

# Economic Impact Study & Audience Research

## Maryland Fleet Week & Air Show Baltimore

October 8-17, 2016

*An event produced by  
Historic Ships in Baltimore*



Report prepared by  
**F | A Forward Analytics**  
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## Highlights of the Study

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- 2016 Maryland Fleet Week & Air Show Baltimore attracted an estimated 300,000 visitors to the City of Baltimore over the ten-day event, October 8-17. Survey research shows 41.5% of attendees (an estimated 124,500 people) were City residents, another 16.4% reside in Baltimore County. And 26.3% of Fleet Week & Air Show visitors reside out-of-state. Survey respondents include residents span 18 other states, reaching from Washington to Delaware and Florida to Michigan.
- Seventy-seven percent of visitors said Fleet Week & Air Show was the “main reason to be in the area today”. Moreover, 43.6% of visitors revealed they would NOT have visited Baltimore (today) if there were no Fleet Week & Air Show, with 30% experiencing Inner Harbor/downtown for the very first time this year.
- Maryland Fleet Week & Air Show had a total economic impact on the City of Baltimore's business volume of \$27.88 million, comprising \$16.40 million in direct impact and a further \$11.48 million in indirect impact. The State of Maryland received an estimated \$955,400 in tax revenue from the economic activity generated by Fleet Week & Air Show attendees, and the City of Baltimore gained an estimated \$472,100.
- Fleet Week & Air Show attendees spent an estimated \$6.03 million at local restaurants. Overnight visitors accommodated over 29,000 room nights resulting in a direct impact of \$4.1 million for hotels and other accommodations. Other tourism expenses included retail, attractions, parking, gasoline, and ground transportation. Each non-local visitor spent an estimated \$88 locally while exploring and enjoying Fleet Week & Air Show.
- Maryland Fleet Week & Air Show brings national attention to Baltimore with broadcasts achieving over 25 million national television views. The publicity value is over \$4.16 million. The total online new visitors were estimated at 53 million.
- The top attractions at Fleet Week & Air Show were Air Show Baltimore (73.7%), viewing naval vessels (72.0%), and free military ship tours (57.3%).
- Fleet Week & Air Show attendees have a high level of satisfaction (83.7%) with the event. An overwhelming 95% of survey respondents said they are likely to attend another Fleet Week & Air Show in the future.
- Maryland's Fleet Week & Air Show was a family-friendly event with 37.1% of attendees bringing their children under age 18; another 5.7% came with kids in their visiting party. Attendees were more likely to be 50+ (44.6%), while 31.6% of visitors are between the ages 35-49, and 17.0% between ages 25-34.
- Fleet Week & Air Show visitors are well-educated with almost two-thirds of attendees earning a four-year degree or higher. One-fourth of all survey respondents earned a post-graduate degree and 27.8% earned a four-year degree. Nearly half of visitors (44.7%) have household incomes above \$75,000.

## Introduction

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Maryland Fleet Week & Air Show Baltimore celebrates the rich naval tradition of the Chesapeake Bay and honors the contributions of Maryland's proud men and women who defend the nation. Baltimore is one of seven elite cities hosting the U.S. Navy Fleet Week in 2016 with its inaugural event, October 8<sup>th</sup>-17<sup>th</sup>. Modeled on the success of the Star Spangled Sailabration, Fleet Week provides entertaining events and public access to over a dozen ships including the newest U.S. Navy Vessel, the futuristic destroyer USS Zumwalt.

From the air to the sea, and even a landside festival, it was an engaging and enthralling show in Baltimore with ten-days of free activities spanning from Inner Harbor to Fells Point, Locust Point, Canton, Fort McHenry, and to Baltimore County's Martin State Airport. The Fleet Week & Air Show hosted thousands of military personnel, increased tourism, and prompted scores of Baltimore residents to visit the downtown and inner-harbor areas.

2016 Maryland Fleet Week & Air Show had an overall attendance estimated at 300,000. A total of about 30,000 people visited all Navy ships that offered tours. More than 15,000 people came to view over 30 fighter jets and other aircraft that were on display along with vintage aircraft from the Glenn L. Martin Maryland Aviation Museum.

Fleet Week & Air Show events kicked off with the USS Cup Constellation Cup Regatta on October 8<sup>th</sup> and main events took place October 12<sup>th</sup>-16<sup>th</sup>. Along with public visitation of participating ships and aircraft, there were numerous exhibits, military band concerts, Great Chesapeake Bay schooner parade and race, and aviation demonstrations throughout the week showcasing the skilled expertise of dedicated sea and air service members.

In addition to attracting people with an interest in maritime heritage, Maryland Fleet Week & Air Show presented the essence of the City's waterfront to 25,000 participants in the Baltimore Running Festival. The running event coincided with the final weekend of Fleet Week and filled the City of Baltimore with positive energy and excitement. The following report emphasizes the benefits of Fleet Week, both in terms of economic impact and strengthening the community.

## Purpose of Study

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Forward Analytics, Inc. was contracted by Historic Ships in Baltimore to conduct audience research and to analyze the social and economic impact of the inaugural 2016 Maryland Fleet Week & Air Show. The study will be used to improve the event and to ensure continued community and financial support for future naval celebrations and commemorations. The study gathered standard economic impact data and additionally measured the following:

- overall event satisfaction;
- demographics and psychographics of attendees;
- attendance motivators;
- cultural pride and historic and education interests;
- communications and marketing activities,
- and sponsorship awareness.

## The Economic Impact Model

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The economic impact model measures the 1.) direct and 2.) indirect business volume and 3.) government revenues attributed to 2016 Maryland Fleet Week & Air Show. This impact study employs a linear cash flow methodology first developed by Cafferty & Isaacs for the American Council on Education. The Cafferty & Isaacs methodology is the most widely-used impact study tool and has been used throughout the United States in impact analyses for both profit and not-for-profit organizations, corporations, institutions and events.

The direct impact of a special event like Maryland Fleet Week & Air Show is primarily a function of visitor spending at hotels, restaurants, entertainment, and retail, plus travel sources like transportation, parking, and fuel. This study also measures the fresh dollars spent by Fleet Week organizers and partners. The linear cash flow model used in this study takes into account the re-spending of money within the economy as a result of what professional economists term "the multiplier effect." The multiplier effect measures the indirect impact, or the circulation of dollars originally attributable to the Fleet Week & Air Show, and tracks their spending by successive recipients until the funds eventually leak out of the economy. The sum of these direct and indirect expenditures represents the total impact of the 2016 Maryland Fleet Week & Air Show on the local business volume.

The direct spending of Fleet Week & Air Show visitors also generates government revenues for the city and state. Fleet Week & Air Show Week-related taxes are calculated herein.

Economic impact generally measures *new money* brought into the economy by out-of-area visitors, event planners and partners and is then spent locally. Spending by local residents (residing in Baltimore City) represents a redistribution of existing money in the community and is not included in this study. Survey research revealed that 41.5% of Fleet Week visitors reside in Baltimore City. That said, 58.5% of Fleet Week visitors spent "new dollars" and impact the local economy as outlined further in this report.

## Methodology

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When calculating the economic impact of an event, it is necessary to know the crowd size or attendance. The 2016 Maryland Fleet Week & Air Show was a ten-day free event sprawling from locations at the Inner Harbor, Fells Point, Canton, Locust Point, Fort McHenry and Martin State Airport. While there were no ticket sales or admission gates to quantify the total people participating in Fleet Week & Air Show, the conservative attendance figure of 300,000 was determined by Historic Ships in Baltimore after nightly analysis, in communication with the Baltimore police. The crowd estimates also incorporated audience survey data and actual admission counts from Martin State Airport and Fort McHenry.

The study utilized a customized audience survey to collect spending data, demographics, psychographics, and more from a random sample of Fleet Week & Air Show visitors. Prior to the event, Forward Analytics collaborated with Historic Ships to create a 3-page survey.

Forward Analytics administered in-person interviews to 428 adult attendees (ages 18+) during 4 of the 10 days of Fleet Week. The sample size represents a statistical significance of +/-4.70% margin at the 95% confidence interval.

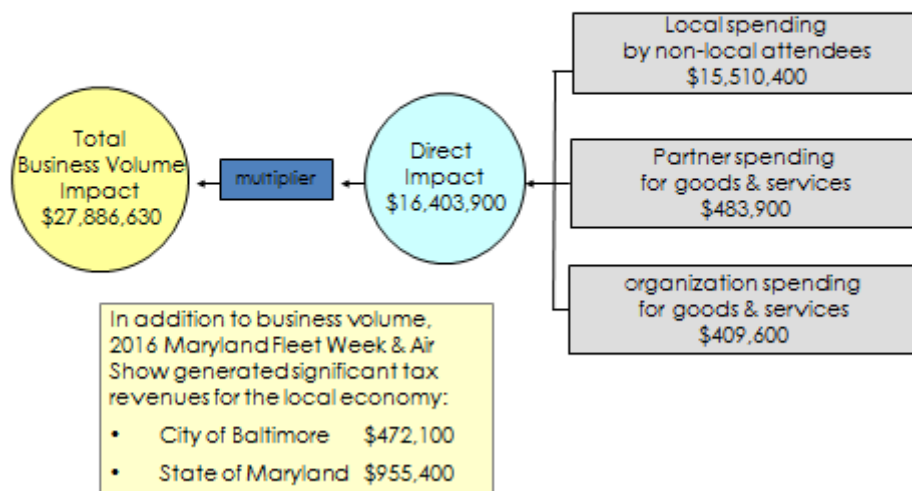
The impact methodology also incorporated detailed information supplied by Historic Ships in Baltimore as well as event partners. The fleet week planners reported back the event expenditure levels and geo-spatial distribution (spending locally vs. non-locally) along with staffing and other related economic information.

## Economic Impact of the 2016 Maryland Fleet Week & Air Show Baltimore

The total economic impact of the 2016 Maryland Fleet Week & Air Show, which includes visitor spending, organizational and event partner spending, is estimated at \$27.88 million for the 10-day naval celebration. Fleet Week increased the local business volume by \$16.40 million in direct impact and \$11.48 million in indirect impact.

The direct impact of Maryland's Fleet Week & Air Show resulted in government revenues received by the City of Baltimore and State of Maryland. The City gained \$472,100 in government revenues attributable to Fleet Week, and Maryland gained \$955,400.

**2016 Maryland Fleet Week & Air Show Baltimore  
Business Volume Impact Map**



## Revenues Generated by Fleet Week & Air Show Attendees

Visitor spending makes up the majority of economic impact attributable to the Fleet Week & Air Show. The total economic impact of visitor spending (those who do not reside in Baltimore City) is estimated to be \$26.37 million. The total economic impact consists of \$15.51 million in direct impact and \$10.86 million in indirect impact.

The following chart illustrates the business revenue generated by non-local visitors who traveled to Baltimore to experience Maryland Fleet Week & Air Show (an estimated 175,500 people). The chart provides a breakdown of revenue at local restaurants, retailers, attractions, hotels, etc. generated in Baltimore City. Each non-local visitor spent an estimated \$88 while enjoying Maryland's Fleet Week & Air Show.

### Revenues Generated by Fleet Week & Air Show Attendees

	Visitor Spending in Baltimore City
Food at restaurants/bars	\$5,084,200
Alcohol at restaurants/bars	\$954,600
Retail/souvenir purchases	\$1,605,800
Tourist attractions and entertainment	\$903,800
Overnight accommodations	\$4,104,700
Parking	\$998,400
Gasoline	\$923,300
Ground transportation (bus, taxi, car rental, etc.)	\$935,600
Direct Impact	\$15,510,400
Indirect Impact	\$10,857,280
Total Impact	\$26,367,680

### Spending by Fleet Week Organizers

In addition to visitor spending, the planning and assembly of Fleet Week & Air Show has a profound impact on the Baltimore economy. To elaborate, the operating budget includes PR and advertising, signage, equipment, transportation, as well as hospitality, security, and so on.

The Fleet Week & Air Show's emphasis is on stimulating cultural, heritage, as well as economic activity for the local communities. Accordingly, 69% of their operating budget for Fleet Week was spent in Baltimore City and another 5% in Baltimore County.

Fleet Week budget is comprised of vendor fees, sponsor dollars, and a grant from the State of Maryland Department of Commerce. A considerable portion comes from corporations and organizations headquartered outside of Baltimore, but the majority of financial support was from Baltimore area companies.

## **Spending by Fleet Week Partners**

Along with sponsorship dollars or vendor fees, Fleet Week's partners contributed to the local economy during the ten-day event and beyond. Survey research with some non-local event affiliates measured the costs to partake in Fleet Week and evaluated the amount of new money spent exclusively in the community. (Please note: not all partners reported their spending and therefore this is considered a conservative estimate.)

Fleet Week partners had expenses that included cost of product, materials, booth equipment, advertising, printing and giveaways, transportation, etc. Furthermore, Fleet Week partners had significant travel expenses attributable to the event which included an estimated \$60,000 on local accommodations.

The reported direct impact of Fleet Week partners in aggregate on the Baltimore economy is \$483,900. The indirect impact of vendor spending generated an additional \$338,730 for the local economy. Thus, the total impact of vendor spending on Baltimore's economy is \$822,630.

## **Government Revenues Attributable to 2016 Maryland Fleet Week & Air Show**

In addition to the direct and indirect and revenues received by local businesses and organizations, visitors to Maryland's Fleet Week & Air Show generated substantial tax revenues for the City of Baltimore and State of Maryland. The City of Baltimore gained an estimated \$472,100 as a result of the 2016 Fleet Week & Air Show. The State of Maryland received an estimated \$955,400 in tax revenues due to the event. The government revenue impacts allocable to 2016 Fleet Week & Air Show comprise the following:

### **Sales & Use Tax**

Sales and use tax revenues were paid directly by Fleet Week & Air Show visitors on purchases such as retail, food and drinks, overnight lodging, gas and parking. The Fleet Week & Air Show-related direct spending by visitors generated \$955,400 in sales tax revenues for the State of Maryland.

### **Hotel Tax**

Research determined that an estimated \$4.1 million was spent by Fleet Week & Air Show visitors and partners/vendors at Baltimore's overnight accommodations. Consequently, Baltimore City received an estimated \$312,400 in hotel tax revenues attributable to the Fleet Week & Air Show.

### **Parking Tax**

While Fleet Week & Air Show planners encouraged visitors to travel to Inner Harbor by foot or bike, survey data estimated visitors spending \$998,400 for parking in the City. This impact generated approximately \$159,700 for the City of Baltimore.

## **Volunteer Impact**

Volunteers were an integral part of Fleet Week, as they are in many facets of the community. Their involvement enhances the scale of the event and enables more activities to be

undertaken. This, in turn, benefits the local businesses by helping to draw visitors and dollars to the region.

An overwhelming 630+ spirited volunteers helped make Fleet Week a success. Over the ten-day event, volunteers provided set-up, guest services, assisted with ship tours and air show management, *to name a few activities*. They donated an approximate 2,975 volunteer work hours.

Estimating the exact dollar amount is less critical than the notion that those who volunteered their time could have spent it in many ways but decided this event was of key importance and worth donating their time. If the total volunteer hours is calculated at the *government dollar value of a volunteer hour* (2015), an estimated \$79,100 is donated in time to Fleet Week & Air Show, the City of Baltimore and its' residents.

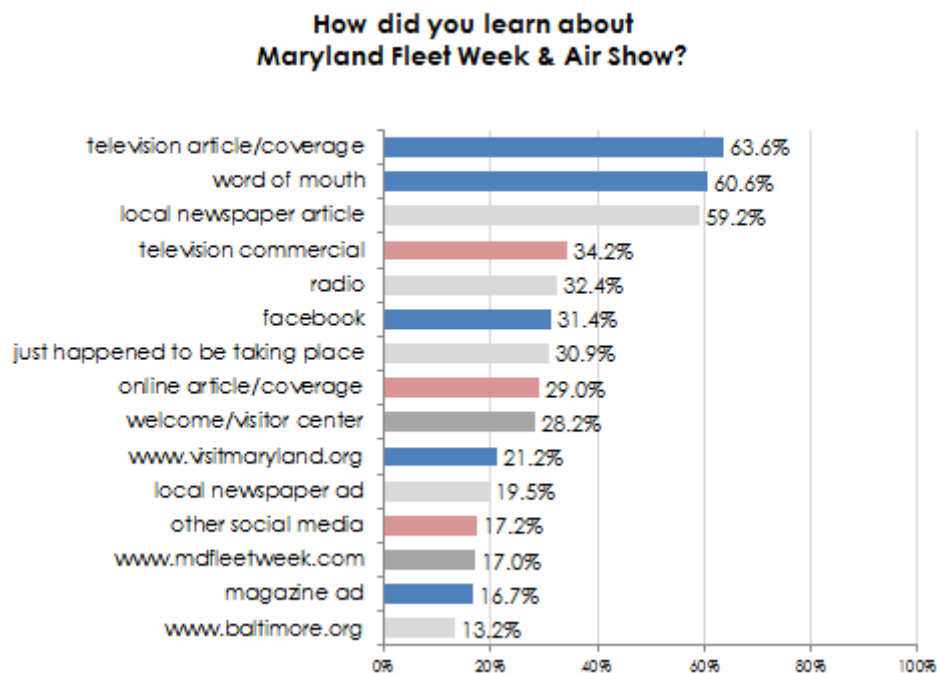
## Marketing Impact

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Maryland Fleet Week & Air Show helped shine a national spotlight on Baltimore by generating valuable media coverage. Broadcast, print and online impressions showcased Inner Harbor and the historic waterfront neighborhoods surrounding it. Fleet Week enhances the authentic city brand and reminds both residents and the country of at large that Baltimore played a leading role during the American struggle for Independence.

Maryland Fleet Week & Air Show broadcasts achieved over 25 million national television views with a publicity value over \$4.16 million. The total online new visitors were estimated at 53 million.

Television proved to be the most effective promotional tool for Fleet Week. Survey research showed that 64% of attendees learned about the event through television episodes, while another 34% gathered information from television coverage.





Social media allows planners to promote their events more strategically, listen to and engage with attendees, enhance attendee experience, help measure the event's overall success, and find areas for improvement in the next event. The analytics below further shows how social media was used:

Facebook 213,489 reach, 2,484 likes  
Twitter 312 followers, 2,886 mentions  
Instagram 312 followers, 8,922 impressions

## **Demographics and Attendance Information**

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2016 Maryland Fleet Week & Air Show celebrated the rich naval traditions of the Chesapeake Bay and the contributions of Marylanders to the defense of the nation. U.S. Navy and Canadian Navy vessels were showcased all along the historic waterfront while Blue Angels, along with other aviators, flew the skies over Baltimore City. In addition, the weeklong event featured interactive activities, tours aboard naval vessels, schooner races, educational outreach programs, live music, and Chesapeake inspired food vendors. While there was "something for everyone" it's imperative that organizers have access to all possible relevant audience information. This section aims to provide quantifiable information that can help form, support or benchmark the direction of future Maryland Fleet Week & Air Show events.

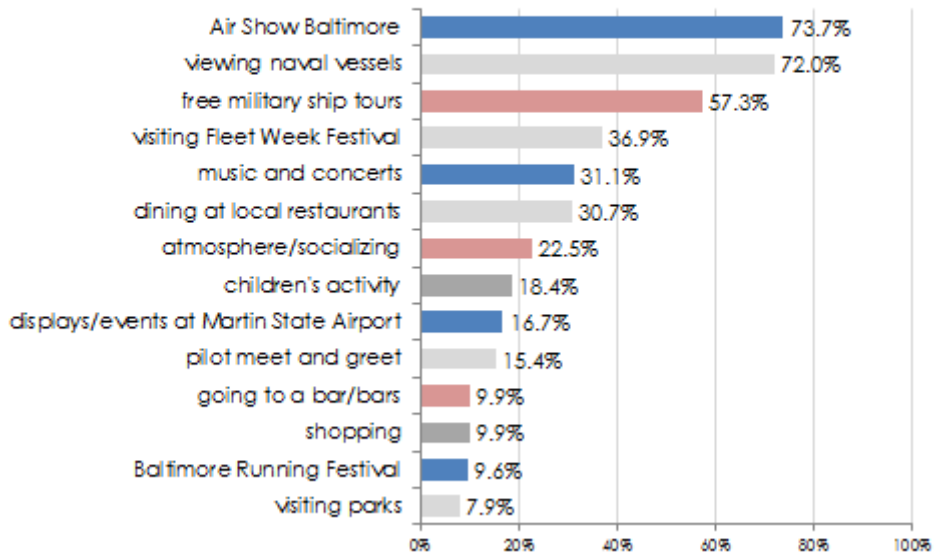
As mentioned, a conservative estimate of 300,000 people experienced 2016 Maryland Fleet Week & Air Show, with 41.5% of visitors residing in the City of Baltimore. Another 32.2% of visitors reside elsewhere in Maryland. And 26.3% of Fleet Week & Air Show visitors reside out-of-state. Survey respondents include residents span 18 other states, reaching from Washington to Delaware and Florida to Michigan.

Seventy-seven percent of visitors said Fleet Week & Air Show was the "main reason to be in the area today". Moreover, 43.6% non-residents revealed they would NOT have visited Baltimore (today) if there were no Fleet Week & Air Show. The cultural and heritage celebration attracted both new and repeat visitors to the Inner Harbor/downtown Baltimore. In fact, 30% of survey respondents residing outside the city experienced the Inner Harbor/downtown for the very first time this year.

A substantial number of visitors spent more than one day in Baltimore while attending the Fleet Week & Air Show. Twenty-seven percent of visitors spent 2 days in Baltimore; 16.1% spent three days, while 17.1% spent 4 or more days. Sixty percent of Fleet Week & Air Show visitors spent more than 5 hours in Baltimore, while 36.3% spent 3 to 4 hours in the area. And 16.7% of visitors stayed overnight in a Baltimore hotel or paid accommodations, another 7.5% stayed with friends/family.

Air and water were essential to the success of Maryland's Fleet Week & Air Show. The top activities most important to visitors of Fleet Week events were Air Show Baltimore (73.7%), viewing naval vessels (72.0%), and free military ship tours (57.3%).

### Ranking of Top Activities at Maryland Fleet Week & Air Show



Maryland's Fleet Week & Air Show was a family-friendly event that appealed to people of all ages. The attendees were more likely to be 50+ (44.6%), while 31.6% of visitors are between the ages 35-49, and 17.0% between ages 25-34. Fifty-eight percent of visitors are married, 6.6% separated/divorced, and 28.4% single, never been married. Thirty-seven percent of visitors live with children under the age 18 or dependent children, and comparatively 37.1% of visitors brought their children under the age of 18 with them to the Fleet Week & Air Show. Another 5.7% came with kids in their visiting party.

Fleet Week & Air Show visitors are well-educated with almost two-thirds of attendees earning a four-year degree or higher. One-fourth of all survey respondents earned a post-graduate degree and 27.8% earned a four-year degree. Another 28.6% of visitors attended earned a technical or vocational degree. Consequently, nearly half of visitors (44.7%) have household incomes above \$75,000.

The ethnicity of surveyed visitors is 67.2% Caucasians; 24.2% African American/Black; 4.1% Asian, and 3.6% Hispanic.

## Sponsorship Awareness

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Most special events of the size and scale of Maryland's Fleet Week & Air Show rely on the financial contributions of their sponsors. For their investment, sponsors of these events expect results. The popularity of event sponsorship with corporate marketers is due in part to its ability to generate positive and potentially lasting consumer brand awareness and emotions.

Survey research tested the awareness and emotions visitors formed with the sponsors of Fleet Week. First we measured unaided sponsorship awareness. Visitors were asked, "When you think of Maryland Fleet Week & Air Show sponsors, which companies or brands come to mind?" Fleet Week visitors had notable awareness of the corporate sponsors as nearly 54 percent of visitors identified two or more sponsors as *top-of-mind*. Geico, M&T Bank, and Domino Sugar achieved the highest level of unaided awareness.

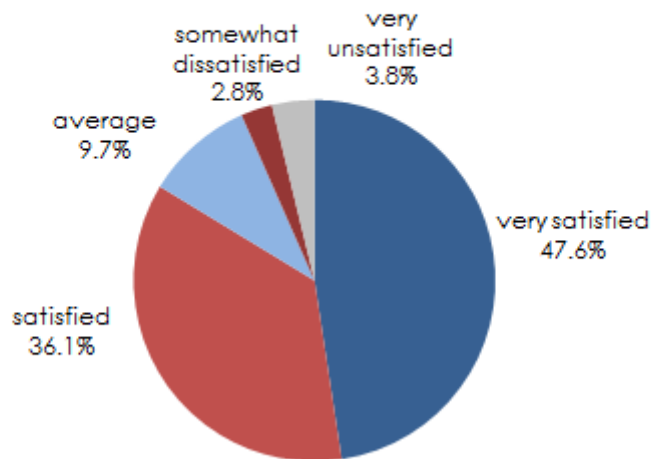
Next, we measured aided awareness of sponsorship. Survey respondents were presented with a list of companies/brands and asked, "Which of the following do you recognize as sponsors of Maryland Fleet Week & Air Show?" City of Baltimore (recognized by 68.9% of respondents), Geico (67%), and Domino Sugar (66.2%) ranked on top for building a strong brand through their sponsorship.

Survey research further demonstrates the combination of awareness, favorability and effectiveness is unparalleled for Fleet Week & Air Show sponsors. Respondents were presented with a series of "emotional" and "attitudinal" statement pertaining to Fleet Week sponsors then asked to what level they agree or disagree. Here are the reactions:

- **Fleet Week & Air Show visitors recognize and appreciate sponsors' contributions.** The majority of visitors (85.3%) *strongly agree* or *agree* that corporate sponsorship made the Fleet Week & Air Show possible.
- **Fleet Week & Air Show sponsorship touches the soul.** 83.3% of visitors indicated having a positive attitude toward Spectacular sponsors because of their association.
- **Visitors "like" corporate sponsors.** 80.1% of visitors are more likely to purchase brands from Fleet Week & Air Show sponsors because of their association
- **Fleet Week & Air Show is a "good buy" in marketing.** 71.4% of visitors felt that Fleet Week & Air Show sponsorship is a better way to reach them- more than through traditional advertising.

Sponsorship works through harnessing the emotional connection between an event and its audience. That said, Maryland Fleet Week & Air Show provided bottom line benefits to all of its sponsors. The event was associated with a positive experience and provided a strong opportunity for community and cause-related marketing. Survey research proved that the Fleet Week & Air Show was a positive experience as 83.7% of visitors were *very satisfied* or *satisfied* with the event. An overwhelming 95% of survey respondents said they are likely to attend another Fleet Week & Air Show in the future.

**Overall Satisfaction with the  
Maryland Fleet Week & Air Show Experience**



Lastly, corporate sponsorship did more than promote a company, brand or service. Fleet Week & Air Show sponsorship benefitted livability and image for the City of Baltimore and State of Maryland. At least visitors, both local and non-local, felt this way. An overwhelming 94.5% of visitors agreed that the Fleet Week & Air Show added value to the Region. The event was a great way to showcase the City, invite Marylanders to the Inner Harbor/downtown area, and generate tourism and tourist dollars. Further, the significance of the Maryland's Fleet Week & Air Show is to share and raise awareness of the naval traditions of the Chesapeake Bay and the contributions of Marylanders to the defense of the nation.