# The Impact of the Torpedo Factory Art Center on the City of Alexandria's Economy

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## Executive Summary

The research presented in this report confirms the findings of other research on the economic impacts of the Torpedo Factory Art Center; that is, the Torpedo Factory is the most cited major attraction of visitors to Old Town, 83% of its visitors are non-residents of Alexandria, its visitors combine their trip to the Torpedo Factory with multiple visits to other Old Town attractions, and visitors attracted to Old Town by the Torpedo Factory spend on average $92.88 during their visit including purchases at the Art Center. Other findings include:

- Visitation to the Torpedo Factory declined steadily from 1994, reaching its low point in 2007; since then it has trended higher reaching 470,000 in 2016;

- Out-of-town visitors comprise 83% of the visitors attracted to the Torpedo Factory;

- The Torpedo Factory was cited by 48.6% of the visitors surveyed as their primary attraction for their visit to Old Town;

- 95.7% of Torpedo Factory visitors combined their visit with other Old Town attractions, most notably restaurants and shopping;

- The Torpedo Factory attracts visitors of all ages and included as many 20-29 year olds as 50-59 year olds;

- The incomes of visitors to the Torpedo Factory reflect a broad range and included as many persons with below-average incomes as above average incomes; and,

- Out-of-town visitors to the Torpedo Factory spent $92.88 during their visit in Alexandria ($64.48 per visitor day) including purchases at the Art Center; in 2016, this spending totaled an estimated $35.2 million to the benefit of the City's hotels, restaurants, retail establishments, resident artists at the Art Center and other businesses across the City.

With growing competition from other jurisdictions in the Washington region and changing tourist tastes, Alexandria's tourist industry has not kept pace with the growth of the City's other major sectors. The long-term decline in visitation to the Torpedo Factory between 1994 and 2007 and recent slow recovery reflect on the City's broad-base of visitor attractions and the ability to maintain and increase their competitive position in the region's tourist market.

The Torpedo Factory Art Center and the combination of recreational and commercial services clustered in convenient proximity constitute the City's principal tourist magnet for attracting day-trippers from throughout the Washington metropolitan area as well as multi-day visitors to the Washington, DC region from elsewhere in the U.S. and internationally. The Torpedo Factory is a proven place maker in concert with the Alexandria waterfront, and it is the City's strongest catalytic force in attracting visitors during all four seasons. As such, it has the potential to increase its competitive position but to be successful it needs the complementary attractions in Old Town to keep pace and improve their relative competitive positions. The food scene, entertainment options, quality of lodging, use of and access to the River, the mix and quality of retailing and other consumer services are all part of the solution building on the City's brand that reflects Old Town's historic resources and the iconic presence of the Torpedo Factory.

The Torpedo Factory is the City's single largest visitor attraction and has the inherent capacity to increase its draw of visitors to Old Town by becoming more extraverted and more aggressive in the programming of its public spaces and after- hour uses. However, for the Torpedo Factory Art Center to maximize its contribution to the City's economy, Old Town's complementary attractions must also increase their competitive position in an increasingly competitive marketplace that has been undergoing fundamental social, cultural and economic change for the past ten years.

## The Torpedo Factory as a Place Maker

The Torpedo Factory Art Center has been fixture on the Alexandria waterfront for more than 40 years and has been an integral part of the long history of the waterfront's revitalization starting in the mid-1970s. The successful repositioning and replacement of the original torpedo factory buildings became a symbol of the revitalization of Old Town's commercial base that had struggled to gain viability through false starts and misplaced efforts epitomized by the controversial demolitions under the City's urban renewal program in the 1960s. That experience may have helped save the remaining building that comprises the Torpedo Factory Art Center that arguably has become the reference point for out-of-town visitors as well as city residents when they visit Old Town. Combined with the attractive power of Alexandria's waterfront, these attractions define the destination for the large majority of Old Town visitors and become the starting point (or ending point) for their excursion through Old Town's other less individually impactful attractions.

It has been long recognized that Old Town's attraction as the City's principal tourist destination is the interdependencies it offers among historic resources, business and recreational outlets, cultural venues and the magnetism of the Potomac River. Old Town's pedestrian scale (with the addition of the King Street Trolley) has enabled its wide range of attractions to be easily navigated by families with children and older visitors thereby strengthening its appeal across a wide demographic. However, without a standout attraction, the whole would not be greater than the sum of its parts. The Torpedo Factory Art Center has long served as this catalyst for Old Town's separate sub-markets by contributing significantly to Old Town's brand, by providing a visual, almost monumental, reference point for visitors as they start their journey, and as a stand-alone activity center offering diverse activities and cultural enrichment as well as commercial opportunities.

## Considering the Economic Impacts of the Torpedo Factory

The impact of the Torpedo Factory on the economic vitality of Old Town should not be underestimated. In order to fully assess the Torpedo Factory's contribution to the City's economy each of its multiple dimensions needs to be assessed independently. While these economic contributions are cumulative and complementary they cannot be measured by applying the same metrics; if they could, it would be easy to add up the contributions into a single number.

The Torpedo Factory Art Center is a complex economic activity. Its economic impacts are generated by: the spending associated with the building's operations, the businesses that are housed within the Torpedo Factory, the expenditures generated by the building's special and after-hours uses, and the people themselves who are attracted to the Torpedo Factory for all of its varied activities, especially those visitors who are not residents of Alexandria. What is especially important about this latter source of economic impact is the spending potential it brings to the City, especially to

the benefit of merchants and service providers co-located in Old Town along side or within a convenient walking distance of the Torpedo Factory.

Beyond these categories of potential contributions to the City's economy (and its fiscal base), the unique identity of the Torpedo Factory Art Center defines the City of Alexandria to many of its visitors from both within the Washington metropolitan area and beyond the region. It is a symbol that distinguishes Alexandria from its competition. There are other attractions in the City (e.g., the Masonic Temple, the Historic District, Christ Church), but individually their attractive power is not as great as the Torpedo Factory's.

The Torpedo Factory is recognized worldwide for its adaptive reuse of a deteriorating factory-style structure transforming it into a successful cultural center that provides workspace for local arts and also created a business, recreational, and educational environment under one roof. As a result of this transformation, the Torpedo Factory has been the stimulus for a historic commercial center's revitalization that has attracted large numbers of customers to enliven Old Town's streets and commercial outlets for 40 years. It is this uniqueness as an educational experience that has been described by the Torpedo Factory Artists' Association, in its business plan, as the "touchpoint" where visitors can experience personal interaction with the creative process—this is what distinguishes this venue as a visitor attraction unique in the Washington metropolitan region.

## Previous Research on the Torpedo Factory's Impacts

The research reported herein benefits from several previous studies of the Torpedo Factory's impacts on the City and more broadly the City's tourist industry and its importance to the City's economy. These included: Torpedo Factory Art Center Visitor Impact Study (1994) by the International Institute of Tourism Studies, GWU, prepared for the Torpedo Factory Artists' Association; The Visitor Market in Alexandria: Present and Prospective—A Foundation for Strategy Planning (2007) by the Center for Regional Analysis, GMU, prepared for the Alexandria Convention and Visitors Association; and A Study of the Torpedo Factory Art Center (2010) by MAI, prepared for the City of Alexandria.

This research spans a period of continuing economic growth in the Washington region and the City of Alexandria and expansion and evolution of the visitor industry that ended with the Great Recession in 2008-2009, the period during which the last of these three foundational research reports (MAI) was being prepared. Still, all three of these reports establish the Torpedo Factory as a unique and impactful source of visitor attraction to the City of Alexandria and identify its importance to the vitality of Old Town's business base.

The tourist industry in 1994, 2007 and 2009, as reflected in the research reported in these studies, is different from today's economic environment. The tourist industry in the Washington metropolitan area has become much more upscale, as illustrated by

National Harbor's emergence with the addition of the Gaylord Hotel and Conference Center and MGM Casino as a major East Coast visitor destination, and is being refocused by significant generational changes in the use of leisure time and entertainment values. The Millennials are displacing the Baby Boomers as the principal market driving urban tourism; this is happening in Alexandria and is reflected in the declining market for antiques and changing preferences in retail shopping and in restaurant formats and styles.

The success of Alexandria's tourism industry is important to Alexandria's economic health—historically tourism has been more important to Alexandria's economy, its contribution is larger, than in the Washington region as a whole—so maintaining the City's competitive position within the regional tourist market place takes on greater significance. And, with the large and visible investment in tourist attractions across the Potomac River in Prince George's County (National Harbor and MGM) this is an opportune time to revisit the Torpedo Factory Art Center and its current and potential role in sustaining the City of Alexandria's competitive position in the region's tourist industry.

Achieving the City's tourist industry full potential and maintaining the City's competitive tourist industry advantages have become more important since 2010. Federal spending in the Washington region peaked in 2010 and declined sharply through 2013 with the costs of being overly dependent on federal spending to drive the local economy becoming very clear during the federal shutdown in October 2013 followed by The Sequester during FY 2014 that brought economic growth down to zero. This experience convinced city and state leaders that diversifying Virginia's economy away from this dependency on federal spending was essential if the local and state economies were going to rebound and avoid the full impacts of future changes in federal spending policies.

Alexandria's tourist industry is independent of federal spending and is export-based, meaning that it is a principal source of attracting non-residents to the City to spend their dollars on local services thereby growing local businesses and strengthening the City's tax base. Additionally, growing the tourist industry in Alexandria will advance the City's efforts to diversity its economy away from its current level of federal spending dependency and is a second good reason to revisit the Torpedo Factory's economic contribution to the city's economy.

## Measuring the Torpedo Factory's Economic Impacts

The Torpedo Factory combines two market functions—it is a business and it is a public service—and this requires two separate methodological approaches to measurement. To examine the Torpedo Factory as a business involves a similar analysis as with any other business in Old Town whether profit making or not-for-profit. The economic impacts of a business on its local economy are largely a function of its expenditures; that is, how much money does it put back into the economy in the form of payroll outlays and non-payroll operating expenditures. This is money that in the absence of

the business—in this case the Torpedo Factory—would not have been spent in the City. As the Torpedo Factory can be rented for various private uses, the costs of executing these extra events may also represent expenditures that would not have occurred in the absence of the Torpedo Factory Art Center. These economic impacts were documented in the MAI study although that Study also including sales information that is actually the source by which businesses (artists) make payroll and cover expenditures. Accordingly, including revenues as economic impact constitutes double counting as they do not represent independent economic benefits to the host economy.

The public service or benefit dimensions of the Torpedo Factory are much more difficult to quantify although these values are easily appreciated in general terms and are generally considered a contribution to the City's unique cultural fabric, its quality of life. These benefits are externalities of the primary purpose of the Art Center as a business—a place for local artists to ply their crafts and sell their goods. But, in carrying out these business functions, they are also source of cultural education and recreation for visitors whether these visitors become customers or only consumers of art education and vicarious creativity. The educational values of the Torpedo Factory are all positive—it is difficult to have a negative experience from being exposure to artists at work or talking about their work—but it cannot be measured in dollars and cents.

The Washington area does not have a strong history of monetizing exposure to the visual arts. Most art museums and galleries are open to the public free of charge. However, where there is an entry fee to an art exhibit and gallery, one might conclude this is the monetary value of this experience. At the Torpedo Factory this experience is free and being free it attracts a wider range of visitors than if there was an entry fee.

This wider penetration of the tourist market is the source of the Torpedo Factory's most important and enduring economic contribution to the City's economy. The Torpedo Factory's attractive power is measured by its annual visitor traffic and the importance of this visitor traffic is defined by: (1) the number or percentage of these visitors who are not city residents—non-residents bring "new" money into the City's economy which could have been spent in these visitors' home jurisdictions; and (2) how much they spend while on this visit to the City. Length of stay, trip purpose, age of the visitors and size of the visitor group, whether the visitors are day trippers or from more distance trip origins requiring overnight stays, and other visitor characterizes may modify spending patterns and the frequency of visits.

The most important determinant of economic impact is how many non-Alexandria residents are attracted to the City to enjoy its varied attractions—historic, commercial, educational, cultural, and environmental. Market penetration is the key metric and then it is up to the local merchants and their success in merchandising and serving their customers to realize these visitors' spending potentials. Whether visitors to the Torpedo Factory spend $50 or $100 along King Street before or after their visit to the Torpedo Factory is not determined at the Torpedo Factory but rather in the stores and restaurants in Old Town or elsewhere in the City.

Attracting visitors to Alexandria is dependent on knowing that there is a place to start the visit, a place known for its dependability of the experiences it offers. Supplementing this primary attraction with a range of other complementary venues in convenient proximity will extend the visitor's trip with a diversity of experiences to make it more fulfilling. To the extent that the Torpedo Factory is known and provides a clearly distinguished point of reference for visitors considering a day trip from other local jurisdictions, this focus becomes the articulation of the City's brand that encompasses its history, its quaint qualities and comfortable scale, its cultural diversity, and its waterfront. The starting point, and therefore the catalyst for many of these tourists wanting to visit Old Town, is the Torpedo Factory—it is the place maker and has been for 40 years.

## The Economic Impact of the Torpedo Factory as a Business

The economic activities housed in the Torpedo Factory and their associated economic impacts are constrained by the size of the building—how many galleries or studios can be provided and the intensity of the work being undertaken on site. Additional impacts can be generated by the rental of the public spaces in the Torpedo Factory for private functions. Building operations represent another source of annual spending that will impact the City's economy.

The most recent inventory of tenants and activities that describe the Torpedo Factory as a business are as follows: there are 136 artists who are leaseholders in studios; there are 5 galleries with 116 total members. There are several other organizations housed in the building (e. g., the Art League, the City's Archeology Museum, Archeology Commission and Archeologist's offices). This is the visible workforce housed at the Torpedo Factory and these are augmented by other jobs related to building management, maintenance and custodial services. The payroll of these artists, public offices, and building support workers is a measure of the Torpedo Factory's economic impact. Especially important are those artists, city employees, and building support workers who reside in the City.

Complementing the payroll outlays generated by the Torpedo Factory are expenditures by the artists working there for goods and services needed to operate their businesses, outlays associated with the Art League and the events it hosts and the Archeology program, and outlays to operate the building. Previous studies of the Torpedo Factory have not reported payroll and non-payroll operating outlays although there are partial data from incomplete surveys from 1994 and 2009. Estimates based on the 1994 surveys would suggest that the economic impact of the Torpedo Factory's business functions in today's dollars would range between $4 and $5 million not including annual building operations and expenditures associated with rentals of the public spaces for private events.

## Torpedo Factory as Source of Visitor Spending in Alexandria

The Torpedo Factory Art Center is more than a business and its ability to attract out-of-town visitors to the City who then can extend their visit to participate in the City's many other economic activities is what differentiates the Torpedo Factory from other economic activities. The identity it contributes to the City's brand and its place making role at the foot of King Street, where the City meets the River, embodies the extra benefits that the City derives from the long history of the Art Center and its positive reputation at a recognized and valued tourist destination.

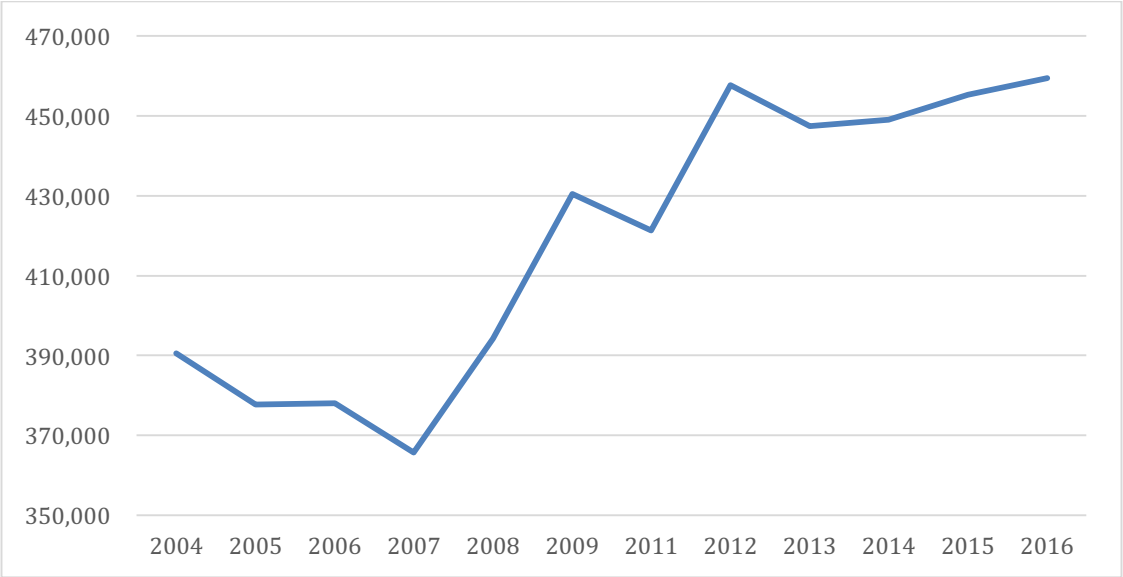
The success of the Torpedo Factory in delivering these economic benefits to the City are measured by the visitor volume attracted to the Torpedo Factory, the geographic distribution of these visitors (city residents vs. non-residents) and visitor spending patterns.

### Torpedo Factory Visitation

Visitor counts at the Torpedo Factory were reported in the 1994 and 2010 reports through 2008. These numbers were developed from door counts, adjusted for under counts (individuals entering in a group might be undercounted), and further adjusted to exclude artists, students and city employees working in the Torpedo Factory. These surveys showed the Torpedo Factory's visitation declining in the early to mid-2000s, reaching its low in 2007 before the recession. More recent door counts, adjusted in a similar fashion as in the 1994 and 2010 reports, show annual visitation growing and, after some back sliding during the period of The Sequester in 2013-2014, visitation in 2016 reached its highest level in more than ten years with 459,385 total visitors at the Torpedo Factory (excluding people working or students at the Center). The Torpedo Factory's recent visitation trend is shown in Figure 1.

Figure 1

Visitation Trends at the Torpedo Factory, 2004-2016




In assessing the Torpedo Factory's contribution to the City's economy the distribution of its visitors is important as economic impact results from bringing "new" money to the City's economy—dollars that would not otherwise come to the City. Unfortunately, previous surveys have set a 50-mile radius to distinguish between local and non-local (the reason being an attempt to separate day trippers from overnight travelers). This 50-mile radius excludes potential visitors to Alexandria who reside in Arlington, Fairfax County, Prince George's County, Washington, DC and other close-in portions of Maryland and Virginia and yet, these closer-in visitors actually are more likely to be frequent or repeat visitors to Alexandria once they have been introduced to the City's attractions. Day trip visitation has become particularly important as National Harbor, just across the Potomac River, has become an important source of visitors to Old Town via water taxi or motor vehicle.

Still, the 1994 report concluded that 83% of the visitors to the Torpedo Factory were from out-of-town (trip origins of 50 miles or more away) and the MAI (2010), from its survey, set this percentage at 60.6%. A study conducted in December 2016 and January 2017 in the confines of the Torpedo Factory found the following distribution of visitors: Alexandria residents, 17%; U.S. but non-City residents, 75%; and international visitors, 8% (1% did not answer the question). This distribution generally mirrors the findings in the year-long survey conducted in 1993-1994 with 83% of the Torpedo Factory's visitors being non-city residents whose spending in the City would be considered an export to the local economy.

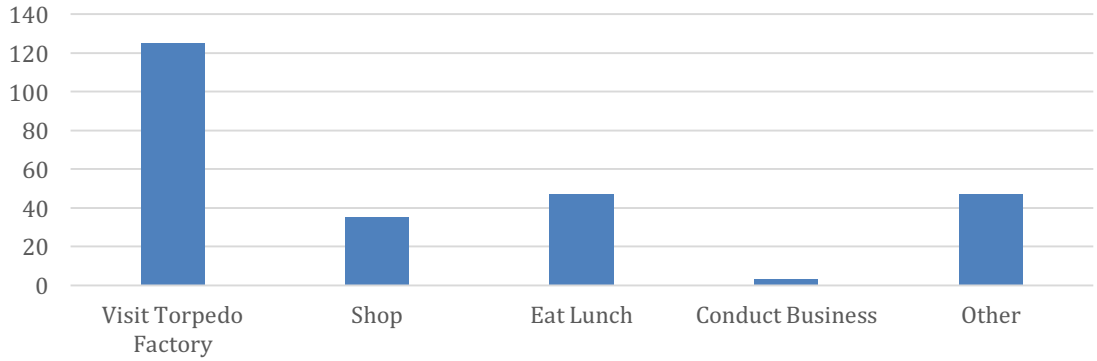
What Brought You To Old Town Today?

Why visitors come to Old Town, or the City more broadly, is an important metric in considering how to better position the City in response to its competitive position as a tourist designation being challenged by newer and higher-end attractions in neighboring jurisdictions. In the end-of-the-year 2016-2017 survey, non-resident visitors were asked what the primary attraction was for their visit that day, as reported in Figure 2. For many visitors there were multiple attractions underscoring the importance of the complementary among the attractions that comprise Alexandria's tourist brand.

Forty-nine percent (48.6%) of the respondents identified the Torpedo Factory as the primary attraction for their visit. Eating lunch (18.3%) and shopping (13.6%) were the next most frequently citied trip purposes. Only 1.2% cited business as their primary attraction and the remainder (18.3%) were more varied (e.g., visit a friend, walk along the River, all of the above). Clearly, as found in previous research, the Torpedo Factory figures large in visitor's decisions to make Old Town and the City of Alexandria their destination for an outing.

Figure 2

What attracted you to Old Town today; what was your primary destination?



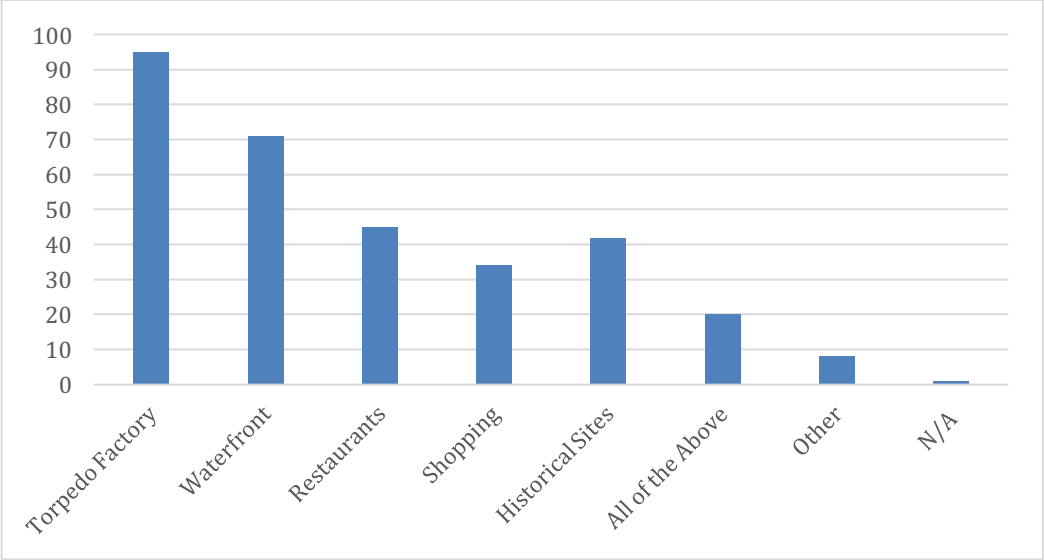

Because what attracts non-resident visitors to the City is important to the health and vitality of the City's tourist industry, survey respondents were asked this question early in the survey (as reported above) and at the end of the survey with the expectation that the interview process would result in a more refined response as a result of the learning gained during the survey.

The answers to the second question (Figure 3, page 10) resulted in more multiple responses as the independencies among the City's (Old Town's) attractions became clearer. In this question, the Torpedo Factory is cited by 31% of the respondents, and the waterfront experience was cited by 22.5%. Restaurants, Old Town's historical sites and shopping received frequent mention. Shopping was the weakest (11.8%). This percentage speaks to the changing nature of tourists, especially the Millennials, who prefer the social interaction of a restaurant to a shopping experience that is no longer

considered recreation but rather a necessity and more easily accomplished on-line than in a store.

Figure 3

What specific attraction or place do you identify with in Old Town?




What Else Will You Do On Your Visit Today?

The beneficial interdependencies of destinations within reinforcing proximity in Old Town and along lower King Street were confirmed by asking visitors in the Torpedo Factory "what else have you already done on your visit today or do you plan to do following your time at the Art Center?" The responses to this question are shown in Figure. 4, page 11. While these include a range of the City's principal brand elements—shop, eat, visit other historic sites—combining a visit to the Art Center with lunch or dinner is the primary combination, with lunch being number one as the timing of the visit to the Art Center better coincides with the lunch hour than with dinner time. Although not singled out as one of the day's visitor activities, an analysis of spending information identified 38 percent of the visitors interviewed as spending on lodgings, suggesting that these visitors were not day-trippers (although may have been on a day trip visit to the City) and were visiting the Torpedo Factory as part of a longer visit to the City or other metropolitan area jurisdiction.

How Much Do You Plan To Spend On Your Visit To Old Town?

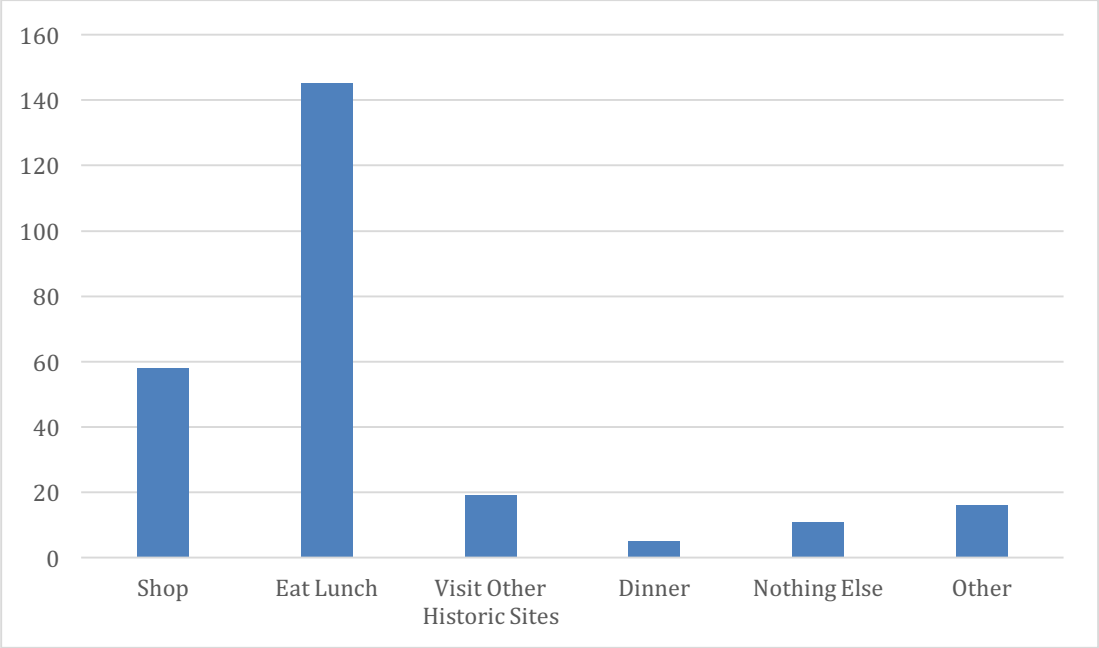
Of the 83% of the Torpedo Factory's visitors coming to Alexandria for a trip combining multiple purposes (with 48.6% of these attracted primarily by the Torpedo Factory), and regardless of primary attraction, all but 4% had plans to shop, eat, or experience

Old Town in other ways. This combination of multiple trip activities represents an important economic potential; these visitors can be spending while walking around Old Town enjoying the cultural, historic and natural environments.

The spending potential of visitors has been the focus of all of the previous Torpedo Factory Art Center studies. The 1994 research, including 1,500 face-to-face surveys over the span of a year, reported $54.48 million in spending by out-of-town visitors (more than 50-mile radius) linked to their Torpedo Factory visit with approximately 20% of this spending for lodging, 36% for food and 44% for other items (these were largely retail purchases). On a per day basis, these visitors spent an average of $39.34 each ($63.16 in 2016 $s).

Figure 4

Additional Activities Of Non-Resident Torpedo Factory Visitors




The total spending attributed to visitors motivated to come to Alexandria solely for the purpose of visiting the Art Center was found to be 19.9%. By using that metric as the determinant of the Torpedo Factory's economic impact, the value of the interdependencies, the closely linked visitor experiences, is totally discounted. As was found in all of these studies, Old Town is the vessel in which tourists achieve their visitor satisfaction and for many visitors it takes several venues to make the trip worthwhile. However, the venue that is identified as the place maker and the primary attractor is the Torpedo Factory for reasons that are easy to identify and understand. It is large, visible, offers inside space comfortable in all kinds of weather, offers a broad pallet of visual experiences, has garage parking nearby, and is an excellent staging location for walking excursions to other attractions, especially places to eat.

How much do visitors to the Torpedo Factory say they expect to spend on their visit during their time in Old Town? In the 2016-2017 survey of visitor spending, a conservative estimate of the average value of spending by out-of-town visitors, including purchases at the Torpedo Factory Art Center, was $92.88 per visitor (per visit). On a per day visitor basis, the average per visitor spending totaled $64.48; this per visitor daily spending value in 2016 is very similar to the per visitor daily spending average found in the 1994 Study when expressed in 2016 dollar values.

Multiplying this average per out-of-town visitor spending times the estimated 378,993 out-of-town visitors to the Torpedo Factory in 2016 yields a total of $35.2 million spent at the Art Center, the City's restaurants, retail stores, hotels, and other commercial enterprises.

While the spending totals reported in the 1994 Study and calculated here from this current survey cannot be considered comparable, even if the per visitor daily spending expressed in current dollars is almost the same, as the spending data were developed using different methodologies; most particularly, spending by day-trippers was excluded from the 1994 Study. Still, both studies confirm the magnitude of spending associated with visitor trips in which the Torpedo Factory served as the major attraction.

What Else Do We Know About Visitors To The Torpedo Factory?

Rounding out the characteristics of Torpedo Factory visitors that help to better define their nature and economic potential are:

- their average length of visit to the Torpedo Factory was between 1.5 and 1.75 hours;

- the large majority learn about the Torpedo Factory by word of mouth (62%) followed by its website (12%);

- the age of visitors is concentrated among 20-29 years olds (25%) and 50-59 year olds (25%) with the 30-39 and 40-49 year olds combining for (32%); and,

- the average income of respondents spans a wide range confirming that the Torpedo Factory offers value to a broad range of visitors—33% of visitors had incomes below the city's average, 27% had incomes ranging around the average and 39% had incomes above the city's average.

## The Torpedo Factory Art Center's Economic Impact

Throughout the history of the Torpedo Factory its importance as a place maker and catalyst in support of the revitalization of Old Town's commercial base and Old Town as a destination for out-of-town visitors have been well documented. By the numbers

alone, the Torpedo Factory contributes directly to the City's economy by generating on-site employment (payroll) and supporting continuing operating outlays by the vendors—the artists—for goods and services, expenditures for building operations, and expenditures by organizations and individuals who rent the public space in the building for special events. A dollar value for these outlays could be carefully estimated—it wasn't as part of this study—although would likely fall within the range of $4 to $5 million annually.

The educational and cultural value of the Torpedo Factory Art Center is not debatable and no dollar value can be placed or should be placed on this public benefit. It is the visitors to the City, who are attracted by the Torpedo Factory and its surrounding collection of complementary attractions, that together create an multi-purpose recreational, cultural, and leisure-time experience and that can be custom-shaped to fit the interests and time budget of each visitor, it is this contribution that provides the Torpedo Factory is most important and largest economic impact. This is the one location, the only one in the metropolitan area, where visitors can interact with the creative process; this unique educational and experiential quality is described as the "touchpoint" and, in Alexandria it can be combined with a multi-purpose visit that includes other forms of recreation and commercial endeavor.

As reported previously, the average spending of out-of-town visitors to the Torpedo Factory during their visit to Alexandria was estimated at $92.88 ($64.48 per visitor day). With a base of 378,993 out-of-town visitors (83% of all annual visitors to the Torpedo Factory in 2016), their combined economic contribution to the City's economy would total $35.2 million. The Torpedo Factory operations—the payroll it generates among its artists, building management, and other functions—and the expenditures to operate the businesses and educational activities located within the building are estimated to total from $4 to $5 million annually. Combined, this direct spending linked to the Torpedo Factory Art Center totals approximately $40.0 million, monies spent in the City of Alexandria that might not be captured by the City's economy in the absence of the Torpedo Factory Art Center.

This $40 million is direct spending. As this direct spending is circulated and re-circulated within the City's economy—that is, as visitors buy goods and services and shopkeepers and restaurants pay their employees and purchase goods and services from their supply chain and these payroll dollars and purchases support additional purchases—the initial $40 million in direct spending (by visitors, by employees in the Torpedo Factory, by tenants) accounts for a larger impact. These indirect and induced economic impacts, along with the direct or initial outlays, are captured in the "multiplier effect." Economic multipliers are unique to each jurisdiction and its economy. Each business or activity has its own multiplier reflecting its capital intensity and interdependencies with other sectors. These multipliers are calculated by and can be purchased from the U.S. Bureau of Economic Analysis using its RIMS II model.

For the City of Alexandria, with is relatively small economy and small geographic size (e.g., the majority of people working in the City do not live in the City and therefore

much of their payroll leaks out to their jurisdiction of residence), its multipliers are smaller than for larger jurisdictions with more complex economies. Still, for each dollar spent by out-of-town visitors to Alexandria in the tourist sector's businesses, including hotels, retail outlets, restaurants, consumer services, galleries, the City's economy gains more than one dollar. For Alexandria and this mix of spending that describes out-of-town visitors to the Torpedo Factory, the current multiplier is estimated at 1.3275; that is, for each $1 in direct spending, the City's economy, its gross city product, would gain a total of $1.33.

For the $35.2 million in spending by out-of-town visitors to the Torpedo Factory Art Center in 2016, the City's economy realized a total of $46.7 million, including the initial spending plus the accumulated economic effects of the re-spending of these monies in the City's economy—their indirect and induced effects. Additionally, this spending supported employment beyond the jobs on-site in the Torpedo Factory. The employment multiplier for this mix of spending as described above is 4.9 jobs per $1 million in direct spending. Hence, the $35.2 million in direct spending by out-of-town visitors to the Torpedo Factory in 2016 supported 172.5 full-time, year-round equivalent jobs although only a portion of these jobs would be based in the City. The same analysis could be done for the $4 to $5 million in operating outlays and payroll expenditures generated by the Torpedo Factory. Each $1 spent would generate extra economic benefits beyond the value of that initial spending as these payroll dollars and operating outlays were re-spent in the City's economy.

The direct, indirect and induced spending generated by the Torpedo Factory Art Center exceeds the initial direct dollar value of this spending and benefit the broad business base of the City's economy as these monies are re-spent by businesses located in and workers residing in the City. This spending also supports jobs beyond those at the Torpedo Factory or in the restaurants, hotels, and stores patronized by visitors to the Torpedo Factory as they extend their visit to other Old Town attractions. And, this spending and the jobs and business activity it supports broadens the City's tax base as seen in property values and taxable sales.

## Conclusions

The essential focus of this research is on the broader question of the Torpedo Factory's impact of the economy, beyond its walls, on the economy of Old Town and the City of Alexandria. With the tourism industry in Alexandria facing growing competition from newer and more upscale venues as well as changing tourist values (Millennials replacing Baby Boomers), the Torpedo Factory's place making role, in conjunction with the magnetism of the waterfront, becomes of ever-greater relevance in sustaining the City's competitive advantage and regaining lost share in the region's tourist industry.
The Torpedo Factory has been shown to be the City's most widely known tourist attraction, its visitor base is growing and these visitors routinely combine their visit to the Torpedo Factory with patronage of other Old Town attractions. In the process, these visitors spend a significant sum of money that would not likely be captured in Old Town in the absence of the Torpedo Factory.

The challenge going forward is how best to maximize this asset to the benefit of the City's economic base. The City and business leaders should focus their efforts on strengthening the primary tourist attractions that will raise the City's competitive position in the Washington Region's tourist industry. This needs to be a collaborative process. One venue or one group cannot achieve the full potential of the City's tourist assets by itself.

The Torpedo Factory is the City's most important single tourist attraction. To achieve the Torpedo Factory's full potential as a magnet for out-of-town visitors, it must become more extraverted in its operations. This may be achieved through improved management and programming of its public spaces, initiating joint activities with other tourist-serving organizations in hosting events outside the Torpedo Factory building on adjacent deck space and elsewhere in the City, and by more effectively publicizing the featured events, exhibitions, educational functions and other activities sponsored at the Torpedo Factory to broaden its market and increase its capture rate.

These are not new strategies and there maybe others worth considering. Art-related organizations elsewhere in the U.S. are re-inventing themselves to adjust to the changing market place and to increase their contributions as important centerpieces of their cities' economic development efforts.

The importance of a strong tourist industry to Alexandria's economic vitality is well established. The Torpedo Factor Art Center offers the City of Alexandria a unique and well-recognized destination-visitor attraction. It is ingrained in the City's tourist brand. The research findings presented here should help to provide direction for the City and business leadership to better realize the potentials of its unique tourist industry assets.

# Appendix A

From "The Visitor Market In Alexandria: Present and Prospective (ACVA, 2007)

## Hospitality as a Core Economic Sector

The hospitality sector is more important to the Alexandria economy than it is to the regional economy generating approximately 4% of its total value of goods and services where regionally this sector accounts for approximately 2.1%. As the hospitality sector is projected to grow more slowly than the regional economy over the next five years, its share of the economy will decline extending a trend that has been under way for at least 10 years. The contribution of the hospitality industry to the Alexandria economy could follow this regional trend, as both sectors tend to perform in parallel. However, the hospitality industry's local trend has the potential for growth; this would enable the sector to maintain its role in the Alexandria economy and even to grow faster than the City's economy, translating to a stronger performance during the slower growth portion of the business cycle that will play out over the next five or more years. Strengthening and expanding Alexandria's hospitality industry is the goal of the strategic plan that will flow from these analyses presented herein.

As an important component of Alexandria's economy, the hospitality industry should be viewed as interdependent with the economy's other sectors. Growth in any one of these other sectors will generate spending that may be captured and recycled within the hospitality sector adding jobs and generating additional local economy (and tax revenues). Similarly, the expansion of the hospitality sector strengthens the City's other core sectors and generates jobs and income within the City's local retail and personal service businesses.

Understanding the economic relationships between the core sectors is essential to the successful development of the City's economy. Economic development is more than just adding more jobs. It builds from expanding the capacity of the City's economy to grow and has the primary objective of attracting and retaining more and better paying jobs to increase the level of total personal income in the city. This will support increased consumer spending and strengthen the local tax base by attracting more and higher quality commercial development (real estate taxes) and increased retail spending (sales taxes).

# Appendix B

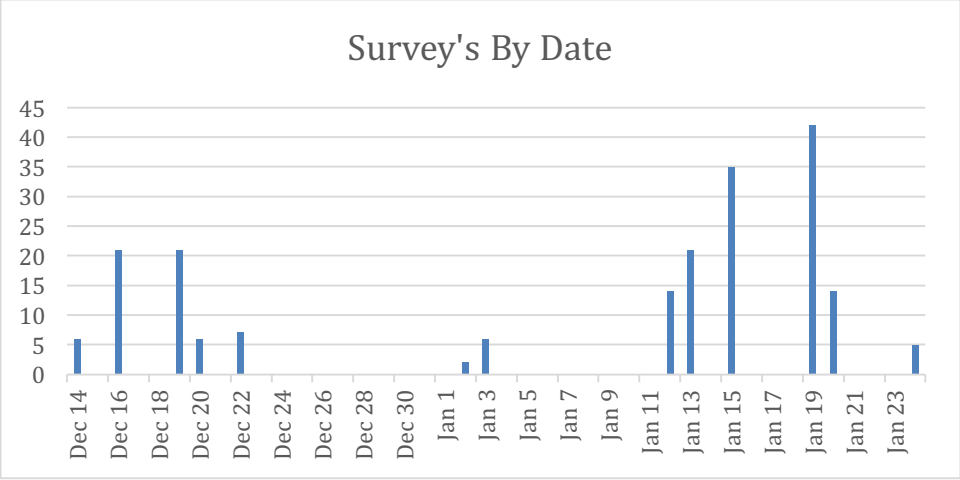
## Torpedo Factory Research Methodology

The methodology designed to measure the impact of the Torpedo Factory Art Center on the City of Alexandria's economy consisted of (1) a survey of visitors to the Art Center and (2) an analysis of survey results and secondary documents relating to the Torpedo Factory and the Alexandria visitors industry.

The surveys were the primary method for gathering primary information in order to estimate the economic impacts of visitors. Surveys involved in-person interviews conducted with visitors throughout the public spaces in the Torpedo Center. The survey team purposefully selected its sample to assure that a cross section of age, gender and ethnicity was included in the sample. Survey dates and times were chosen to capture a broad spectrum of visitors. As seen in Figure 1, 61 surveys were collected in December 2016 and 139 were collected in January 2017. The majority of responses were collected on Friday and Saturday as shown in Figure 2. Survey questions dealt with the primary residence of the visitor, the attraction to Old Town Alexandria, hotel stays, and estimated spending per visitor. The full survey is attached.

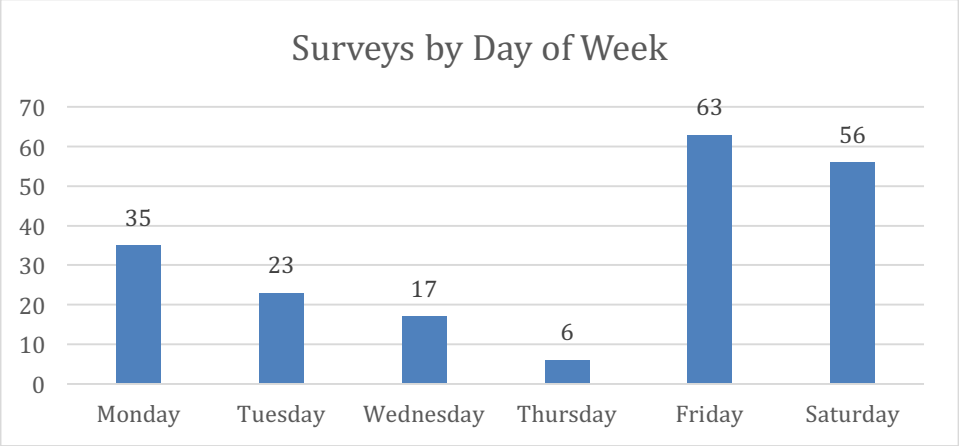
Spending estimations obtained through the surveys were used to estimate the impact of visitors. First, residents of Alexandria were excluded from the analysis to narrow it to spending by non-city residents; that is, to identify new money into the City's economy. The estimated spending provided by the non-city resident visitors was used to construct spending distributions. The final spending distribution used the low-end and mid-ranges of spending categories in order to provide conservative estimates. Spending distributions were then applied to door count data provided by the TFAC and adjusted for consistency with the 2009 MAI report.

Figure 1




Survey dates included: 12/15, 12/17, 12/18, 12/22, 1/7, 1/12, 1/14, 1/ 15, 1/21

Figure 2


Surveys by Day of Week
70
60
50
40
30
20
10
0
35
23
17
6
63
56
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday

# Torpedo Factory Survey

Hi, my name is _____. The Alexandria Torpedo Factory Art Center is conducting a short survey in order to better know its customer base so it can better serve this base in the future. May I ask you a few questions? It will only take 2-3 minutes to complete this interview.

Base Data (to be filled in by enumerator). Gender of Interviewee: M F Couple Group
Ethnicity: W B H Asian Other

Day of Visit: 12/15, 12/17, 12/18, 12/22, 1/7, 1/12, 1/14, 1/ 15, 1/21

Hour of Interview: 11-1 1-3 3-5

1. Where are you live (zip code)? _____

1b If from out of area, ask: Are you staying in town overnight? Y N
1c If "Yes", Where are you staying? Hotel/model Family/friends
1d If "hotel/model", Where is the Hotel/Model located (city/County)? _____

2. What attracted you to Old Town today; what was your primary destination?

a. Visit the Torpedo Factory
b. Shop
c. Eat lunch
d. Conduct business including visit City Hall
e. Other _____

3. Besides visiting the Torpedo Factory, what else are you planning on doing in Old Town today?

a. shop
b. eat lunch
c. visit other historic sites
d. other_____

4. How much do you think you will spend in Old Town on your visit today, for shopping, restaurants, parking, etc.?

a. less than $20
b. $20-$50
c. More than $50
d. $_____

5. Hope much time did you (or do you plan to) spend at the Torpedo Factory today?

a. less than an hour
b. 1-2 hours
c. 2-3 hours
d. more than 3 hours

6. How did you hear about the Torpedo Factory? Multiple answers OK

a. advertising
b. website
c. social media
d. word of mouth
e. news coverage
f. visitor information
g. other (please specific) _____

7. Did you make a purchase (or plan to make one) from an artist studio today? Yes No

If no, why not?
a. nothing I saw appealed to me
b. the options were too expensive
c. I couldn't find what I was looking for
d. need more time to make a decision
e. other (please specify) _____

8. What age category are you (if couple or group, ask apparent spokesperson)
under 20 20-29 30-39 40-49 50-59 60-69 70+

9. If I read you several income categories would you tell me which one test captures your household income?

Under $50,000, $50,000-$75,000, $76,000-$100,000,
$101,000-$150,000, $150,000+

10. One last question, when you think of visiting Alexandria's Old Town what is it that you think about as your destination? What specific attraction or place do you identify with? (Multiple options)

a. the Torpedo Factory Art Center
b. the water front
c. restaurants
d. shopping
e. historical sites

other_____