# Silver Spring Civic Building and Veteran's Plaza Economic Impact Analysis FY-2017

Hunyjoo Eom, Qiong Peng, and Morgan Wortham

Under the supervision of: Dr. Scott Dempwolf & Dr. Gerrit Knaap

Course #: URSP 688Y Smart Cities and Urban Data Science
The University of Maryland – College Park
Spring 2018





PALS - Partnership for Action Learning in Sustainability
An initiative of the National Center for Smart Growth

Gerrit Knaap, NCSG Executive Director
Uri Avin, PALS Director

# **Table of Contents**

1.0	Executive Summary	4
1.1	Overview	4
1.2	Summary of Findings	4
2.0	Introduction	5
3.0	Methodology	5
3.1	General Methodological Overview	5
3.2	Economic Impact Analysis Methodology	6
4.0	Findings	7
4.1	Economic Impacts	7
4.2	Fiscal Impacts	11
5.0	Conclusion	13
6.0	References	14
	List of Tables	
Tabla	1: Economic Impact Summary	-
	2: Summary of Similar Studies	
	3: Estimated Visitation by Event Type	
	4: Estimated Overnight Visitor Spending	
	5: Estimated Daytrip Visitor Spending	
	6: Estimated Exhibitor Spending	
	7: Estimated Organizer Spending	
	8: Gross Direct Spending	
rabie	9: Total Fiscal Impacts	

# 1.0 Executive Summary

#### 1.1 Overview

The Silver Spring Regional Center sought a report detailing the economic and fiscal impacts of the Silver Spring Civic Building at Veteran's Plaza (SSCB) on Montgomery County's economy in 2017.

The SSCB is an indoor community facility for events, festivals, trade shows, conferences and conventions, and other activities available to county residents and out-of-town groups. The County benefits from the economic activity and fiscal revenue generated by the SSCB's meetings and events.

While some of these benefits are difficult to measure, the SSCB's contribution to regional economic activity can be quantified in terms of spending, jobs and earnings. This analysis compiles data from a variety of sources to estimate direct, indirect, and induced economic benefits and tax benefits produced by the SSCB in FY2017.

This economic and fiscal impact analysis was conducted by the Partnership for Action Learning in Sustainability (PALS) and the Center for Economic Development (EDA Center) at the University of Maryland College Park. To quantify the SSCB's economic and fiscal impact, PALS/EDA used the IMPLAN input/output model.

#### 1.2 Summary of Findings

While this analysis considers as many variables as possible, it is important to note that a number of assumptions and exclusions were made as a result of missing data and other factors.

The key findings on the SSCB's economic and fiscal impacts for FY2017 are:

- \$39.3 million in total economic impact
- approximately 325 jobs
- \$2.9 million in fiscal revenue impact.

The total impact of \$39 million is the sum of \$15.6 million in labor income and \$24.6 million in added value to the economy.

## 2.0 Introduction

The Silver Spring Regional Center sought a report detailing the economic and fiscal impacts of the Silver Spring Civic Building & Veteran's Plaza (SSCB) on Montgomery County's economy during the fiscal year FY2017.

The SSCB is located in the Silver Spring Arts and Entertainment District, one of 22 such districts in Maryland. It offers a range community and recreational activities that attract both residents and visitors. Since it opened in 2010, the venue has become the center of community activities in Silver Spring. The SSCB contains a large hall and five community rooms, as well as a gallery space. The venue holds up to 1,500 people in approximately 14,000 square feet. Typical events include concerts, trade shows, wedding receptions, banquets, and meetings.

Local leaders are seeking to better understand the SSCB's economic contribution to the County. To achieve this, SSCB partnered with the University of Maryland's Partnership for Action Learning in Sustainability (PALS) and the Center for Economic Development (EDA Center). While the SSCB's true economic contribution is difficult to measure, the activity it generates can be quantified in terms of spending, jobs and earnings.

Based on data from a variety of sources, this analysis summarizes the estimated direct, indirect and induced economic benefits and tax benefits that the SSCB generates for the county. To determine this, the PALS/EDA estimated the number jobs, and the share of county GDP and wages that were directly attributable to the SSCB in 2017. These results were further broken down by type of impact (direct, indirect and induced). PALS/EDA also estimated the fiscal impacts attributable to the SSCB.

# 3.0 Methodology

#### 3.1 General Methodological Overview

PALS/EDA analyzed findings from similar studies conducted for comparable buildings and centers. Nationally, more municipalities are developing community arts and cultural facilities within arts and entertainment districts.

PALS/EDA defined economic impact as new spending that occurred in Silver Spring due to the SSCB. Economic impacts occur when visitors and local businesses spends money in the local economy. This study only includes spending that originated outside of Montgomery County. Spending by persons or companies within the County is considered a transfer of income from one sector of the economy to another and is not counted as a new economic impact.

These expenditures generally include money spent at restaurants, hotels, retail shops, recreational facilities, conventions, and on local transportation. Expenditures also include spending that leads to local business owners hiring employees and purchasing supplies for products and services that are the direct result of visitors and event organizers using the SSCB.

Finally, this study accounts for various multipliers or "ripple effects" produced by economic activity directly related to the SSCB.

The expenditures are generated by facility operations and spending by attendees, sponsoring organizations, event producers and exhibitors as the initial measures of economic activity. Once this direct spending was estimated, a calculated multiplier was applied to determine the indirect and induced economic impacts. The sum of the direct, indirect and induced impacts equals total economic impact, which is expressed in terms of spending (output), employment (jobs), and personal earnings.

#### Spending falls into three categories:

#### • Direct Spending

Direct spending is the initial change in spending that results from SSCB operations. This spending occurs both inside and outside of the center. Direct spending from SSCB operations is determined by combining spending on facility expenditures (including capital outlay), spending by attendees, and spending by sponsoring organizations, event producers, and exhibitors. Types of direct spending include purchases by overnight guests, daytrip attendees, event organizers, and exhibitors. For example, a conference attendee's restaurant meal is direct spending. Estimating direct spending is the first step in calculating economic impact.

#### Indirect Spending

Indirect spending is re-spending of direct expenditures that is, business-to-business transactions that grow from direct spending. For example, a conference attendee's direct expenditure on a restaurant meal can cause the restaurant to purchase additional food and supplies. If these purchases are made within the study area, Montgomery County, they are counted as indirect spending.

#### Induced Spending

Induced impacts are the changes in local spending on goods and services that result from income changes in directly and indirectly affected industry sectors. It is the change in local consumption by employees whose incomes are affected by direct and indirect spending. For example, waitstaff at local restaurants may have more personal income because event attendees dine at their restaurants. The amount of the increased income that waitstaff spend in the local economy is considered induced spending.

The variables that determine direct, indirect and induced spending were based on the number of events at the SSCB, the number of attendees, the types of events, the origin of the attendees, the facility's financial operations, industry trends, economic conditions, the direct spending categories used, the per-person spending amounts, the distribution of spending, and specific taxes.

#### 3.2 Economic Impact Analysis Methodology

Regional input-output models are typically used by economists to understand the flow of goods and services within and between regions, and to measure complex interactions given an initial spending estimate. In an effort to quantify the inputs needed to produce the total output, economists have developed multiplier models.

These multipliers rely on input-output models that can quantify interactions between firms, industries and social institutions in a local economy. This analysis uses IMPLAN software and databases (Impact Analysis for Planning) that provides procedures for estimating local input-output models and associated databases.

The IMPLAN model can estimate the multiplier effects of changes in demand for one industry relative to all other industries within a defined economic area. Its proprietary methodology includes a matrix of production and distribution data in all counties in the United States. The model's is sensitive to both the location and the type of spending. In addition, it can determine indirect and induced spending, as well as employment changes and earnings by industry while taking into account any leakages associated with the purchase of certain goods and services outside the geographic area being studied.

The model estimates these impacts by analyzing local-level average wages, prices and transportation data, including commuting patterns and the relative interdependence between regions. Once the direct spending amounts are assigned to a category, the IMPLAN model estimates the economic multiplier effects for each type of new direct spending attributable to SSCB operations. Direct spending estimates were then assigned to unique IMPLAN expenditure categories, which served as the inputs for the IMPLAN model.

# 4.0 Findings

#### 4.1 Economic Impacts

To determine the economic impacts, PALS/EDA used SSCB data on event activity, specifically the type of event, number of days, and estimated total number of attendees. Table 1 summarizes the total economic impacts generated by new businesses and the impacts of visitor spending at SSCB events.

**Table 1: Economic Impact Summary** 

Total Economic Impacts										
Impact Type	Employment Labor Income				Added Value	Total Output				
Direct effect	235	\$	9,680,986	\$	14,427,115	\$	24,098,438			
Indirect effect	36	\$	2,724,487	\$	4,435,439	\$	6,884,660			
Induced effect	55	\$	3,241,450	\$	5,830,435	\$	8,371,647			
Total effect	326	\$	15,646,923	\$	24,692,990	\$	39,354,745			

Sources: IMPLAN, NCSG

According to the PALS/EDA analysis of the provided data, in FY2017 the SSCB supported approximately 326 jobs, generated nearly \$15 million in county GDP, and \$24 million in wages. Studies of similar facilities in other regions have yielded comparable results (Table 2).

**Table 2: Summary of Similar Studies** 

Facility Name	City	Impact	Jobs	Revenue
Glens Falls Civic Center	Glens Falls, NY	\$10.6 mil	131	\$780,000
Cox Center	Oklahoma City, OK	\$62.4 mil	390	\$1.3 mil
Virginia Beach Convention Center	Virginia Beach, VA	\$60.6 mil	450	\$2.7 mil
Albany Capital Center	Albany, NY	\$36.2 mil	190	\$409,000

PALS/EDA analyzed findings from similar studies conducted for comparable cities or regions. Across the nation, there has been an increased interest in the economic impact of convention centers and civic buildings. Tourism drives a significant amount of direct spending in host cities' economies, and is typically well documented by local convention and visitors' bureaus.

There is limited research published on the economic benefit of civic buildings, community facilities, and convention centers. PALS/EDA compiled similar impact studies for comparison purposes. While there are limitations associated with comparing other research with PALS/EDA's findings, this comparison can check that the validity of the SSCB findings are within the range of probable results. As additional studies on local civic centers are conducted, more research and analysis about their specific economic impacts will become available.

#### **Sources of Direct Spending**

PALS/EDA examined tour sources of new direct spending impact:

- Overnight Guests: Visitors to Silver Spring who require overnight lodging, including convention delegates, meeting attendees, and attendees at other SSCB events.
- Daytrip Attendees: Visitors to the SSCB venues who don't require paid lodging.
- Event Organizers: Individuals, associations, or other organizations that plan, sponsor, organize, and coordinate events at SSCB facilities.
- Exhibitors: Individuals or companies that rent exhibition space, typically from event organizers, to display information or products at events.

PALS/EDA classified events into the following categories:

- Banquet
- Conference/Convention
- Cultural and Performance
- Meeting
- Private
- Skating/Sports.

#### **New Visitor**

PALS/EDA estimated the percentage of each visitor type from outside the market rather than from the local area. Only new visitor spending is included in the spending estimates because non-residents import income, whereas residents transfer income within the market area.

Table 3 shows the product of visitor forecasts and percent of demand that is new to the market, yielding an estimate of the impact sources.

**Table 3: Estimated Visitation by Event Type** 

Fuent Tune	#Events Attendees		Out-of-County			Local			
Event Type	# EVEITS	Attendees	Overnight	Daytrip	Overnight	Daytrip	#Exhibitors		
Banquet	99	13,520	3,042	11,219	338	2,301	169		
Conference	310	38,928	21,897	20,189	2,433	4,141	973		
Cultural & Performances	103	66,880	23,031	48,137	2,559	9,873	836		
Meeting	142	25,088	1,411	24,722	157	5,070	470		
Private	129	12,656	2,848	10,502	316	2,154	158		
Skating	2	28,640	4,833	25,251	537	5,179	179		
Total	785	185,712	57,062	140,021	6,340	28,717	2,786		

#### **Overnight Guest Spending**

In Table 4, the measure of Overnight Guests assumes that 100 percent of overnight guests are new to Montgomery County and therefore all their spending is direct spending.

**Table 4: Estimated Overnight Visitor Spending** 

Estimated Daily Spending by Overnight Visitors (In 2011 Dollars)							
Daily Spending Parameter	Spending Per Overnight Stay						
Isolated Hotel Rate	\$138.53						
Hotels and motels, including casino hotels	\$46.60						
Automotive Equipment Rental and Leasing	\$8.17						
Food services and drinking places	\$60.60						
Retail Stores - Gasoline Stations	\$1.88						
Retail Stores - General Merchandise	\$28						
Transit and ground passenger transportation	\$8.53						
Scenic and sightseeing transportation and support activities for transportation	\$4.52						
Motion picture and video industries	\$1.26						
Performing Arts Companies	\$3.79						
Spectator Sports Companies	\$2.04						
Museums, Historical Sites, Zoos, and Parks	\$9.65						
State and local government passenger transit	\$1.65						
Total	\$333.83						

#### **Daytrip Visitor Spending**

Daytrip spending is generated by delegates and other attendees to conventions, tradeshows, and consumer shows who don't stay overnight. In most markets, day-trippers typically spend money on meals, shopping, local transportation, recreation and

entertainment, and other goods and services while in town. The estimates in Table 5 are based on the percentage of the population within a 30-minute drive-time of the SSCB.

**Table 5: Estimated Daytrip Visitor Spending** 

Estimated Daytrip Spending (In 2011 Dollars)						
Daily Spending Parameter	Spending Per Daytrip					
Food services and drinking places	\$47.26					
Retail Stores - Gasoline Stations	\$1.46					
Retail Stores - General Merchandise	\$22					
Scenic and sightseeing transportation and support activities for transportation	\$3.53					
Motion picture and video industries	\$0.99					
Performing Arts Companies	\$2.96					
Spectator Sports Companies	\$1.59					
Museums, Historical Sites, Zoos, and Parks	\$7.53					
Amusement parks, arcades, and gambling industries	\$14.50					
State and local government passenger transit	\$1.29					
Total	\$102.93					
Sources: DMAI, CTI, BLS, WCD, HVS	-					

#### **Exhibitor Spending**

In addition to spending at the facility, exhibitors purchase lodging, meals, local transportation, vendor services, meeting room rentals, equipment rentals, and other goods and services. Adjusted DMAI data provides estimates of exhibitor spending per attendee day. Exhibitor spending on facility rental and facility services is included in the facility revenue estimates. In Table 6, PALS/EDA estimates of Exhibitor/Organizer spending on Attendees/Delegates are based on the percentage of attendees by events organized and exhibited by companies that would not otherwise hold or participate in an event in the county.

**Table 6: Estimated Exhibitor Spending** 

Total Exhibitor/Vendor Spending (In 2011 Dollars)							
Daily Spending Parameter	Spending Per Event Day						
Hotel Room Rate	\$18.93						
Hotels and motels, including casino hotels	\$2.61						
Automotive Equipment Rental and Leasing	\$1.54						
Food services and drinking places	\$18.27						
Retail Stores - Gasoline Stations	\$0.30						
Retail Stores - General Merchandise	\$0.84						
Transit and ground passenger transportation	\$0.62						
Commercial and industrial machinery and equipment rental and leasing	\$1.07						
Advertising and Related Services	\$1.97						
Other amusement and recreational industries	\$1.94						
State and local government passenger transit	\$0.09						
Total	\$48.18						
Sources: DMAI, CTI, BLS, WCD, HVS							

#### **Event Organizer Spending**

In addition to facility spending, event organizers also spend on lodging, meals, local transportation, facility rentals, equipment rentals, and other goods and services required to plan and organize a successful event. In Table 7, adjusted DMAI data provides estimates of organizer spending per attendee day. Event organizer spending on facility rental, facility services, and event food and beverage is included in the facility revenue estimates.

**Table 7: Estimated Organizer Spending** 

Total Organizer Spending (In 2011 Dollars)							
Daily Spending Parameter		Spending Per Event Day					
Hotel Room Rate	\$	0.14					
Hotels and motels, including casino hotels	\$	0.18					
Automotive Equipment Rental and Leasing	\$	0.07					
Food services and drinking places	\$	0.54					
Retail Stores - General Merchandise	\$	1.67					
Transit and ground passenger transportation	\$	0.03					
Advertising and Related Services	\$	1.29					
State and local government passenger transit	\$	0.06					
Total	\$	3.95					
Sources: DMAI, CTI, BLS, WCD, HVS							

**Table 8: Gross Direct Spending** 

Spending Source		# of Visitors Visitor Type			\$ per Day	Total Spending		
Out-of County Overnight	=	57,062	overnight visitors	X	\$333.83	=	\$19,049,007	
Out-of County Daytrip	=	140,021	day trip visitors	X	\$102.93	=	\$14,412,362	
Exhibitor/Vendor	=	2,786	attendees	X	\$48.18	=	\$134,229	
Organizer =		1,789	1,789 attendees		\$3.95	=	\$7,067	
					Total		\$26,885,180	

### 4.2 Fiscal Impacts

PALS/EDA's estimates of the fiscal impacts associated with the SSCB are shown in Table 9. Input data were provided in application materials and annual reports provided by MSAC. Fiscal impacts—specifically, property tax revenues—would traditionally be compared to estimated tax revenue losses from property tax incentives used by the SSCB. Data from the SSCB annual reports indicate that one property submitted applications for the tax incentive, but neither the annual reports nor information from the State Department of Assessments and Taxation indicated that this application was approved. As a result, PALS/EDA omitted this consideration in the analysis.

**Table 9: Total Fiscal Impacts** 

Desctiprion	Employee Compensation		Indirect Business Tax		Corporations		Household	
Social Insurance Tax	\$	9,510						
Indirect Business - Sales Tax			\$	864,960				
Indirect Business - Property Tax			\$	952,229				
Indirect Business - Other Taxes			\$	329,573				
Corporate Profits Tax					\$	57,056		
Personal - Income Tax							\$	504,743
Personal - Property Tax							\$	6,686
Personal - Other Taxes							\$	165,322
Total State and Local Tax	\$	9,510	\$ 2	2,146,762	\$	57,056	\$	676,751

Sources: IMPLAN, NCSG

Total tax revenues refer to property, income, sales, payroll, and other tax revenues supported on the state and local level.

# Silver Spring Civic Building & Veteran's Plaza Economic Impact Analysis FY 2017

#### 5.0 Conclusion

Arts and entertainment districts have a positive impact on the local economy. During FY2017, Silver Spring's SSCB generated \$39 million, the sum of \$15.6 million in labor income and \$24.6 million in added value to the economy.

Job and labor impacts are a similar combination of 235 jobs (\$9.6 million) from direct impacts and 91 jobs (\$5.9 million) from indirect and induced effects.

The total value added is the sum of \$14.4 million from direct impact and nearly \$10.2 million in indirect and induced impacts. The SSCB's total tax revenue impact came to approximately \$676,751 million during the study period.

The SSCB attracts visitors for a variety of events, which introduces money into the local economy that might have been spent elsewhere. The SSCB is an important addition to Silver Spring and Montgomery County, providing not only social benefits, but also measurable economic benefits.

## Silver Spring Civic Building & Veteran's Plaza Economic Impact Analysis FY 2017

## 6.0 References

- Albany Capital Center Economic and Fiscal Impact Update. Draft Report. Chicago, IL: HVS Convention, Sports & Entertainment Facilities Consulting, 2015.
- ❖ Anaheim Convention Center Expansion Market & Economic Analysis. Final Report. Tampa, FL: Crossroads Consulting Services, 2014.
- Broward County Convention Center. Economic and Fiscal Impact Analysis. Chicago, IL: HVS Convention, Sports & Entertainment Facilities Consulting, 2015.
- Convention Center and Headquarters Hotel Market and Economic Impact Study Results. Report. Chicago, IL: HVS Convention, Sports & Entertainment Facilities Consulting, 2017.
- Convention/Conference Center Market & Feasibility. Report. Chicago, IL: HVS Convention, Sports & Entertainment Facilities Consulting, 2015.
- Economic and Fiscal Impact Study Construction of the Phoenix Convention Center. Project Report. San Francisco, CA: AECOM Technical Services, Inc., 2010.
- Economic Impact Analysis Convention Center Headquarters Hotel. Report. Chicago, IL: HVS Convention, Sports & Entertainment Facilities Consulting, 2011.
- Economic Impact of the Glens Falls Civic Center. Report. Saratoga Springs, NY: Camoin Associates, 2016
- ❖ Humphreys, J. "The Economic Impact of the Georgia World Congress Center and the Georgia Dome on Georgia's Economy in FY 2008". Selig Center for Economic Growth. Athens, GA: The University of Georgia. 2008.
- Kennedy, B., Jones, D. P. "The Economic Impact of the Spokane Public Facilities District in 2016". Institute for Public Policy & Economic Analysis. Cheney, WA: Eastern Washington University. 2017.
- Market & Economic Analysis Associated with Expansion of the Ocean City Convention Center. Final Report. Tampa, FL: Crossroads Consulting Services, 2017.
- Oregon Convention Center Economic and Fiscal Impact Analysis FY 2010. Report. Tampa,
   FL: Crossroads Consulting Services, 2011.
- The Economic and Fiscal Impacts of the Orange County Convention Center. Report. Orlando, FL: Fishkind & Associates, Inc. 2013.
- ❖ Parr, K.E. and Waite, B. "The Economic Impact of the Redevelopment of the Hartford Civic Center." Connecticut Center for Economic Analysis. Storrs, CT: University of Connecticut, 2011.
- Wisconsin Center District. Economic Impact Analysis. Chicago, IL: HVS Convention, Sports
   Entertainment Facilities Consulting, 2012.