo supply. The forecasted population growth in Area 1 (5 percent) and in Area 2 (3 percent) is more than that within the city as a whole (2 percent). The millennial and baby boomer populations moving into the city desire certain amenities of which will be increased by the new construction or major renovations proposed within Center City and in particular, along South Broad Street. It is estimated that by 2020, Area 1 will have increased its renter-occupied housing by 5 percent, outpacing the growth predicted in the city (3 percent). Additionally, the median home value and median household income, which are both useful indicators of economic health, are estimated to increase significantly by 2020 (see Table 2.4).

TABLE 2.4 – FORECASTED DEMOGRAPHIC AND HOUSING GROWTH WITHIN AREA 1, AREA 2, AND THE CITY OF PHILADELPHIA

Demographic Category	Area 1 – 13th to 15th Streets			Area 2 – 11th to 17th Streets			City of Philadelphia		
	2015	2020	Percent Change	2015	2020	Percent Change	2015	2020	Percent Change
Population	6,894	7,211	5%	19,669	20,340	3%	1,551,773	1,583,334	2%
Housing Units	4,207	4,302	2%	12,569	12,852	2%	683,247	697,742	2%
Owner-Occupied Housing	1,176	1,241	6%	2,920	3,015	3%	317,878	323,015	2%
Renter-Occupied Housing	2,648	2,774	5%	8,366	8,676	4%	295,510	304,097	3%
Median Housing Value	$381,873	$473,843	24%	$385,237	$477,969	24%	$177,793	$208,349	17%
Median Household Income	$46,335	$56,743	22%	$46,731	$58,018	24%	$35,563	$40,250	13%

Source: US Census (2016), ESRI (2016), Econsult Solutions, Inc. (2016)

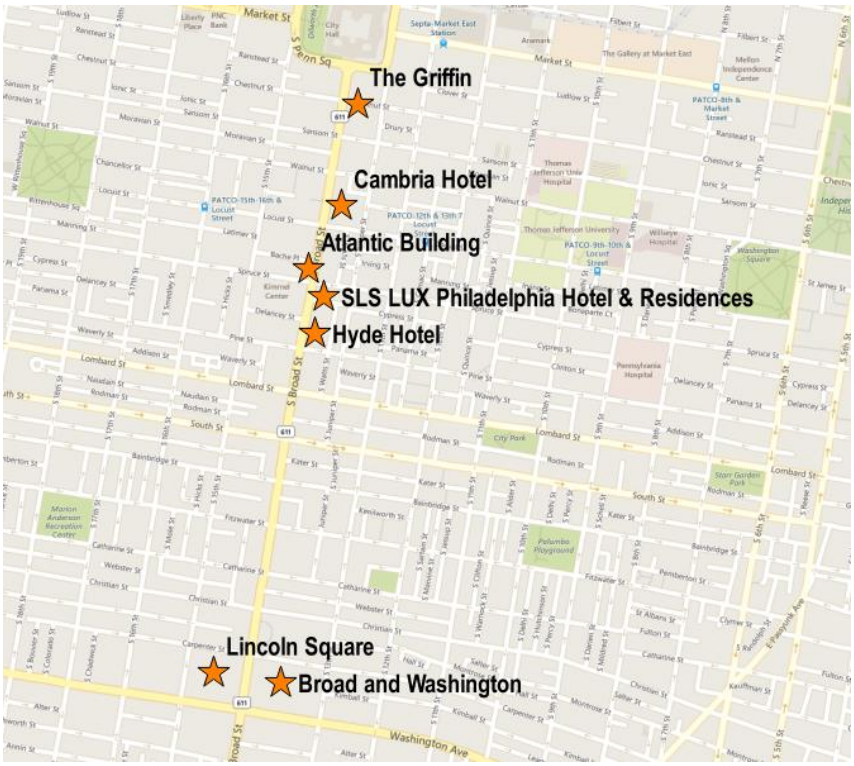
3.0 THE AVENUE OF THE ARTS CORRIDOR: BROAD STREET

3.1 INVESTMENT ALONG BROAD STREET

Recently, the neighborhood south of Market Street along Broad Street has seen significant change, with the renovation of the Kimmel Center in 2012 and the addition of the residential buildings with ground floor retail – 777 South Broad, completed in 2010 and the South Star Lofts, built in 2014. The additional residential and retail space has brought not only new residents, but also new businesses and general consumers to the area. The retail associated with the new developments has created interest, activity and "buzz" for the Avenue of the Arts. Bringing new housing options, commercial space, and additional amenities to the area has spurred further growth and redevelopment along Broad Street.

In addition to these now completed projects, several large residential, hotel and retail projects are either under way, in process, or announced from Market Street to Washington Avenue along South Broad Street. Seven significant projects are either underway or in the planning phases along South Broad Street (see Figure 3.1). This amount of investment over a relatively short time is significant, for any part of the city, and is further cementing South Broad Street, as one of the new places of the city to not only enjoy the arts, but to live, work, and enjoy other amenities as well.

FIGURE 3.1 – SELECTED PLANNED CONSTRUCTION PROJECTS ALONG BROAD STREET



Source: ESI (2016)

RESIDENTIAL

Buoyed by a younger, wealthier Center City and a lack of new supply across certain markets, increasing rents and declining Greater Center City vacancy, makes development attractive for projects that can meet the market's growing demand. South Broad Street and the surrounding neighborhoods have realized a dramatic investment in multi-family housing over the last decade and is reaching its limit of space and availability. As a result, demand for residential options along South Broad Street has grown, representing positive change and significant potential for the area particularly south of Graduate Hospital. Numerous construction projects are currently in process or proposed on South Broad Street. From north to south, these residential projects include the following.

The Griffin is a new luxury apartment conversion at 1346 Chestnut Street at the corner of Broad Street and Chestnut Street.[6] This 309,000 square foot building constructed in the late 1800s, formerly known as the Real Estate Trust Building, Western Savings Fund Society Building, and most recently the Avenue of the Art building. Floors 4 through 17 were purchased by MRP Realty for $33 million in early 2014 and will open 220 apartment units in mid-2016[7] (see Figure 3.2).

FIGURE 3.2 – 1346 CHESTNUT STREET



Source: ESI (February 23, 2016)

[6] http://www.phillymag.com/property/2015/08/10/property-tour-step-inside-the-griffin-at-broad-and-chestnut/
[7] "Center City Developments 2014-2018", Center City District 2015

The 21-story, 330,000 square foot Atlantic Building located at 260 S. Broad Street, with an alternative address of 1401 Spruce Street, will be turned into a multi-family complex by the Post Brothers scheduled to open in 2017. This former office building was purchased by Post Brothers in 2012 for $27 million and will be transformed into 220 condominiums. Construction costs are an estimated $100 million and will include amenities such as a fitness center, business center, cigar room, and rooftop even space[8] (see Figure 3.3).

FIGURE 3.3 – 260 S. BROAD STREET



Source: ESI (February 23, 2016)

The corner of South Broad Street and Washington Avenue is being transformed into a "mega-development" by prominent developer, Tower Investments who also constructed the Piazza in Norther Liberties. The proposed development includes a 32-story tower with 1,000 residential units, 143,000 square feet of commercial/retail space, and 25,000 square feet of multi-tenant office space. Construction costs for this project are estimated to be around $150 million and a completion date has yet to be released[9] (see Figure 3.4).

[8] http://www.bizjournals.com/philadelphia/datacenter/phila-cre-construction-center-city-crane-watch.html
[9] http://planphilly.com/articles/2016/02/03/blatstein-seeks-zoning-variances-at-broad-washington

FIGURE 3.4 – NORTHEAST CORNER OF BROAD AND WASHINGTON



Source: ESI (February 23, 2016)

On the opposite side of Broad Street at Washington Ave, a surface parking lot and former site of the Philadelphia, Wilmington, and Baltimore passenger train station, including the last vestige of the train shed, is being redeveloped by MIS Capital L.L.C. and Alterra Property Group into a mixed- use complex called Lincoln Square. This proposed development is to consist of roughly 356 apartments, 74,000 square feet of retail space, and has an estimated completion date of spring 2017[10] (see Figure 3.5).

[10] Adelman, Jacob. "Lincoln Square project calls for apartments, retail at Broad and Washington", The Philadelphia Inquirer. March 15, 2016. Web.

FIGURE 3.5 – NORTHWEST CORNER OF BROAD AND WASHINGTON



Source: ESI (February 23, 2016)Hotels

When the Pennsylvania Convention Center was expanded, studies indicated that the city did not have enough hotel rooms near the convention center to meet the forthcoming demand. With the private construction stoppage of the Great Recession just a memory, a renewed tourist business, and business attraction to the Center City, several hotel projects have been announced in Center City with three new hotels on Broad Street. From north to south they include the following.

The Cambria hotel will take the place of the current parking garage at 219-225 S. Broad Street at Locust Street built in 1928. Pearl Properties is teaming with Choice Hotels to bring a 206-room hotel with bistro catered to business travelers and tourists. Bought by Pearl Properties for $12.45 million, this 115,830 square foot property is scheduled to open its doors in 2017[11] (see Figure 3.6).

[11] http://philly.curbed.com/2016/3/10/11192580/cambria-hotel-rendering-revealed-for-broad-and-locust

FIGURE 3.6 – PARKING DECK AT BROAD AND LOCUST STREETS



Source: ESI (February 23, 2016)

The SLS Lux Philadelphia is a combination of a five-star hotel and luxury residencies located on the corner of Broad and Spruce Streets. Dranoff Properties and SBE Entertainment group are transforming this property into a 47-story tower with 90 luxury residences and 152 hotel rooms, expected to cost $220 million to construct.[12] SLS Lux Philadelphia will feature a corner bar and restaurant overlooking South Broad Street towards the Kimmel Center. The site once housed the famed Philadelphia International Records and Cameo-Parkway Records dance hits but the former building, since demolished, sat vacant as a blighting influence on the block after a fire destroyed its interiors (see Figure 3.7).

[12] "Center City Developments 2014-2018", Center City District 2015

FIGURE 3.7 – DEMOLITION SITE AT BROAD AND SPRUCE STREETS



Source: ESI (February 23, 2016)

The recently announced Hyde Hotel, another Dranoff and SBE Entertainment Group offering, will be located at Broad and Pine Streets. It will be the lower price point sibling- hotel to the SLS Lux Philadelphia and will begin construction in 2017. This proposed 22-story tower will have 76 hotel rooms, 83 apartment units, underground parking, a roof deck, and a featured restaurant. Construction costs for this project are estimated to be around $75 million[13] (see Figure 3.8).

[13] http://www.phillymag.com/property/2015/12/23/hyde-hotel-carl-dranoff/

FIGURE 3.8 – BROAD AND PINE



Source: ESI (February 23, 2016)

RETAIL

Most of the new developments and major renovations along Broad Street include ground floor retail, mostly in the form of restaurants catering to the buildings' occupants, tourists, and other city residents. The most significant proposal for retail along Broad Street is 143,000 square foot retail village at Tower Investment's Broad and Washington development, which is still in the design process. Additionally the northwest corner's Lincoln Square development add additional 74,000 square feet of retail, half of which will be filled by a supermarket.

3.2 BEYOND BROAD STREET

After a halt in construction (residential and office) activity during the recent economic recession, residential construction has picked up again since 2009, with the Avenue of the Arts corridor benefitting significantly from these investments. Philadelphia's revival of public spaces, growing global status, vital geographic location, and a booming economy combined with low interest rates is causing an influx of young people moving into Center City.

Due to the relatively stable economy and population growth, and the new population growth in the area, housing demand has been strong in Center City. As housing demand increases, especially in an urban area, a portion of that population will seek market rate apartment units, many of which will be available within a few years in both Area 1 and Area 2.

3.3 COMMERCIAL AND RESIDENTIAL INVESTMENT

Using the City of Philadelphia's Office of Property Assessment (OPA)'s recent data, the change in housing stock within Area 1, Area 2, and the city as a whole from 2013 to 2015 was estimated. Both Area 1 and Area 2 have seen an increase in stores with dwelling (mixed-use with residential), hotel, and apartment properties over the three-year period. The growth in these areas has significantly outpaced that of the city in regards to the number of stores with dwelling (mixed-use with residential), hotel, and apartment properties. This is a positive change for the Avenue of the Arts that will impact its future position in the city (see Table 3.1).

TABLE 3.1 - PERCENTAGE CHANGE IN THE NUMBER OF PARCELS FROM 2013 TO 2015

Property Type	Area 1 – 13th to 15th Streets	Area 2 – ' 11th to 17th Streets	Philadelphia
Residential	0.5%	1.1%	0.2%
Hotels and Apartments	2.8%	3.3%	0.0%
Store with Dwelling	48.1%	63.3%	-1.9%
Commercial	0.5%	-3.5%	-1.6%
Industrial	0.0%	0.0%	-2.2%
Vacant Land	5.0%	0.8%	-1.0%

Source: City of Philadelphia Office of Property Assessment (2013-2015), Econsult Solutions, Inc. (2016)

The OPA data also provides the market value for all city parcels each year. In 2013, the city made significant efforts to fairly reassess all residential and commercial property values under the Actual Value Initiative (AVI). These changes allow for a more accurate picture of market value changes over time. From 2013, after AVI was implemented, to 2015, property values within Area 1 and Area 2 have increased. Most notably, the stores with dwelling (mixed-use residential properties) saw the largest property value increases followed by hotels and apartments (see Table 3.2). While stores with dwelling (mixed-use with residential) saw an aggregate property

value decline across the city, these property values within Area 1 and Area 2 increased by 48 and 63 percent, respectively.

TABLE 3.2 - PERCENTAGE CHANGE IN AGGREGATE VALUE OF PARCELS FROM 2013 TO 2015

Property Type	Area 1	Area 2	Philadelphia
Residential	-0.8%	-1.8%	0.4%
Hotels and Apartments	18.3%	13.6%	4.4%
Store with Dwelling	32.1%	41.7%	-7.5%
Commercial	1.9%	-5.6%	-4.0%
Industrial	0.0%	-6.7%	-2.9%
Vacant Land	-5.5%	38.0%	-7.0%

Source: City of Philadelphia Office of Property Assessment (2013-2015), Econsult Solutions, Inc. (2016)

The change in construction permits approved over time is also an indicator of changes in the city's building stock. Publicly available data, provided by the city's Office of Licenses and Inspections shows growth within both Area 1 and Area 2 (see Table 3.3). These permits include all new construction or major renovation permits approved each year.

TABLE 3.3. CONSTRUCTION PERMIT DATA 2006-2015

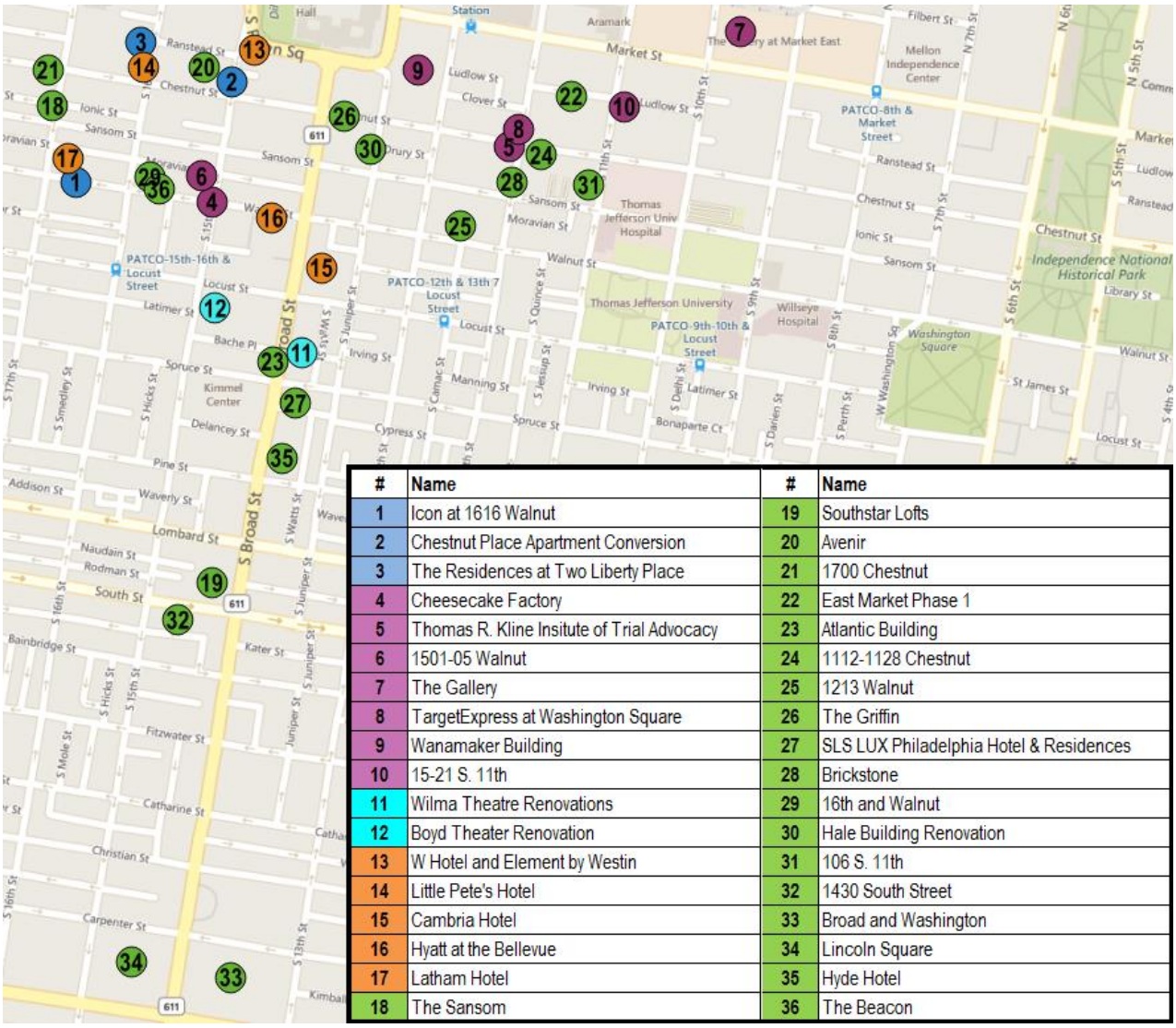
Year	Area 1	Area 2	5 zip codes[14]
2006	0	0	4
2007	1	3	20
2008	3	8	31
2009	0	4	33
2010	5	8	80
2011	0	3	72
2012	6	12	70
2013	7	19	139
2014	11	25	253
2015	1	28	261
Total	**34**	**110**	**963**

Source: City of Philadelphia Office of Licenses & Inspections (2013-2015)

Like South Broad Street itself, the surrounding area is continuing to grow with many new construction and renovation projects, both large and small, in the pipeline for Area 1 and Area 2. These projects have been proposed or are well under construction in and near the Avenue of the Arts. The construction pipeline includes both new construction and major renovations (see Figure 3.9). The largest developments not on South Broad Street include the Gallery at Market East, the adjacent East Market project, and the W and Element Hotels at Chestnut at 15th Street. Most projects have expected completion dates between 2016 and 2018.

[14] This refers to the five zip codes surrounding the Avenue of the Arts (19102, 19103, 19107, 19146, 19147).

FIGURE 3.9 – MAP OF RECENTLY COMPLETED AND PLANNED NEW CONSTRUCTION AND MAJOR RENOVATION PROJECTS BETWEEN 11TH AND 17TH STREETS



#	Name	#	Name
1	Icon at 1616 Walnut	19	Southstar Lofts
2	Chestnut Place Apartment Conversion	20	Avenir
3	The Residences at Two Liberty Place	21	1700 Chestnut
4	Cheesecake Factory	22	East Market Phase 1
5	Thomas R. Kline Insitute of Trial Advocacy	23	Atlantic Building
6	1501-05 Walnut	24	1112-1128 Chestnut
7	The Gallery	25	1213 Walnut
8	TargetExpress at Washington Square	26	The Griffin
9	Wanamaker Building	27	SLS LUX Philadelphia Hotel & Residences
10	15-21 S. 11th	28	Brickstone
11	Wilma Theatre Renovations	29	16th and Walnut
12	Boyd Theater Renovation	30	Hale Building Renovation
13	W Hotel and Element by Westin	31	106 S. 11th
14	Little Pete's Hotel	32	1430 South Street
15	Cambria Hotel	33	Broad and Washington
16	Hyatt at the Bellevue	34	Lincoln Square
17	Latham Hotel	35	Hyde Hotel
18	The Sansom	36	The Beacon

Source:ESI (2016), Various (2015, 2016)

4.0 IMPACTS FROM CAPITAL INVESTMENTS

4.1 OVERVIEW

The scale of commercial and residential investment along South Broad Street that is currently underway, in the pipeline and even speculative is significant. Over the past 10 years, new residential buildings with ground floor restaurants have been added to South Broad Street. Important to the current revitalization of South Broad Street, the current projects announced or underway for Broad Street are bringing an even greater level of investment and density through a large mix of residential, hotel and retail space.

4.2 ABOUT INPUT-OUTPUT MODELS

To estimate the economic impact from the construction of new developments along South Broad Street, IMPLAN, an input-output modeling software, was used. IMPLAN is 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.

Construction activity produces two kinds of spillover effects of which the composition and scale of these spillover effects can be modeled using IMPLAN.

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- First, locally sourced materials generate increased business activity for local vendors, who in turn ramp up their activities and their own sourcing; this is known as the indirect effect.
- Second, workers earn wages and in turn spend a portion of their earnings within their local economies; this is known as the induced effect.

We can therefore model the total economic impact generated by the construction activity that is and is proposed to take place along South Broad Street. The direct construction expenditures generate economic activity that ripples out from each project site. Once economic impacts from direct expenditures have been estimated, fiscal impacts to the city government can be calculated. Direct construction expenditures generate economic activity that expands various city tax bases and therefore generates various tax revenues.

4.3 CAPITAL INVESTMENTS

For the purposes of this report, the seven major construction or renovation projects that are currently proposed along South Broad Street were selected in order to predict the overall economic impact of the residential and commercial growth along the Avenue of the Arts (see Table 4.1). Estimated total construction costs were used to develop a customized input-output model for the City of Philadelphia.

The construction costs for the six of the selected projects have been publically announced or are known by Econsult Solutions. However, as designs and plans may change for the projects, these construction costs may change. Estimated construction costs have not been publically released yet for Pearl Properties' 206-room Cambria Hotel, planned for the northeast corner of Broad and Locust Streets. Rather than leaving the Cambria Hotel out of the analysis, ESI developed estimates for hotel construction based on comparable hotel construction projects in Center City. The estimated costs were assumed to be $400,000 per room, which is comparable to the construction costs estimated for the Kimpton Hotel, a similar sized hotel at 18th and Vine Streets. In total, we estimate $810 million in direct construction costs for large residential, hotel and retail announced large developments.[15]

TABLE 4.1 – APPROXIMATE CAPITAL INVESTMENT FOR SELECT LARGE DEVELOPMENTS ALONG SOUTH BROAD STREET

Project Name	Project Location	Project Description	Estimated Completion Date	Approximate Cost ($M)[16]
The Griffin	1346 Chestnut St.	217-unit luxury apartment with retail	unknown	$85
SLS LUX Philadelphia Hotel & Residences	309-313 S. Broad St.	152-room hotel with 90 residential units	2018	$220
Cambria Hotel	219-225 S. Broad St.	206-room hotel	2017	$85[17]
Atlantic Building	260 S. Broad St.	220-unit condo	2017	$100
Broad and Washington	Broad and Washington	1,000-unit apartment with retail and office	2017	$150
Lincoln Square	Broad and Washington	356-unit apartment with retail	2017	$95[18]
Hyde Hotel	337 S. Broad St	76-room hotel with 83 apartment units and retail	unknown	$75
Total Estimated Construction Costs				**$810**

Source: CCD (2015), Philadelphia Business Journal (2016), Hidden City (2016), Plan Philly (2015)

[15] These are total estimated construction costs and do not include the purchase of property or land. The purchase of property and land are considered transfers of assets and are not typically included in an input-output model, as that project expense does not circulate through the local economy and generate economic activity.
[16] Construction costs may change for projects – these are all current estimates
[17] The total cost for Cambria hotel has not yet been announced.
[18] Lincoln Square announced purchase and development cost of over $100 million. The purchase of the property ($6.5 million) was not included in total construction costs in Table 3.1. Construction cost was rounded and estimated to be approximately $95 million. The purchase of property is considered transfers of assets and is not typically included in an input-output model, as that project expense does not circulate through the local economy and generate economic activity.

4.4 ECONOMIC IMPACTS FROM CAPITAL INVESTMENTS

The $810 million in total construction costs associated with these seven projects will potentially generate over $1.3 billion in one-time economic impact for the city, supporting 1,420 full-time equivalent jobs per year with $680 million in labor income. Within the Commonwealth of Pennsylvania, these investments will potentially generate nearly $1.5 billion in economic impact, supporting 1,560 jobs and $730 million in labor income (see Table 4.2). In analyzing jobs supported by multi-year construction projects, it is necessary to divide by the estimated length of construction in years to arrive at an annualized employment impact. The annual employment impact represents an average per year over an estimated six-year construction period[19] rather than a precise yearly impact. Construction spending and job demand is likely to fluctuate during varying phases of the project and will likely not stay constant over the six-year period.

TABLE 4.2 – ESTIMATED ECONOMIC IMPACT OF THE CAPITAL INVESTMENT FOR SELECT LARGE DEVELOPMENTS ALONG SOUTH BROAD STREET

Impact Type	City of Philadelphia	Commonwealth of Pennsylvania
Direct Output ($M)	$810	$810
Indirect & Induced Output ($M)	$520	$670
Total Output ($M)	**$1,330**	**$1,480**
Employment (FTE jobs each year)	**1,420**	**1,560**
Labor Income Supported ($M)	**$680**	**$730**

Source: IMPLAN (2013), ESI (2016)

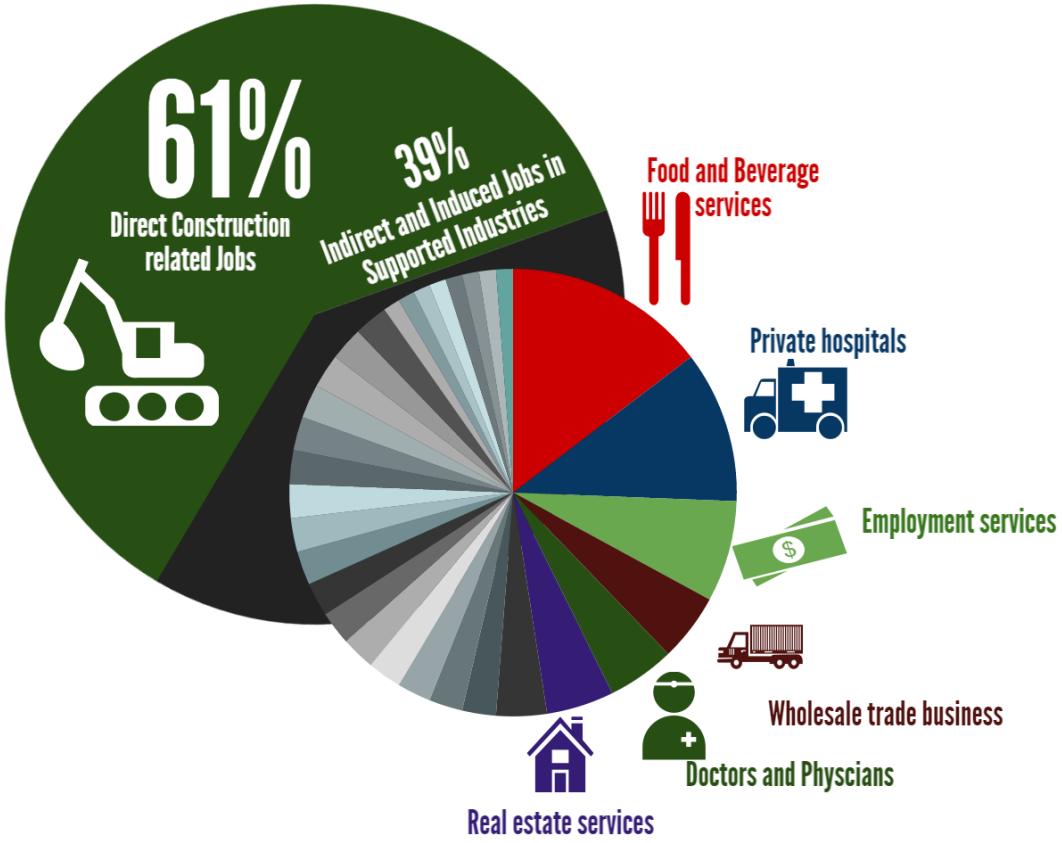
JOBS IMPACT

While the majority of jobs supported by these capital investments fall within the construction, architectural, and engineering industries (61%), a significant portion of the employment impact occurs in a range of other industries. Direct, indirect, and induced jobs are supported in the food services industry, the private hospital industry, and the employment services industry, as well as additional industries across the commonwealth (see Figure 4.1).

Once the new developments are completed, those will require permanent employees to maintain operations. Direct employment at the new developments will be in the hotel, food and beverage service, retail, and real estate service industries.

[19] Estimated full construction is estimated to take place over the six year period from 2015 to 2019.

FIGURE 4.1 – ESTIMATED EMPLOYMENT IMPACT OVER SEVERAL YEARS OF THE CAPITAL INVESTMENT FOR SELECT LARGE DEVELOPMENTS ALONG BROAD STREET



Source: IMPLAN (2013), ESI (2016), Piktochart (2016)

4.5 FISCAL IMPACTS FROM CAPITAL INVESTMENTS

The fiscal impacts generated by these capital investments will be substantial. The investments will generate city and commonwealth taxes both directly through the initial capital activities and indirectly via spending by the construction workers and developers' local procurement of goods and services. Over the full construction period, it is estimated that the capital investments will generate $21 million in tax revenues to the city and over $33 million in tax revenues to the commonwealth in the form of income, sales, and businesses taxes (see Table 4.3).

TABLE 4.3 – ESTIMATED FISCAL IMPACT OF THE CAPITAL INVESTMENT FOR SELECT LARGE DEVELOPMENTS ALONG SOUTH BROAD STREET

Tax Type	City of Philadelphia	Commonwealth of Pennsylvania
Personal Income Taxes ($M)	$15	$17
Sales and Use Taxes ($M)	$3	$13
Business Taxes ($M)	$4	$3
Total ($M)	**$21**	**$33**

Source: IMPLAN (2013), Federal Reserve Bank of St. Louis (2011), Philadelphia Department of Revenue (2012), Commonwealth of Pennsylvania (2015), ESI (2016)

5.0 CONCLUSION

Avenue of the Arts contribution to the Philadelphia economy, image and experience is robust and continuing to grow. Overall, this area is experiencing both a growth in population and in new multi-family rental apartment and for-sale condo supply. The millennial and baby boomer populations moving into the city desire certain amenities of which many will be provided through the new construction or major renovations proposed along South Broad Street, refreshing a relatively older multi-family apartment stock. As desire to live, work and recreate in Center City increases with the influx of the millennial and baby boomer generations, Avenue of the Arts is being redefined. The new concentration of residents and commercial activity allows for additional growth along the corridor.

The prominence of the Avenue of the Arts is attracting new investment not just to South Broad Street, but to the surrounding neighborhoods as well. The current landscape of South Broad Street will be forever changed with the strategic and thoughtful investment by local developers and their partners, which span from local to international in scope, increasing the strength and visibility of South Broad Street.

APPENDIX A – INPUT-OUTPUT METHODOLOGY

A.1 Overview

Economic impact estimates are generated by utilizing **input-output models** to translate an initial amount of direct economic activity into the total amount of economic activity that it supports, which includes multiple waves of spillover impacts generated by spending on goods and services and by spending of labor income by employees. This section summarizes the methodologies and tools used to construct, use, and interpret the input-output models needed to estimate this project's economic impact.

A.2 Input-Output Model 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 is the sum of its own direct economic footprint plus the indirect and induced effects generated by that direct footprint.

A.3 Input-Output Model Mechanics

To model the impacts resulting from the direct expenditures Econsult Solutions, Inc. 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 440 industry categories in accordance to the North American Industrial Classification System (NAICS) codes.

These economic impacts in turn produce one-time or ongoing increases in various tax bases, which yield temporary or permanent increases in various tax revenues. To estimate these increases, Econsult Solutions, Inc. created a **fiscal impact model** to translate total economic impacts into their commensurate tax revenue gains.

A.4 Employment and Wages Supported

IMPLAN estimates the direct jobs employed by the project or activity being modeled. These estimated direct jobs will be displayed in the report unless the number of jobs is known beforehand by the project's owner, and if provided, will be noted in the body of the report. The project/activity expenditures also support induced and indirect jobs. These are jobs not directly employed by the project, but instead are employees who work for the project's vendors and employees who work at businesses frequented by those employees directly employed by the project. We report the total jobs supported by the project, therefore all direct, indirect, and induced jobs. These jobs are a mix of full-time and part-time jobs.

IMPLAN generates job estimates based on the term job-years, or how many jobs will be supported each year. For instance, if a construction project takes two years, and IMPLAN estimates there are 100 employees, or more correctly "job-years" supported, over two years, that represents 50 jobs each year. The 50 jobs represent the annualized number of jobs supported by the construction project. The job can be the same each year such as the coffee barista serving the directly employed construction workers or different if in the first year of the project a welder is needed and in the second year of the project an electrician is required.

The total income is for all direct, indirect and induced jobs. It includes proprietor income, wages, and all benefits. Since many projects/events require the employment sourced from multiple industries, the average wages paid will be different per industry. Therefore, it is not correct to divide the total labor income and divide it by the total job-years to derive an average employee compensation estimate.

APPENDIX B - ABOUT ECONSULT SOLUTIONS

This report was authored by Econsult Solutions, Inc. (ESI). ESI is a Philadelphia-based economic consulting firm. It 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, and planning, as well as expert witness services in support of litigation.