

Economic Impact Study & Audience Research

# 2018 Light City

**April 14-21, 2018**

*Produced by  
Baltimore Office of Promotion & The Arts*

## Highlights of the Study

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- The 2018 Light City attracted an estimated 442,500 guests to Inner Harbor/downtown Baltimore over the 8-day festival, April 14-21. Light City opening night broke attendance records, with an estimated 175,000 visitors enjoying the event. Another estimated 3,600 people experienced Neighborhood Lights, April 6-8.
- Survey research shows the tremendous gathering included approximately 173,000 City residents. Another 101,330 visitors came from elsewhere in the Baltimore Metro. And 19.6%, or 86,730 visitors, came from out-of-state, with most coming from D.C., Pennsylvania, Virginia, New Jersey and New York.
- The 3rd annual Light City Festival had a total economic impact on Baltimore's business volume of \$33.5 million. Light City directly increased the local business volume by \$19.72 million and \$12.73 million in indirect impact. The government revenue impact attributable to 2018 Light City is estimated \$1.26 million for the State of Maryland and \$384,851 for the City of Baltimore.
- Light City visitors spent an estimated \$6.44 million at local restaurants. Overnight visitors accommodated over 10,700 room nights resulting in a direct impact of \$2.24 million for hotels and other accommodations. In addition, BOPA spent \$51,770 in overnight accommodations for artists, lecturers, performers, vendors and contractors. As a result, Baltimore City received an estimated \$172,070 in hotel tax revenues. Other tourism expenses included retail, attractions, parking, gasoline, and ground transportation.
- Local residents visiting Inner Harbor/downtown Baltimore specifically to experience Light City generated a total economic impact of \$7 million. This includes \$4.21 million in direct impact and an additional \$2.86 million in indirect impact.
- Fifty percent of attendees visited 2018 Light City more than one day, with one-fourth attending 3 or more days. Seventeen percent of this year's attendees experienced Light City all three years (2016, 2017, 2018), while 26% came two years.
- While 57% of this year's visitors experienced Light City for the first time, 16.8% attended all three years. Fifty percent of visitors attended more than one day, with one-fourth experiencing Light City 3 or more days.
- Overall satisfaction ratings for Light City reached a high of 82%. Also, 82% of survey respondents reported feeling very *safe* or *safe* while visiting Inner Harbor/downtown Baltimore during the event. And 85% were satisfied with the level of security.
- Each year, Light City increases exposure of Baltimore as a tourism destination and a great place to live. The publicity value of Light City media is estimated at \$1.3 billion. Light City generated 1.58 million impressions on Facebook, Twitter and Instagram. Nearly half of Light City attendees shared images of the light festival on social media during their visit.

## Purpose of Study

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Special events and festivals of all kinds are becoming a major element in the competitive arsenal of cities and their economic development and tourism offices. Major events bring people to the city, provide attractions for the residents, and ensure the city's name is profiled in the national and international media. The local economies of the host cities benefit greatly as they are infused with millions of dollars in additional tourism-related revenue. But, the increase in major events inevitably increase the competition for valuable stakeholders, including investors, sponsors, politicians, and most important, attendees.

It's likely that public officials, the business community, and the community in general see the power of Light City as a way to spur short-term tourism while shaping the long-term image of Baltimore City. Yet, evaluating the impact of Light City is crucial to analyze the return on investment (ROI) for its corporate, philanthropic and civic stakeholders.

Forward Analytics, Inc. was contracted by Baltimore Office of Promotions & The Arts (BOPA) to conduct audience research and to analyze the social and economic impact of the third annual Light City. Further, the study will be used to progress the event, improve quality of life for residents, attract tourists, refine marketing efforts, and further enhance the image of Baltimore.

The study utilized quantitative survey research to gather standard economic impact data and additionally measured the following:

- overall event satisfaction
- demographics and psychographics of attendees
- attendance motivators
- civic pride and social awareness
- communications and marketing activities
- sponsorship awareness.

## The Economic Impact Model

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This economic impact analysis, completed by Forward Analytics, measured the effect of both direct and indirect business volume and government revenue impacts attributable to 2018 Light City. The methodology employed in the calculation of these impacts is derived from the standard set of impact research tools developed by Cafferty & Isaacs for the American Council on Education. Having been used in hundreds of studies throughout the United States, the ACE-based methodology is a recognized best practice for measuring economic impact of programs, initiatives and events across the for- and not-for-profit sectors.

The ACE methodology employs linear cash-flow modeling to track the flow of event-originated funds through a delineated spatial area, providing a detailed quantification of the total direct and indirect impact of Light City. The direct impact of a unique and special event like Light City is primarily a function of visitor spending at hotels, restaurants, entertainment, and retail, plus travel sources like transportation, parking, and fuel. The multiplier effect calculates the indirect impact, or the circulation of dollars originally attributable to Light City, 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 Light City on the local business volume.

This study measures the positive economic gains to the City of Baltimore and the State of Maryland. Economic impact typically measures *new money* or “*fresh dollars*” brought into the economy by out-of-area visitors and is then spent locally. Spending by local residents (residing in Baltimore City) represents a redistribution of existing money in the community and is measured but not included in the total economic impact measure. Survey research revealed that 39% of Light City visitors reside in Baltimore City. That said, 61% of Light City visitors spent “new dollars” and impact the local economy as outlined further in this report.

## Methodology

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As noted above, this impact analysis closely follows the ACE methodology which requires detailed information collected from several sources.

Forward Analytics worked with BOPA to design a three-page audience quantitative questionnaire. In addition to standard economic impact variables, the survey examined demographics, travel distance, event satisfaction, frequency of attendance, attendance motivators, etc. A total of 552 surveys were administered by Forward Analytics staff in the Inner Harbor/downtown festival areas during 4 of the 8 days of Light City. The sample size represents a statistical significance of +/-4.17% margin at the 95% confidence interval. This level of sampling is deemed significant for supporting business decisions and strategic planning.

Additionally, Forward Analytics economic impact model requires that BOPA supply detailed operational and financial data in order to analyze the organizational input-output. Comprehensive information related to expenditure levels and geographic location of such expenditures was incorporated into the impact measurement.

Attendance, or crowd size, is an important factor in an effective economic impact assessment. Yet, estimating attendance for events in large, undefined areas can be difficult. While there were no ticket sales or admission gates to quantify people participating in Light City, the conservative attendance figure of 442,500 was determined by BOPA after nightly analyses, in communication with the Baltimore police.

Light City opening night broke attendance records, with an estimated 175,000 attendees enjoying the event. However, this year's estimated attendance was down slightly compared to 2017 (with 470,000 visitors). Festival organizers cite inclement weather throughout the week as a contributing factor, as well as one less weekend night compared to 2017.

Secondary-sourced data for the economic census, including the Bureau of Labor Statistics information and United States Bureau of Economic Analysis were required for the completion of the impact model.

## Summary of Findings

### Social & Civic Impacts of Light City

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Most people involved in staging major events have experienced their potential to have positive effects on the people and communities that interact with them. Major events have the power to mobilize large numbers of people and create meaningful experiences, affecting many lives in a multitude of ways. At a basic level the positive outcome might simply be the enjoyable or pleasurable experience for attendees. At an advanced level this might be the creation of an opportunity or ideas that positively changes peoples' long-term behavior.

Through its high-quality events, BOPA actively engages citizens and plays a fundamental role in building livable communities in Baltimore and beyond. Light City is a launchpad for artists, inventors, entrepreneurs, activists and their ideas. Specifically, Labs@LightCity pulls together local and national thought leaders to explore ideas that may influence and shape the world playing a fundamental role in enabling social and civic innovation. Light City was also designed to invigorate Inner Harbor/downtown Baltimore and successfully attracted an estimated 442,500 evening visitors to downtown Baltimore over the 8 days.

This year's Light City extended its reach into 13 additional neighborhoods. The Brilliant Baltimore Community Showcase highlights neighborhoods and community groups who wish to show their pride with light displays or events coordinating with Light City.

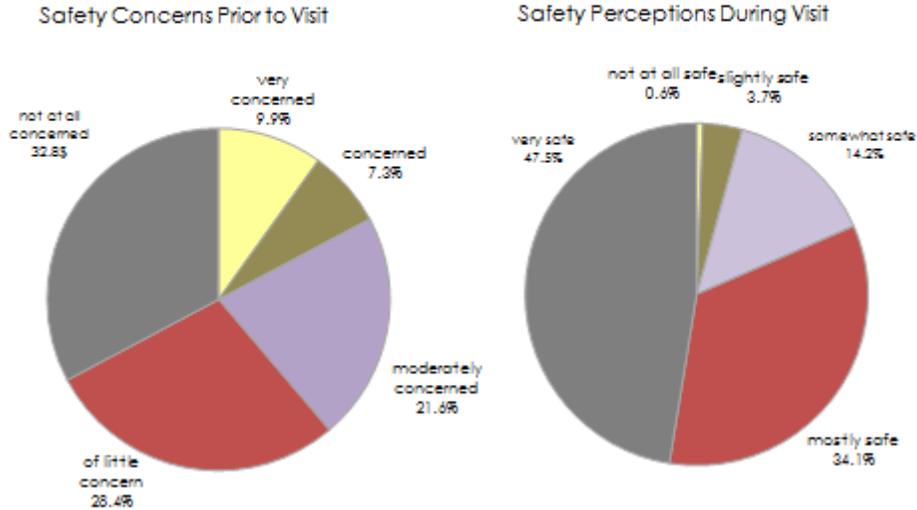
BOPA and its special events advances Baltimore by driving engagement, development and programs that enhance social, cultural and civic innovations thus benefitting businesses, residents and visitors throughout the City. Audience research proves the social and civic impact of Light City is strong, as:

- *92.3% of attendees believe that Light City adds value to the region*
- *87.4% feel it changes perceptions of Baltimore*
- *84.8% see it as a new tradition for Baltimore.*

Research shows that Light City is becoming as a Baltimore tradition as 16.8% of survey respondents attended the event all three years. Another 26.1% attended two years. Seventy-three percent of survey respondents said they will "very likely" or "likely" attend Light City next year. Another 17.4% said they are "somewhat likely" to attend next year.

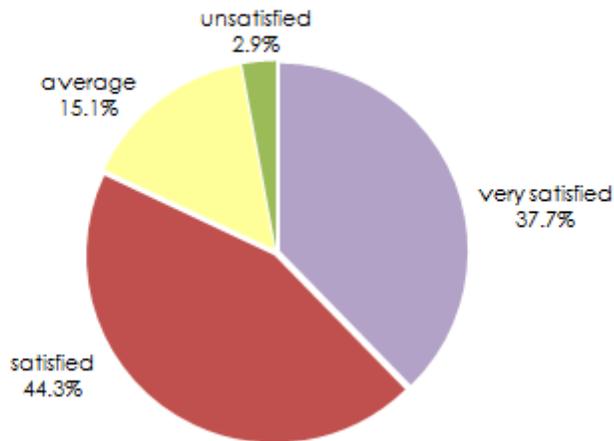
The guest's perception of safety and security is critical to the satisfaction and success of Light City. Crowd density, sudden changes in weather and the inevitable rush to leave following the events are all considered by those who plan and manage the safety during Light City. While most visitors had little concern for their safety while attending Light City, perceptions changed for the better once at Inner Harbor.

Light City Improves Perceptions of Baltimore



The majority, or 82%, of visitors felt "very safe" or "safe" while visiting Light City. The majority of visitors, 85%, were "very satisfied" or "satisfied" with the level of security at Light City. Overall event satisfaction is overwhelmingly high with 82% of survey respondents either "very satisfied" or "satisfied" with their Light City experience.

Overall Satisfaction with the 2018 Light City Experience

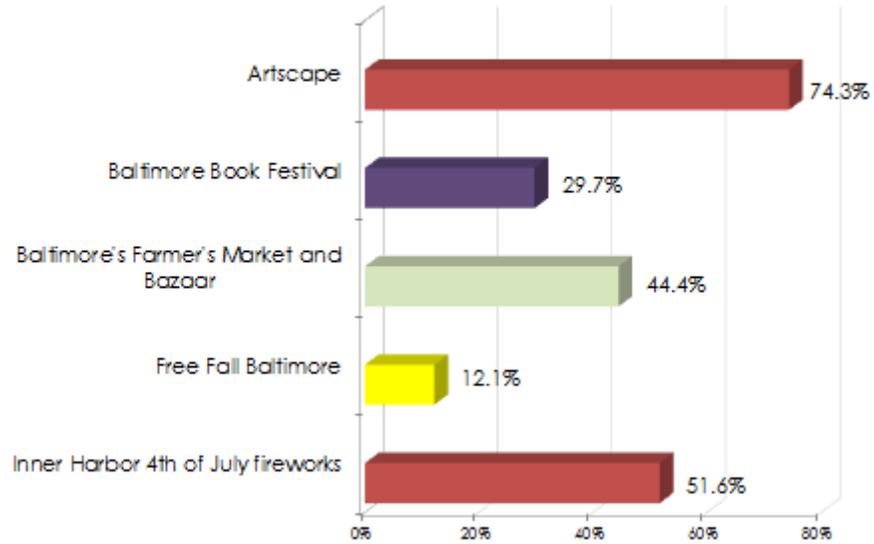


Audience research demonstrates that BOPA's festivals and events actively engage Baltimore residents and visitors all year long. Their events certainly foster enthusiasm for the arts as three-

fourths of Light City attendees previously attended Artscape. Over half gathered for Inner Harbor's Fourth of July fireworks. The below chart indicates the percentage of Light City attendees who also participated in BOPA's other premier events.

### BOPA Events Build Community Engagement

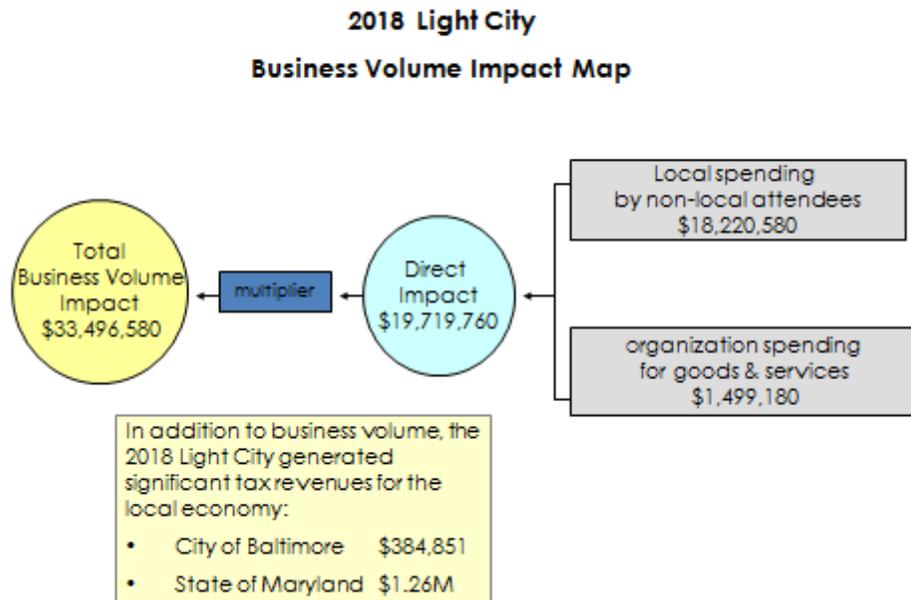
The majority of Light City visitors revel at other BOPA events, too.



## Economic Impact of Light City

The total economic impact of 2018 Light City, which includes both visitor spending and organizational spending, is estimated at \$33.50 million for the 8-day festival. Light City increased the local business volume by \$19.72 million in direct impact and \$13.78 million in indirect impact.

The direct impact of Light City resulted in government revenues received by the City of Baltimore and State of Maryland. The City gained \$384,850 in government revenues attributable to Light City, and Maryland gained \$1.26 million.



## Revenues Generated by 2018 Light City Visitors

Because Light City is a free event, visitor spending makes up the majority of economic impact attributable to Light City. The total economic impact of 2018 Light City visitors (those who do not reside in Baltimore City) is estimated to be \$30,947,980. The total economic impact consists of \$18.22 million in direct impact and \$12.73 million in indirect impact.

The following chart illustrates the business revenue generated by non-local visitors who traveled to Baltimore to experience Light City (269,480 people). The chart provides a breakdown of revenue at local restaurants, retailers, attractions, hotels, etc., generated in Baltimore City. Each visitor spent an estimated \$67 while enjoying Light City.

### Total Economic Impact of Light City Visitors

	Visitor Spending in Baltimore City
Food at restaurants/bars	\$6,442,960
Alcohol at restaurants/bars	\$1,543,740
Retail/souvenir purchases	\$2,134,300
Tourist attractions and entertainment	\$2,004,560
Overnight accommodations	\$2,242,450
Parking	\$1,329,900
Gasoline	\$1,387,570
Ground transportation (bus, taxi, car rental, etc.)	\$1,135,100
<b>Direct Impact</b>	<b>\$18,220,580</b>
<b>Indirect Impact</b>	<b>\$12,727,400</b>
<b>Total Impact</b>	<b>\$30,947,980</b>

### Revenues Generated by Light City Operations

In addition to visitor spending, the *production* of Light City has a profound impact on the Baltimore economy. While the 8-day event is free to its attendees, BOPA's cost to produce Light City Baltimore is nearly \$2.9 million. To elaborate, the operating budget includes PR and advertising, signage, payment and commissions to artists and performers as well as waste management, equipment rental, security, consulting fees, *and so on*.

The light festival's emphasis is on stimulating cultural and economic activity for the local communities. Accordingly, 50% of their operating budget for Light City was spent in Baltimore City. That's an estimated \$1.5 million injected into the local economy attributable to the festival. And, 7.9% of operating expenses were with businesses and services in Baltimore County.

In addition to its full-time staff, BOPA employs 36 temporary employees working for Light City at an hourly wage of \$15-\$20/hr. Light City's budget is comprised mostly of sponsor dollars but also from the sale of merchandise. A portion comes from corporations and organizations headquartered outside of Baltimore, but the majority of financial support was from Baltimore area companies. BOPA also receives significant in-kind contributions to sustain Light City.

## **Government Revenues Attributable to Light City Visitors**

In addition to the direct and indirect revenues received by local businesses and organizations, Light City attendees generated substantial tax revenues for the City of Baltimore and State of Maryland. The City of Baltimore gained an estimated \$384,851 while the State of Maryland received an estimated \$1.26 million in tax revenues due to Light City. The following comprise the government revenue impacts attributable to 2018 Light City:

### **Sales & Use Tax**

Sales and use tax revenues were paid directly by Light City visitors on purchases such as retail, food and drinks, overnight lodging, gas and parking. Light City-related direct spending by visitors generated \$1.09 million in sales tax revenues for the State of Maryland.

### **Alcohol Sales Tax**

In June 2011, the state of Maryland added a 3 percent alcohol surcharge on top of the 6 percent sales tax. Light City attendees spent \$1.54 million on alcohol at local restaurants and bars. The alcohol hike added another \$46,300 to Maryland's tax revenue that is attributable to Light City.

### **Hotel Tax**

Research determined that an estimated \$2.24 million was spent by Light City visitors at Baltimore's overnight accommodations. Approximately 10,750 nights were booked in Baltimore City by Light City visitors. In addition, BOPA spent \$51,770 in overnight accommodations for artists, lecturers, performers, vendors and contractors. Consequently, Baltimore City received an estimated \$172,070 in hotel tax revenues attributable to the light festival.

### **Parking Tax**

With an inflow of after 5pm visitors to the Inner Harbor/downtown Baltimore, survey data measured an estimated \$1.33 million was spent on parking in the City. This impact brought approximately \$212,800 for the City of Baltimore.

### **State Gasoline Excise Tax**

Light City visitors spent an estimated \$1.39 million in gasoline while traveling to and from Baltimore. A gasoline excise tax of \$.235 per gallon generated \$125,400 for the State of Maryland.

## **Business Revenues Generated by City Residents**

This year, Light City stepped up with a bigger focus on the local community with Neighborhood Lights, April 6-8. Baltimore-based artists received a \$15,000 grant to create an illuminated visual or performance art experience within their neighborhood of residency. The community events sparked awareness and interest the event and drew the residents to Inner Harbor/Downtown Baltimore for the subsequent main Light City event.

Survey research shows that 10.3% of city residents visited Inner Harbor/downtown Baltimore for the first time this year while attending Light City events. Another 20.3% visited only 2-3 times this year. Sixty-three percent of locals said they would not have been in the area if there were no Light City events. City residents visiting Light City generated \$4.12 million in direct business revenue for Inner Harbor/downtown Baltimore restaurants, retailers, tourist attractions and other services. Another \$2.89 million is generated in indirect business volume. The total economic impact of local spending with Inner Harbor/downtown Baltimore businesses attributable to Light City is estimated at \$1.89 million.

	<b>City Resident Spending in Inner Harbor/Downtown Baltimore</b>
Food at restaurants/bars	\$1,886,586
Alcohol at restaurants/bars	\$644,385
Retail/souvenir purchases	\$421,287
Tourist attractions and entertainment	\$319,485
Parking	\$304,323
Gasoline	\$215,517
Ground transportation (bus, taxi, car rental, etc.)	\$330,315
<b>Direct Impact</b>	<b>\$4,121,990</b>
<b>Indirect Impact</b>	<b>\$2,885,390</b>
<b>Total Impact</b>	<b>\$7,007,380</b>

We must note that the economic impact of city residents represents the 63% of locals who said they would not be in the area if there were no Light City events *only*. And while the financial impact of locals is significant, we do not include the above figures in the total economic impact analysis of Light City.

### **Volunteer Impact**

Volunteering is an important part of what makes magical events like Light City possible, and they are an important part of participating in the community at large. Volunteers provide the biggest resource to ensure the success of festivals. Undoubtedly, their wholehearted efforts enhance the actual scale of the event, as well as the social and economic impacts of Light City.

More than 330 sparkling volunteers are to be commended for all their energy and the many hours they gave to help make 2018 Light City an over the top experience donating a calculated 1,888 volunteer hours.

In the last decades, government has recognized the critical contribution that volunteering makes to build a strong and cohesive society and the advantages it brings to the individual volunteers. It has promoted volunteering as the essential act of citizenship, and an important contributor to the delivery of meaningful and quality public services. Accordingly, it enhances the economic impact of a community.

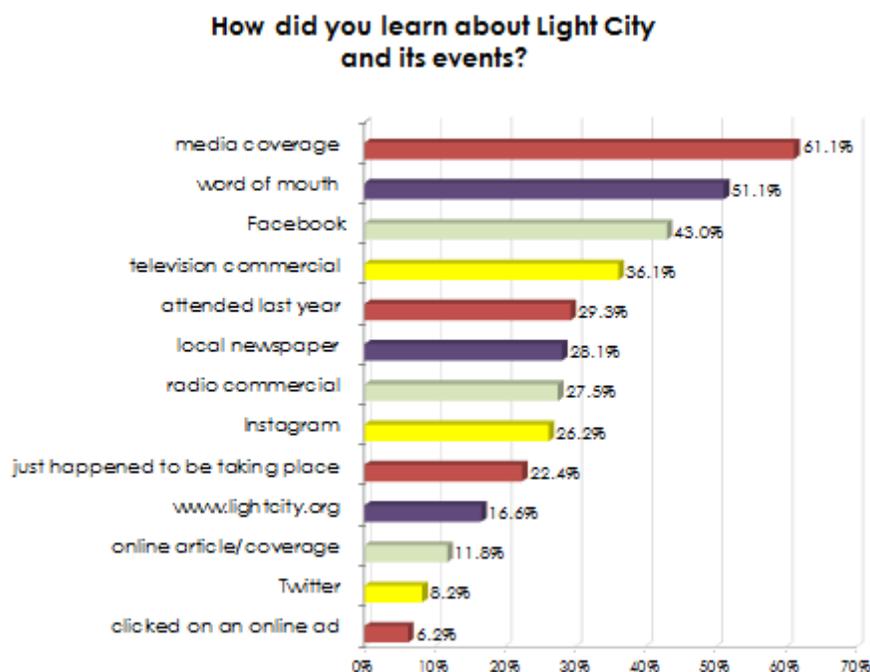
Appraising the exact dollar amount is less critical than the notion that those who volunteered their time could have spent it in many ways but decided the event and their community was of key importance and worth donating their time. But we choose to quantify and monetize volunteer hours in an attempt to show the enormous value of volunteers. If the total of 1,888 festival volunteer hours is calculated at the *government dollar value of a volunteer hour (2017)*, an estimated \$51,920 is donated in time to Light City, Baltimore and its residents.

## Marketing Impact

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Media coverage has been identified as the most effective promotional tool for 2018 Light City, used by 61.1% of survey respondents. Broadcast, online and print coverage included more than 475 stories reaching a national audience of 1.6 billion. Media outlets were mostly local but included national press across the country in big cities like, Los Angeles, New York, San Francisco and New Orleans, to name a few. The publicity value of Light City media is estimated at \$1.3 billion.

While media certainly has its spread, *word of mouth* marketing enticed over half of Light City visitors. Light City has created a buzz worthy experience as 48.2% of survey respondents said they “recommended Light City to friends and family” and 75.7% said they “will be recommending Light City”.



The proliferation of digital and social media has helped festival culture expand by creating a community and conversation around the experience. Like any other aspect of an event, social media marketing requires extensive planning and strategy. The relationship between a festival and its audience begins far before the live experience. For many events, Light City included, the promotion starts over social media and online with pictures, announcements and enticement.

During the event (and often before), visual content and live stream captures the amazing moments of the festival, awakening an enormous emotional response. Social media as a whole has created a mentality of FOMA- Fear of Missing Out- where people who aren't there feel like they missed something great.

Nearly half (48.7%) of survey respondents indicated they shared images of Light City on social media during their visit. This is a big jump from last year when only 27.4% said they posted pictures on social media. Social media metrics also indicates a jump in impressions and engagement when compared to 2017 data. A breakdown by Sprout Social, a social media management tool, is below:

Facebook 836,725 impressions, 12,802 engagements, 5,544 link clicks

Twitter 736,384 impressions, 24,493 engagements, 1,545 link clicks

Instagram 10,037 followers, 26,063 likes received, 905 comments

## **Demographics and Attendance Information**

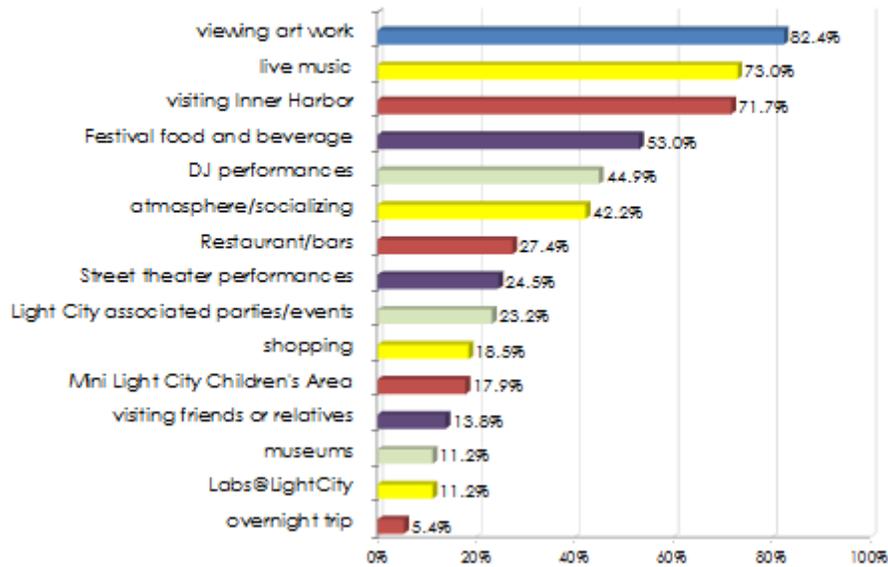
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A goal of Light City Baltimore is to revitalize downtown Baltimore by turning around perceptions and reality of the City's downtown area for residents and tourists through positive awareness. Research shows that Light City dazzled more than 173,000 City residents over the 8-day event. Another 101,330 visitors came from elsewhere in the Baltimore Metro. And 19.6%, or 86,730 visitors, came from out-of-state. Survey respondents included residents of 19 other states, with most out-of-state visitors coming from D.C., Pennsylvania, Virginia, New Jersey and New York.

While the atmosphere of Inner Harbor, itself, is a big draw, 81.2% percent of visitors said Light City was the "main reason to be in the area today". Others gathered for baseball games, dance competitions, and conventions yet still took the opportunity to experience the light festival. Moreover, 53.6% non-residents revealed they would NOT have visited Baltimore (today) if there was no Light City. The illuminating event enticed 22.8% of survey respondents (approximately 100,890 people) to Inner Harbor for the first time this year!

Illuminating art displays and music were ranked as top attractions when visiting Light City. Festival foods and beverages were a bigger draw this year with over half the visitors coming for gastronomy. Fifty percent of visitors attended 2018 Light City more than one day. One-fourth of visitors attended 3 or more days.

### Ranking of Top Activities at 2018 Light City



Each year, Light City brings together art enthusiasts of all ages visiting with their friends (41.3%), family (41.8%), or both friends and family (16.9%). The attendees were more likely to be young with 59.5% under the age of 39, while 24.7% of visitors are ages 50+. Thirty-two percent of visitors live with children under age 18 or dependent children, and the same number (32.1%) visited Light City with children.

Sixty-two percent of survey respondents are female; 38% male. Seventy-two percent of survey respondents indicate their ethnic or cultural background to be Caucasian/white; 22.4% African American/black; 4.5% Asian, and 3.2% Hispanic.

Light City visitors are well-educated with 55% of attendees having earned a four-year degree or higher. This total includes an overwhelming 14.9% of all survey respondents having earned a post-graduate degree. Another 26% of visitors attended some college technical school. One-third of all visitors have household incomes above \$75,000.