OVO by OGE Group

Drift by Stephanie Imbeau
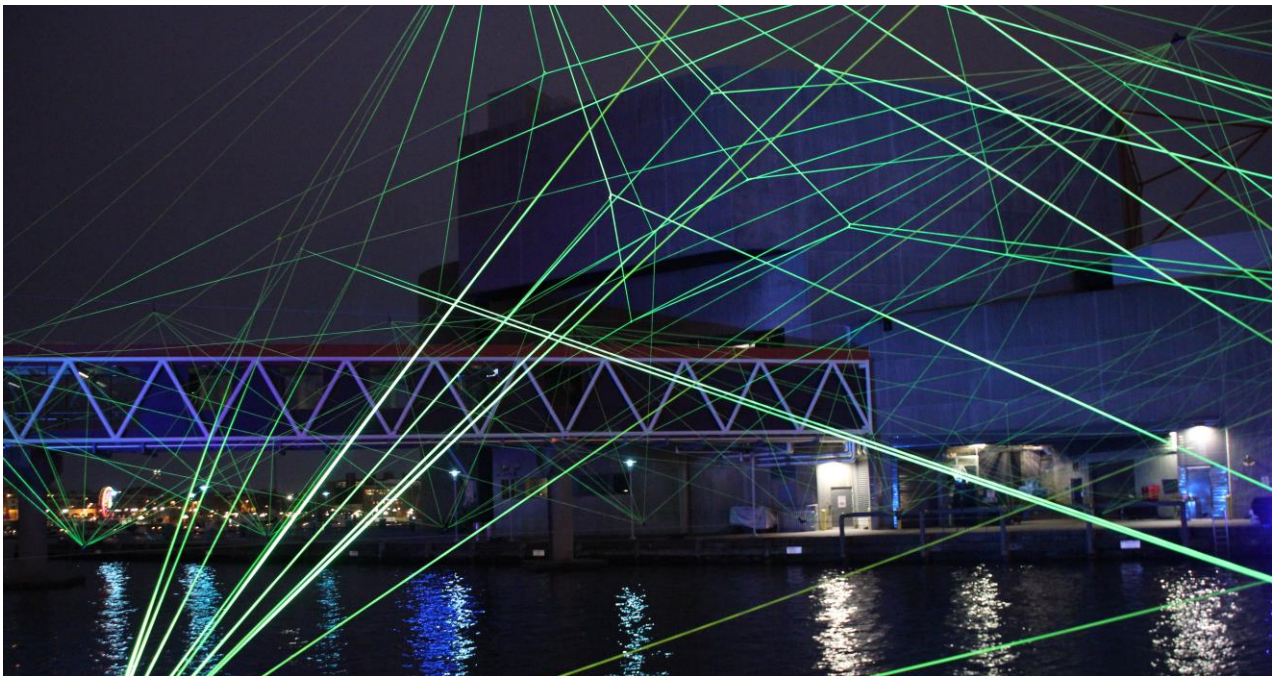

Economic Impact Study & Audience Research

2017 Light City

March 31-April 8, 2017

Produced by
Baltimore Office of Promotion & The Arts

OUR HOUSE by Tom Dekyver
Photos Courtesy of Baltimore Office of Promotions & The Arts

Highlights of Study

- 2017 Light City attracted an estimated 470,000 *nighttime* visitors to downtown Baltimore/Inner Harbor over the nine-day event, March 31 - April 8, 2017. Survey research shows that the second annual gathering included more than 137,700 City residents and another 106,700 people residing elsewhere in the Baltimore Metro. An overwhelming 33.5%, or 157,450 visitors, came from out-of-state. Survey respondents included residents of 22 other states, with the majority of out-of-state visitors coming from D.C., Pennsylvania, Virginia, New Jersey and New York.

- Eighty-one percent of survey respondents indicated that Light City was the "main reason for visiting the Baltimore area today." Twenty-eight percent revealed that Light City was the first time this year visiting downtown Baltimore. Moreover, 48.2% said they would NOT have visited Baltimore (today) were it not for the light festival.

- Inner Harbor/downtown Baltimore proves to be the perfect backdrop for Light City. Visiting Inner Harbor was a main draw for 82.8% of visitors to during their time in Baltimore. Viewing art work, live music, and DJ performances were also top attractions for attendees of Light City (according to audience research).

- Thirty-six percent of attendees visited Light City more than one day. Twenty-two percent of attendees experienced Light City both years (2016 and 2017).

- Light City visitors spent an estimated $8.04 million at local restaurants. Overnight visitors accommodated over 36,000 room nights resulting in a direct impact of $5.42 million for hotels and other accommodations. Other tourism expenses included retail, attractions, parking, gasoline, and ground transportation. Each non-local visitor spent an estimated $80 while exploring and enjoying Light City.

- The total economic impact of 2017 Light City visitors is estimated at $44,306,250. Visitors generated $26.06 million in direct spending which rippled through the local economy injecting another $18.24 million in indirect impact. The State of Maryland received an estimated $1.55 million in tax revenue from the economic activity generated by Light City attendees, and the City of Baltimore gained an estimated $732,100.

- The $26.06 million in direct spending attributable to Light City generated an additional $40.05 million in Maryland's employment wages[1] supporting 1,074 FTE at an annual salary of approximately $37,300.

- Light City clearly improves the perceptions of Baltimore with 61.2% having a more positive outlook after attending the light festival. Eighty-six percent of survey respondents reported feeling very safe or safe while visiting Inner Harbor/downtown Baltimore during the event. Overall satisfaction ratings for Light City reached a high of 78.4%.

- The value of Light City's print, broadcast and online publications coverage totaled more than $1.89 million. Over 570 media blurbs reached an audience of 1.09 billion from January 2017 to April 2017, increasing awareness and shining a light on the City of Baltimore.

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[1] Forward Analytics utilizes the Gross Employment Multiplier of 1.5368 generated by United States Bureau of Economic Analysis to determine the employment wage impact.

Purpose of Study

Light City was a planned with a purpose. The festival is designed to attract and unite forward-looking people to shed light on concepts that bring positive social and community impact. And just as Light City asks citizens to look to the future, it is important for event organizers to have accurate information and projected and measured economic impacts for the next events. This information is necessary to garner ongoing and additional community and financial support and to justify the allocation of resources for producing the event.

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 second 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

This economic impact analysis, completed by Forward Analytics, measured the effect of both direct and indirect business volume and government revenue impacts attributable to 2017 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 not included

in this study.) Survey research revealed that 29.3% of Light City visitors reside in Baltimore City. That said, 70.7% of Light City visitors spent "new dollars" and impact the local economy as outlined further in this report.

Methodology

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 524 surveys were administered by Forward Analytics staff in the Inner Harbor/downtown festival areas during 4 of the 9 days of Light City. The sample size represents a statistical significance of +/-4.28% margin at the 95% confidence interval. This level of sampling is deemed significant for supporting business decisions and strategic planning.

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 470,000 was determined by BOPA after nightly analyses, in communication with the Baltimore police.

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.

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

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 400,000 evening visitors to its inaugural international light festival in 2016-far exceeding crowd expectations. This year's Light City extended its reach even further and attracted an estimated crowd of 470,000. Twenty-two percent of this year attendees experienced Light City both years. The 2017 light festival expanded beyond Inner Harbor/downtown and helped shape and bond the neighborhoods of Baltimore City by celebrating in and showcasing eight outlying communities.

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:

- *90.0% of attendees believe that Light City adds value to the region*
- *88.3% feel it changes perceptions of Baltimore*
- *87.9% see it as a new tradition for Baltimore.*

Light City is an asset to the Baltimore where most visitors' sentiments remain high with a large majority of attendees having an overall positive impression of the event and safety. Sixty-four percent of survey respondents said they will "very likely" or "likely" attend Light City next year. Another 21.2% said they are "somewhat likely" to attend next year.

When asked how Light City has changed their opinion of Baltimore, 20% said their opinion has "significantly improved" and another 41.2% said "slightly improved." The majority, or 86%, of visitors felt "very safe" or "safe" while visiting Light City. Overall event satisfaction is overwhelmingly high with 78.4% of survey respondents either "very satisfied" or "satisfied" with their Light City experience.
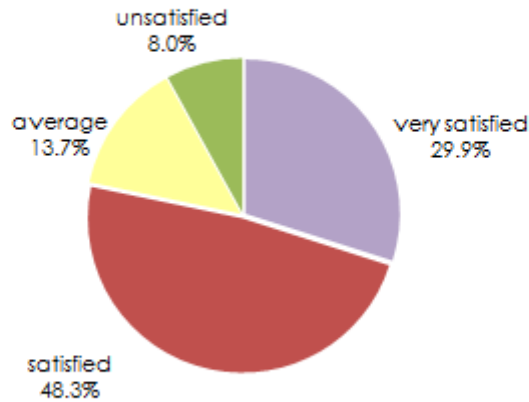

Perceptions of Safety at Light City
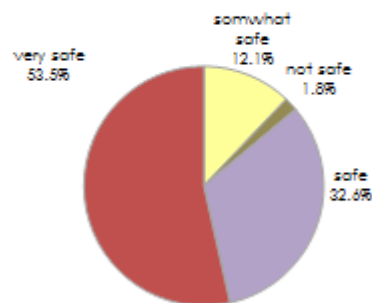
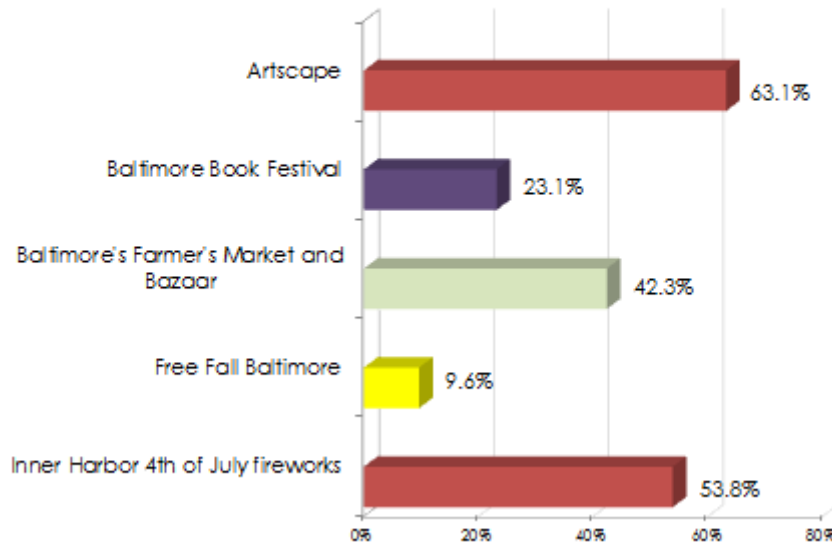Light City Improves the Perceptions of Baltimore
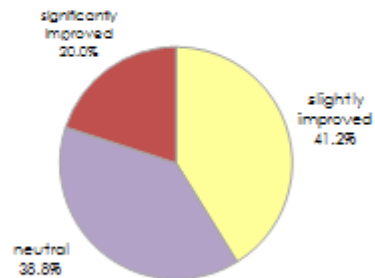
**Overall Satisfaction with
the Light City Experience**

unsatisfied
8.0%

average
13.7%

very satisfied
29.9%

satisfied
48.3%

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 63% 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.

Event	Percentage
Artscape	63.1%
Baltimore Book Festival	23.1%
Baltimore's Farmer's Market and Bazaar	42.3%
Free Fall Baltimore	9.6%
Inner Harbor 4th of July fireworks	53.8%

Economic Impact of Light City

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The total economic impact of 2017 Light City, which includes both visitor spending and organizational spending, is estimated at $47.25 million for the 9-day festival. Light City increased the local business volume by $27.79 million in direct impact and $19.46 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 $732,100 in government revenues attributable to Light City, and Maryland gained $1.55 million.

2017 Light City

Business Volume Impact Map
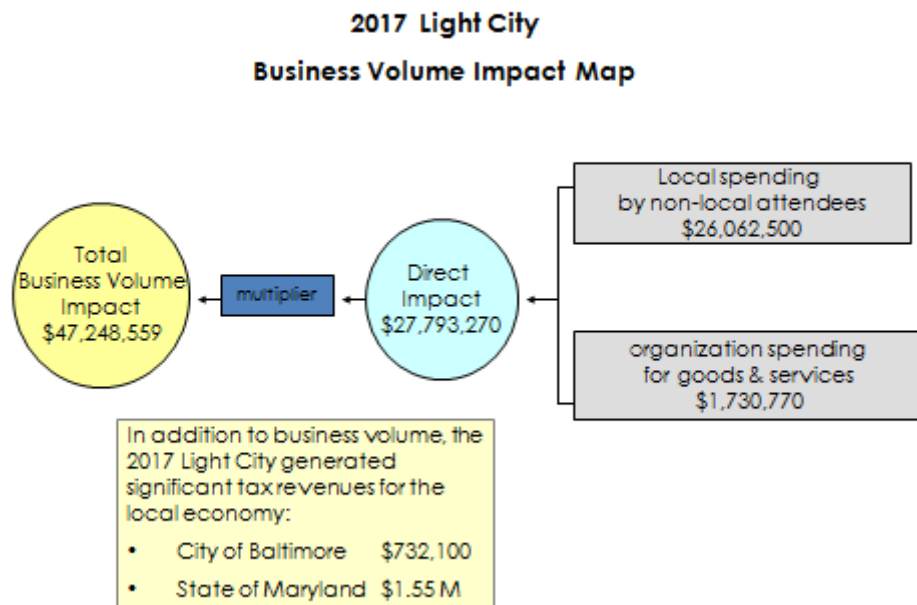
Revenues Generated by Light City Visitors

Visitor spending makes up the majority of economic impact attributable to Light City. The total economic impact of 2017 Light City visitors (those who do not reside in Baltimore City) is estimated to be $44,306,250. The total economic impact consists of $26.06 million in direct impact and $18.24 in indirect impact.

The following chart illustrates the business revenue generated by non-local visitors who traveled to Baltimore to experience Light City (326,000 people). The chart provides a breakdown of revenue at local restaurants, retailers, attractions, hotels, etc., generated in Baltimore City. Each visitor spent an estimated $80 while enjoying Light City.

Total Economic Impact of Light City Visitors

	Visitor Spending in Baltimore City
Food at restaurants/bars	$8,041,600
Alcohol at restaurants/bars	$1,867,500
Retail/souvenir purchases	$2,940,500
Tourist attractions and entertainment	$2,425,000
Overnight accommodations	$5,428,500
Parking	$2,030,600
Gasoline	$2,032,000
Ground transportation (bus, taxi, car rental, etc.)	$ 1,296,800
Direct Impact	$26,062,500
Indirect Impact	$18,243,750
Total Impact	$44,306,250

The economic impact of visitors of Light City had a substantial rise when comparing 2016 to 2017. This is due largely to the increased number out-of-town visitors attending the 2017 light festival. Research data shows that 69.4% of 2017 Light City attendees reside outside Baltimore City. In 2016, only 44.2% of Light City attendees were from outside of the area and contributed to the total economic impact. In addition, the estimated crowd size increased from 400,000 in 2016 to 470,000 in 2017.

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 9-day event is free to its attendees, BOPA's cost to produce Light City Baltimore is nearly $3.7 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, *and so on*.

The light festival's emphasis is on stimulating cultural and economic activity for the local communities. Accordingly, 47% of their operating budget for Light City was spent in Baltimore City. That's an estimated $1.73 million injected into the local economy attributable to the

festival. And, 12.5% of operating expenses were with businesses and services in Baltimore County.

Light City's budget is comprised mostly of sponsor dollars but also from the sale of merchandise. A considerable portion comes from corporations and organizations headquartered outside of Baltimore, but the majority of financial support was from Baltimore area companies.

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 $732,100 while the State of Maryland received an estimated $1.55 million in tax revenues due to Light City. The following comprise the government revenue impacts attributable to 2017 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 $1.36 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 $1.87 million on alcohol at local restaurants and bars. The alcohol hike added another $56,000 to Maryland's tax revenue that is attributable to Light City.

Hotel Tax

Research determined that an estimated $5.4 million was spent by Light City visitors at Baltimore's overnight accommodations. In addition, BOPA spent $17,600 in overnight accommodations for artists, lecturers, performers, vendors and contractors. Consequently, Baltimore City received an estimated $408,450 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 $2.03 million was spent on parking in the City. This impact brought approximately $324,900 for the City of Baltimore.

State Gasoline Excise Tax

Light City visitors spent an estimated $2 million in gasoline while traveling to and from Baltimore. A gasoline excise tax of $.235 per gallon generated $130,800 for the State of Maryland.

Employment Impact

In addition to measurements of economic impact in terms of dollars, Light City supported an estimated 1,074 FTE jobs at an annual salary of approximately $37,300. (This equates to $40.05 million in employment wages for the State of Maryland.) The impacted industries include tourism and hospitality, but also comprise other major employment sectors like construction, manufacturing, transportation and warehousing, professional, etc.

Volunteer Impact

The aim of Light City is to engage and inspire citizens to join together for societal enhancement and change. Perhaps no better measure of success of this event is the sheer number of volunteers for Light City. The second annual Light City grew its volunteer program to 258 people who gave their time and energy to ensure the success of Baltimore's newest large-scale, free arts and cultural festival.

In the last decades, government has recognized the critical contribution that volunteering makes to build a strong and cohesive society. 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 1,867 volunteer hours is calculated at the *government dollar value of a volunteer hour* (2016), an estimated $50,017 is donated in time to Light City, Baltimore and its residents.

Marketing Impact

Light City showcases Baltimore to the region by generating valuable media coverage. The festival allows Baltimore to become increasingly recognized as a forward thinking region where creativity and innovation are mutually valued and nurtured.
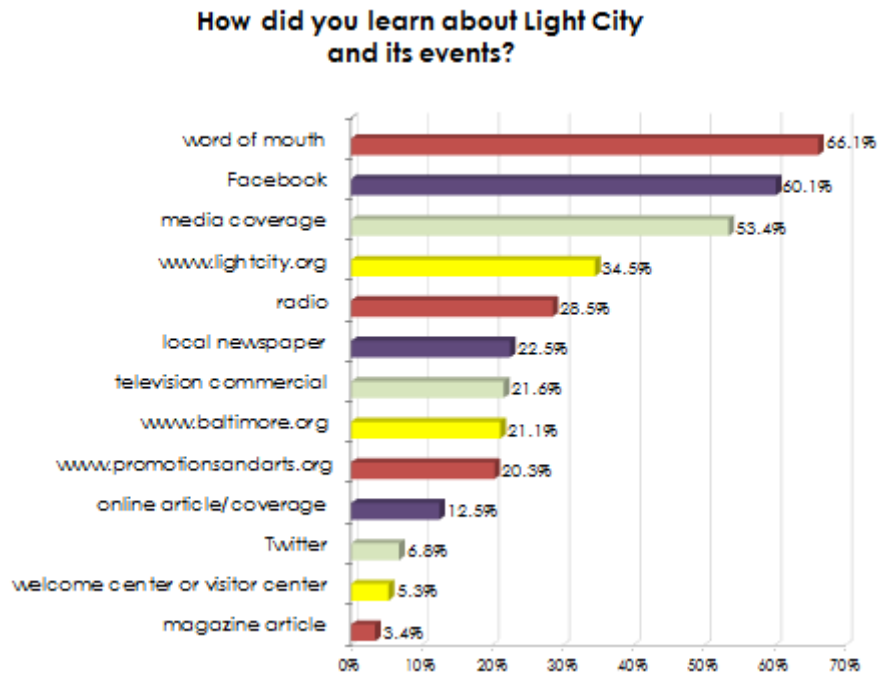
Media coverage not only further cements the city's core identity but also represents an additional benefit of Baltimore's investments. Light City's reports an estimated 39,984,969 impressions for out-of-market media print, digital and television buys which included a Super Bowl ad in D.C., Philadelphia, and Baltimore. The out-of-market coverage had a media value of $1.86 million. Additionally, the local and regional coverage was valued at $1.19 million.

In total, the light festival was covered in over 570 total media sources reaching 1.09 billion people[2] from January 2017 to April 2017. While exposure was mostly local and regional, coverage was viewed in major cities, including New York, Los Angeles, San Francisco, Chicago, Philadelphia, DC and New Orleans.

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[2] This measurement includes a combination of three separate metrics. For broadcast, the audience reach are Nielsen numbers provided by outlets. Print is measured by the outlet's circulation. Online is measured by UVM, or unique visitors per month.

Word of mouth marketing has been identified as the most effective and valuable form of promotion for 2017 Light City. Light City has created a buzz worthy experience that is being passed from person-to-person. Audience research further proves this as 91.3% of survey respondents say they "*would recommend friends and family visit Light City.*"

Social media keeps the conversation going as 60.1% of visitors learned about Light City through Facebook and 34.5% referred to LightCity.org. Social media also delivers visual marketing opportunities. Slightly more than one-fourth (27.4%) of survey respondents indicated they shared images of Light City on social media during their visit.

How did you learn about Light City and its events?

Source	Percentage
word of mouth	66.1%
Facebook	60.1%
media coverage	53.4%
www.lightcity.org	34.5%
radio	28.5%
local newspaper	22.5%
television commercial	21.6%
www.baltimore.org	21.1%
www.promotionsandarts.org	20.3%
online article/coverage	12.5%
Twitter	6.8%
welcome center or visitor center	5.3%
magazine article	3.4%

While social media brought people together, it also turned the entire Light City experience into a shareable one. Twitter, Instagram and Facebook reached 878,900 social media impressions, 43,267 engagements, and 1,890 link clicks. A breakdown by social media tool is below:

Facebook 471,023 followers, 6,929 engagements, 1,286 link clicks

Twitter 407,883 followers, 29,193 interactions, 604 link cicks

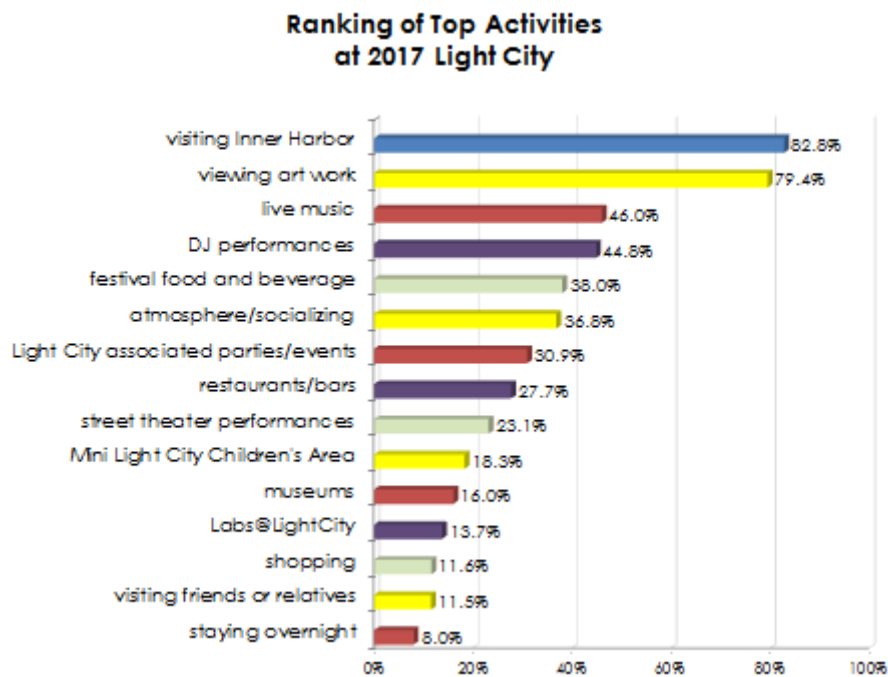Instagram 6,838 likes received, 307 comments

Demographics and Attendance Information

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 137,100 City residents over the 9-day event. Another 106,700 visitors came from elsewhere in the Baltimore Metro. An overwhelming 33.5%, or 157,450 visitors, came from out-of-state. Survey respondents included residents of 22 other states,

with most out-of-state visitors coming from D.C., Pennsylvania, Virginia, New Jersey and New York.

While several other big events coincided with the dates of 2017 Light City, 80.7% 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, 46.5% non-residents revealed they would NOT have visited Baltimore (today) if there was no Light City. The illuminating event enticed 27.5% of survey respondents (approximately 129,700 people) to Inner Harbor for the first time this year!

Inner Harbor was the perfect backdrop for the illuminating art displays and both were ranked as top attractions when visiting Baltimore. Many visitors were enticed by the entertainment, including live music (46.8%) and DJ performances (44.8%). Others were drawn by the festival food and beverages (38.0%).

Ranking of Top Activities at 2017 Light City

Activity	Percentage
visiting Inner Harbor	82.8%
viewing art work	79.4%
live music	46.0%
DJ performances	44.8%
festival food and beverage	38.0%
atmosphere/socializing	36.8%
Light City associated parties/events	30.9%
restaurants/bars	27.7%
street theater performances	23.1%
Mini Light City Children's Area	18.3%
museums	16.0%
Labs@LightCity	13.7%
shopping	11.6%
visiting friends or relatives	11.5%
staying overnight	8.0%

Light City was a family-friendly event that appealed to people of all ages. The attendees were more likely to be young with 48.5% under the age of 39, while 28.0% of visitors are ages 50+. Thirty-five percent of visitors live with children under age 18 or dependent children, and 37.1% of visitors brought children under the age of 18 with them to Light City.

Sixty-eight percent of survey respondents are female; 32% male. Sixty-five percent of survey respondents indicate their ethnic or cultural background to be Caucasian/white; 22.2% African American/black; 6.2% Asian, and 4.1% Hispanic.

Light City visitors are well-educated with 57% of attendees having earned a four-year degree or higher. This total includes an overwhelming 22.1% of all survey respondents having earned a post-graduate degree. Another 29% of visitors attended some college. Forty-two percent of visitors have household incomes above $75,000.