



**PHILIPS**

Impact evaluation  
and analysis

White paper

# Ambient light empowers places

Junction Bridge  
Little Rock, AR







# Ambient light empowers places

Boyette Strategic Advisors, an economic consulting firm that focuses on strategy, impact and analysis for corporate clients, non-profit groups and economic development organizations, was commissioned by Philips Lighting to conduct this impact evaluation and analysis of select lighting installations across the United States.

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*River Lights in the Rock*

## Executive Summary

Philips Lighting frequently partners with government organizations and non-profit groups to incorporate unique and effective lighting products into infrastructure and facilities, resulting in tangible and meaningful contributions to the public realm. These lighting installations serve much more than a utilitarian purpose of providing light. In many cases, they spark increased tourism, economic development, community pride and neighborhood revitalization.

To better understand the potential comprehensive impact of these lighting projects, Philips Lighting engaged Boyette Strategic Advisors to conduct an impact evaluation and analysis of a sampling of diverse installations. This document will examine the economic, cultural and social impact of the following projects:

- River Lights in the Rock, Little Rock, Arkansas
- The Bay Lights, San Francisco, California
- Gateway Community College Faces, New Haven, Connecticut
- District Hall, Boston, Massachusetts

These projects represent a range of budgets and visibility, in addition to being geographically diverse and located in various sized cities. Some are grand and have created a high-profile attraction while others serve to support an organization's distinct mission and goals.

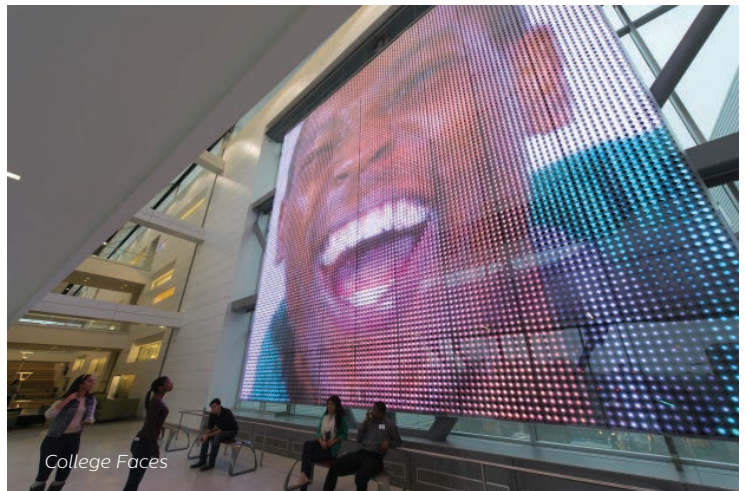
**River Lights in the Rock** includes the lighting of one vehicular bridge and two pedestrian bridges spanning the Arkansas River between the downtown areas of Little Rock and North Little Rock. The lighting installation was largely funded by Entergy Arkansas and the Entergy Charitable Foundation in celebration of its 100th anniversary in the state.

**The Bay Lights** installation is the largest architectural light art piece in the world, designed by renowned American artist Leo Villareal, and was originally installed to commemorate the 75th anniversary of the Bay Bridge, which connects San Francisco and Oakland.



*The Bay Lights*

Gateway Community College relocated its campus to downtown New Haven in 2012 and developed the **College Faces** digital mural with funding from the State of Connecticut's Arts in Public Spaces program to help connect the college community with the surrounding neighborhood.



*College Faces*



*District Hall*

**District Hall**, which opened in 2013, is the world's first public innovation center located in the newly developed innovation district at Seaport Square in Boston.



This study includes a review of the **value and benefits lighting projects have on a community**, including how an artistic lighting display can drive public/private partnerships; enhance public engagement; and promote a city's commitment to sustainability. Additionally, the economic and societal impacts may include enhanced community pride; increased visits or tourism; and strengthened connections with partners. Philips Lighting commissioned an impact evaluation and analysis to provide specific metrics and examples of the benefits of lighting installations for other interested parties considering similar projects.



## Following are highlights of the findings from this study:

- The projects represent a total combined investment of more than \$15 million and a total **impact from the installation investment of almost \$22 million**

### *River Lights in the Rock, Little Rock, Arkansas*

- The River Lights in the Rock installation, installed in 2013, has been utilized to promote conventions in Little Rock with more than 60,000 attendees, which had a **tourism impact of \$19 million**
- The Little Rock bridges are visible from the Clinton Presidential Center, the Statehouse Convention Center, Riverfront Park and Dickey-Stephens Park, which combined have more than 1.2 million visitors per year
- Only one of the three Little Rock bridges carries vehicular traffic and is traveled by more than 10,000 vehicles per day. However, all three bridges are visible from two other primary thoroughfares over the Arkansas River that have a combined traffic count of approximately 150,000 cars daily
- The River Lights in the Rock bridges have been utilized to promote causes for more than 20 non-profit organizations, including breast cancer awareness, organ donation, ovarian cancer awareness, colon cancer awareness and the March of Dimes
- River Lights in the Rock has received national media coverage, in addition to significant local coverage, including a story in the *Wall Street Journal*, which has a circulation of 2.2 million, as well as *Electric Energy*, *LEDs Magazine*, *Architectural SSL Magazine*, *FutureStructure* and *LD+A Magazine*. Circulation for all publicity as of December 21, 2015, was more than 70.6 million
- In addition to a website dedicated to the River Lights project, the Little Rock bridges have seen social media exposure in excess of 125,000 impressions

### *The Bay Lights, San Francisco, California*

- The Bay Lights project was funded with a **total investment of \$12 million** over two installations in 2013 and 2016, with the permanent display then gifted to the California Department of Transportation, which will maintain the installation
- Media coverage of The Bay Lights has been included in stories on *CNN* and *NPR*, as well as in *The New York Times*, the *Wall Street Journal* and *Forbes*. Those outlets have a combined reach of more than 150 million subscribers. In addition, a feature in *Hemisphere* magazine generated more than half a billion impressions in six months
- More than 100 YouTube videos of the installation are available, with the most popular having more than 100,000 views
- San Francisco Travel has estimated that The Bay Lights will be seen by more than 50 million people

“Light is swiftly becoming one of the most powerful tools to breathe new life into cities and to initiate a new era of urban design.”

Susanne Seitinger and Antonia Weiss  
Light for Public Space

### *Gateway Community College Faces, New Haven, Connecticut*

- The Gateway Community College Faces mural was **funded as part of the public art appropriations for state construction projects**, with a total cost of \$734,000
- It is one of 50 public art installations on community college campuses in Connecticut
- The College Faces project, designed by Electroland, features 350 students, faculty and staff photographs
- In addition to exposure to 14,000 students on the Gateway campus annually, the installation can be seen from George Street, which has a daily traffic count of more than 11,000 vehicles
- The Gateway installation has been recognized with two awards – a Lighting Control Innovation Award of Merit and a CodaWorx Merit Award for Education

### *District Hall, Boston, Massachusetts*

- District Hall, the heart of Boston's Innovation District, is the world's first public innovation center
- Since District Hall's opening in late 2013, the facility has hosted more than 1,400 events with 70,000 attendees
- Public meeting space in District Hall has been utilized by more than 70,000 visitors in less than three years
- District Hall has provided **in-kind event space valued at more than \$2 million**
- The lighting in District Hall, which is a key component of meeting the facility's goal of being an inviting public space, has been featured in a range of business, architectural and consumer publications including, *Fast Company*, *Metropolis*, *Design New England* and *BostInno*

In researching these projects, it is clear that **cities and organizations that leverage their lighting installations see a greater overall impact**. If a community maximizes exposure of the installation through marketing and social media vehicles, it will be elevated to a higher profile that leads to a broader social and cultural impact and, ultimately, economic impact resulting from tourism and economic development investments.

More and more cities are seeing the value of light as something beyond its functional use. It is becoming a tool for driving community engagement, promoting health and wellness, and revitalizing areas that have begun to decline. In Philips Lighting's publication, *Light for Public Space*, authored by Susanne Seitinger and Antonia Weiss, lighting is explored as a way to enhance livability in cities. The introduction states that "Light is swiftly becoming one of the most **powerful tools to breathe new life into cities** and to initiate a new era of urban design."

The four projects reviewed for this impact evaluation and analysis all, in their own ways, have breathed new life into areas through the unique and creative use of lighting. In fact, the installations go beyond the functional to serve as public art and **a tool for changing perceptions of the cities and organizations represented**.

**Recognized with**  
two awards.

**Tourism impact**  
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**Will be seen by**  
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**Provided in-kind event space**  
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## Methodology

This study includes a review of the value and benefits lighting projects have on a city. Impacts to be discussed in this report will include how an artistic lighting display can drive public/private partnerships; enhance public engagement; and promote a city's commitment to sustainability.

The impact evaluation and analysis measures the effect of four lighting installations and associated electricity costs, using the county in which the installations are located as the impacted geography. The economic impact was estimated using the IMPLAN input-output model.

The economic impact is measured in direct effect, which gauges the change in final demand of directly impacted industries; indirect effect, which captures business-to-business spending; and induced effect, which represents increased household spending.

An input-output model was used to estimate inter-industry spending from purchaser to producer to determine the economy-wide impact. The impact values include payroll generated; contribution to the gross regional product (GRP); tax impact and the total impact, which includes the initial investment. Data used in the model is from 2014 and all funds are adjusted for inflation/deflation. All dollar values are presented in 2016 values.

The evaluation of social and cultural contributions of each lighting installation examined includes impact in the following categories, as applicable:

- Community Engagement
- Economic Development
- Economic Impact
- Health and Wellness
- Media Coverage
- Partnerships
- Sustainability
- Tourism



In each of these areas, contributing factors to the cultural and social effects of the lighting projects were identified. Qualitative research provides a mechanism for pairing relatable data points with anecdotal stories to illustrate the overall impact of lighting projects on a community.

This research was completed using a variety of secondary sources, including interviews with both Philips Lighting and local officials involved in the projects, a review of media coverage related to the lighting installations, analysis of online and digital media presence for lighting projects, city and state reports of tourism activity, and reports of charitable organizations engaged in the projects.



## River Lights in the Rock



In December 2013, three bridges – the Main Street Bridge, the Junction Bridge and the Clinton Presidential Park Bridge – all of which cross the Arkansas River between Little Rock and North Little Rock, were illuminated in celebration of Entergy Arkansas’ 100th anniversary. Entergy Arkansas provides electricity to approximately 705,000 customers in 63 of the 75 counties in Arkansas. The company also employs 3,500 employees.<sup>1</sup> The three bridges are all components of the Six Bridges Framework Plan, which was developed in 1999 to maximize the benefits of six bridges spanning the Arkansas River and connecting Little Rock and North Little Rock. From west to east, the bridges included in the Plan are the Baring Cross Bridge, the Broadway Bridge, the Main Street Bridge, the Junction Bridge, the Interstate 30 Bridge, and the Clinton Presidential Park Bridge (formerly known as the Rock Island Bridge).<sup>2</sup>

With a combined donation of \$2 million from Entergy Arkansas and the Entergy Charitable Foundation, the municipalities on either side of the bridges, along with Pulaski County, began an effort to have more than 2,000 LED lights installed on the three bridges. The goals of the project were riverfront enhancement and increased community engagement, according to a Philips Color Kinetics case study on the project.<sup>3</sup>

On December 19, 2013, the River Lights were officially illuminated at a lighting ceremony held at First Security Amphitheater in Riverfront Park.<sup>4</sup> The admission-free event began at 5:00 p.m. with live music from the Natural State Brass Band followed by opening remarks from former President Bill Clinton, who “flipped the switch.”<sup>5</sup> Ottenheimer Market Hall, home to many restaurants and vendors, was open providing food and beverages.<sup>6</sup>

A combination of various Philips Lighting LED fixtures<sup>7</sup> were used, with unique cloud-based remote management software. Custom light shows for each bridge can be programmed and synced with all three bridges or create a scheme across them.<sup>8</sup> The bridges are lighted from dusk until 2:00 a.m. daily.<sup>9</sup>

The lighting of the Little Rock bridges has created economic and societal impacts ranging from a \$2.4 million investment to enhancing community pride; increasing foot traffic on the bridges; and strengthening connections and partnerships between Little Rock and North Little Rock.

### Community Engagement

While the River Lights in the Rock installation provides a variety of opportunities for community engagement, that process actually began when the lighting installation was nothing more than an idea. Entergy Arkansas was seeking a way to give back to the community in commemoration of its 100th anniversary. After exploring several opportunities, Entergy chose to partner with the cities of Little Rock and North Little Rock, the Clinton Foundation and the Pulaski County Junction Bridge Authority to work with Philips Lighting and Koontz Electric to light the three bridges. The gift from Entergy was described as supporting the spirit of Arkansas, its opportunities and possibilities.<sup>10</sup>

“I dreamed of a time when, at night, we would have this bridge lit and everybody who landed in Little Rock at night would fly over this Library lit and the bridge lit and would see us and our values and our potential in a way that they had never seen before. And it would brand, in a way, our whole state as a place which was big enough to be diverse and interesting, full of occasional tumult and legitimate disagreements, but also a place where, in the end, bridges are built.”

*Former President Bill Clinton  
at River Lights Lighting,  
December 2013*

“Between Entergy and Philips, we’ve electrified the city tonight. It’s been a great event, a great opportunity, and a tremendous public/private partnership.”

*Little Rock Mayor Mark Stodola  
at River Lights Lighting,  
December 2013*

## Special Events/Conventions

River Lights in the Rock can be customized to commemorate a special event. In the two years since the bridges were lighted, almost 20 non-profit organizations have taken advantage of this opportunity to promote their cause. Some of these include Hunger Action Day, Ovarian Cancer Awareness, Colon Cancer Awareness, Childhood Cancer Awareness and Diabetes Day Awareness.<sup>11</sup>

In addition to spreading awareness, conventions held in Little Rock often have the bridges illuminated in special colors while their attendees are in town. To date, the bridges have been lighted for 105 days for conventions with attendees of nearly 60,000. The Little Rock Convention and Visitors Bureau estimated the economic impact of these conventions at \$19 million.<sup>12</sup> The following list includes the conventions that utilized the light display, listed in order of attendance.

Convention	Attendees
UALR Athletics (12 events)	24,000
2015 National Quilting Association	8,000
American Taekwondo Association	6,800
Alpha Kappa Alpha South Central Regional	3,800
Arkansas Future Business Leaders of America (2016)	3,000
Arkansas Future Business Leaders of America (2015)	3,000
Phi Beta Sigma Fraternity, Inc.	3,000
Lifepius (2 events)	1,200
TedX Talks	550
Arkansas DECA	500
Alliance Parts Warehouse	500
Kappa Alpha Psi	500
Replacement Parts, Inc. Crow-Burlingame Bumper to Bumper	500
Davidson Hotel & Resorts	325
National Guard Association of Arkansas	250
Helena Chemical Company	225
Building Owners & Managers Association of Greater Little Rock	200
Windstream Employee Picnic	142

Source: Little Rock Convention and Visitors Bureau



Conventions generally deploy the bridge lighting to coincide with either the opening or closing session of the event and announce the lighting to attendees during a general session. The Little Rock Convention and Visitors Bureau utilizes the opportunity for bridge lighting as an added value sales tool in discussions with meeting planners and in meeting advertising.<sup>13</sup>

Rates for lighting the bridges start at \$200 per evening for one bridge, \$500 for all three bridges and an additional \$100 for a special light show. Non-profit organizations receive a discounted rate. From September 2014 through May 2016, more than \$13,000 has been raised from bridge lightings. These funds will be used for maintenance of the bridges.<sup>14</sup>

## Awards

The River Lights in the Rock project has been recognized for its design and installation by several organizations. Awards include the following:<sup>15</sup>

- American Council of Engineering Companies, Arkansas 2014 People's Choice Award
- American Council of Engineering Companies Arkansas 2014 Engineering Award, Special Projects
- Associated Builders & Contractors 2014 Excellence in Construction Award



## Economic Development

The downtown areas of Little Rock and North Little Rock, where the bridges can be viewed, have seen additional investment and economic development since their installation. The lights on the bridges can be seen by visitors to the River Market and from patios of restaurants located along the river.

### Robinson Center Music Hall

Robinson Center Music Hall (Robinson Center) is a rare, federally funded Public Works Administration project in Arkansas. Located along the Arkansas River, the Robinson Center is home to the Arkansas Symphony Orchestra and host to national touring productions and Ballet Arkansas performances. In addition to performances, it is also used as a meeting venue.<sup>16</sup>



Robinson Center is currently undergoing a \$60 million renovation, which includes upgrades to the performance hall, lobby space and adjacent conference center. Part of this renovation will be the addition of a Grand Ballroom located on the north side of the facility with views of the Arkansas River and the three bridges. The Grand Ballroom will provide flexible meeting and convention space.<sup>17</sup> Additionally, a 5,800-square-foot (539-square-meter) outdoor terrace will allow visitors to Robinson Center to view the bridges and the Arkansas River from the highest level of the facility.<sup>18</sup>

### Area Hotels

The bridges are visible from several downtown hotels located along the banks of the Arkansas River. Two of these facilities have invested in significant renovations since the lighting of the bridges.

In January of 2015, a \$5 million renovation was announced for the 288-room DoubleTree Hotel, located along the Arkansas River in Little Rock and connected to the Robinson Center.<sup>19</sup> Reviews on the DoubleTree website mention “the rooms with great views of the river,” and “gorgeous night view of the city.”<sup>20</sup>

In February 2014, a \$16 million renovation began on the downtown Little Rock Marriott hotel. The renovation included all guest rooms, public meeting rooms and dining spaces.<sup>21</sup> Many of the guest rooms and meeting spaces offer a view of the bridges and the Arkansas River.<sup>22</sup> The Marriott is Little Rock’s primary convention hotel and is adjacent to the Statehouse Convention Center.

### Additional Development

The Residences at Building 5, which includes 12 condominiums, are located near the DoubleTree Hotel. Views of the Arkansas River are listed as an amenity of the property and prices range from \$395,000 to \$2.2 million.<sup>23</sup>

300 Third Tower also offers residents a view of the Arkansas River and bridges. The building also has a screened rooftop deck for exclusive use of residents and their guests.<sup>24</sup> Current listings for this building range from \$299,000 to \$775,000.<sup>25</sup>

### Project Partner

Koontz Electric Company, Inc. (Koontz Electric) is Arkansas’ largest heavy industrial electrical contractor. The company, which is located in Central Arkansas, was selected as the contractor to install the River Lights in Little Rock and is also considered a partner in working to bring the project to fruition.<sup>26</sup>

Since completing the Little Rock bridges project, the partnership between Koontz Electric and Philips Lighting has continued to expand as the two companies have jointly responded to various lighting project inquiries across the country. As a matter of fact, Koontz and Philips Lighting are waiting on final decisions about several bridge projects in cities throughout the Southeast and look forward to teaming up to beautify bridges to the delight of citizens in other communities.<sup>27</sup>

Product reliability was mentioned as a reason Koontz Electric was interested in partnering with Philips Lighting. The products in place in Little Rock feature an integrated, customized remote management system that provides instant feedback of any maintenance needs. Unlike other architectural lighting solutions, the Philips Lighting system runs on a technology infrastructure that is specifically engineered to be a stable, dependable product for use on bridges and lighting installations that are exposed to weather, road vibration and other factors that impact reliability. The Philips Lighting team has been a committed partner, constantly improving and evolving the product to match the varying needs and conditions of each bridge installation.

## Economic Impact

The total installation cost for the River Lights in the Rock was \$2.4 million. Annual electricity usage for the bridges is \$7,200. The Pulaski County Gross Regional Product (GRP) has expanded more than \$1.2 million since the installation in 2013 and saw a total impact of \$2.3 million, including almost \$900,000 in payroll.

The following table provides additional details about the impact.

### River Lights Installation Impact

Jobs Supported	Payroll	Contribution to GRP	State and Local Tax	Total Impact
14.35	\$862,096	\$1,210,029	\$62,033	\$2,327,802



It is difficult to quantify total tourism impact of an installation that does not require admission or have a mechanism for monitoring visitors. However, the Little Rock Convention and Visitors Bureau has determined that the economic impact of the conventions utilizing the bridge lighting as part of their events exceeds \$19 million since the bridges were lighted in late 2013.

## Health and Wellness

The lighting of the bridges has increased visibility and brought the bridges to the attention of residents and tourists as a place for exercise and recreation.

In September 2015, the City of North Little Rock conducted bicycle and pedestrian counts for the Clinton Presidential Park Bridge on Tuesday and Saturday of a given week. That research indicates that almost 200 cyclists and 225 pedestrians crossed the bridge on those days in a county with a total population of 397,236.<sup>28</sup>



### Arkansas River Trail System

The Arkansas River Trail System includes a 15.6-mile (25.1-kilometer) loop from the Clinton Presidential Park Bridge via North Little Rock to the Big Dam Bridge and back to the Clinton Presidential Park Bridge via Little Rock. This loop provides a paved, relatively flat trail for people of all ages and fitness levels to enjoy.<sup>29</sup>



## Media Coverage

The original lighting event celebrating the 100-year anniversary of Entergy Arkansas received national media coverage, in addition to significant local coverage, including a story in the Wall Street Journal, which has a circulation of 2.2 million.<sup>30</sup> Other publications covering the event were *Electric Energy*, *LEDs Magazine*, *Architectural SSL Magazine*, *FutureStructure* and *LD+A Magazine*. Circulation for all publicity as of December 21, 2015, was more than 70.6 million.

## Local Media Coverage

Local media, including the *Arkansas Times* which posted a one-minute video of the testing of the lights, covered the lighting ceremony.<sup>31</sup> Channel 7, the local ABC affiliate, provided live coverage of the lighting ceremony on their three evening broadcasts on December 19, 2013.<sup>32</sup>

## Riverlightsintherock.com

Riverlightsintherock.com is a website dedicated to the bridges managed by the Little Rock Convention and Visitors Bureau. The site gives a brief overview of the history and provides the process for requesting bridge lighting for special events.<sup>33</sup> Riverlightsintherock.com has been visited more than 8,000 times from February 2015 to March 2016 with more than 4,300 unique visitors, including global visitors from Australia, South America, Europe and Asia.

## EntergyArkansas100.com

Another website that promoted the initial lighting of the bridges was EntergyArkansas100.com, created by Entergy to commemorate the company's anniversary. There were 900 unique visitors to this website and nearly 4,000 page views, pages clicked on or viewed, between March and September of 2013.<sup>34</sup>

## Advertising

The Little Rock Convention and Visitors Bureau spends \$500,000 annually on direct advertising. The organization often uses images of the bridges in this advertising. One print ad includes the tagline "Meetings are more illuminating with a Southern accent," and features a photo of the Junction Bridge.<sup>35</sup> Another example of advertising that featured the bridges is found in US Airways magazine's May 2014 issue, which included an eight-page insert about tourism opportunities in Little Rock. The opening two-page spread of the section was a large photograph of the Junction Bridge.<sup>36</sup> The illuminated bridges are also mentioned as one of Little Rock's most distinctive attractions in the Arkansas Meeting Guide.<sup>37</sup>

## Social Media

Impressions were made on social media platforms such as Facebook, Twitter, Pinterest, Instagram and Tumblr as well as photograph repositories such as Getty Images and Google Images. Additionally, several major online media outlets, such as BuzzFeed and Mashable, included the Little Rock bridges during coverage of world events and political issues.

Two of the top five social media posts from the Little Rock Convention and Visitors Bureau 2015 featured the bridges lighted for "Prayers for Paris" and "Little Rock Loves." "Little Rock Loves" was the top post for the organization in



2015 with a reach of nearly 93,000, followed by “Prayers for Paris” with a reach of 35,880.<sup>38</sup> The “Prayers for Paris” display was also featured in a story on national landmarks that were lighted to show support of Paris after the terror attacks.<sup>39</sup>

The River Lights were also mentioned by Advocate magazine in a list of “More Than a Dozen Landmarks You Won’t Believe Were Turned Rainbow.”<sup>40</sup>

#RiverLightsInTheRock is used by @RiverMarket and @LittleRockCVB to share updates on the organization, holidays or information on the person being honored by the color of the bridge lights. On January 18th, the bridges were illuminated red in honor of Dr. Martin Luther King Jr. The @RiverMarket post received 33 retweets and was a favorite of 39 people.

In an analysis of Instagram posts related to River Lights in the Rock, there have been more than 750 posts by 422 unique uploaders since the lighting in December 2013. These posts generated more than 900 comments and 20,500 likes.<sup>41</sup>

## Sustainability

The bridges are lighted using LEDs that will lower the cost of lighting on the bridges.<sup>42</sup> The Junction Bridge was previously lighted with functional lighting and the wiring was reused for the new vibrant lighting system.<sup>43</sup> The LEDs used on the bridges are typically three to four times more efficient than traditional outdoor floodlighting technologies.



## Tourism

“We’ve confirmed that lighting enhancements like this serve as a place-based approach for tourism and an enhanced stage for economic development,” according to Little Rock Mayor Mark Stodola.<sup>44</sup> In fact, the original idea to light the Little Rock bridges was the vision of Mayor Stodola in concert with the Mayor’s Tourism Committee.

In 2014, Little Rock was recognized as a City of Distinction Tourism Development category for cities of its size. The River Lights, along with the Little Rock Marathon, were mentioned as new attractions to the city that led to this recognition.<sup>45</sup>

The River Lights can be viewed from many attractions in Little Rock and North Little Rock. There are several locations in which to view the lights on the South side of the river including the DoubleTree Hotel, Old State House Museum, Marriott Hotel, Statehouse Convention Center, River Market Pavilions and Amphitheater, and the William J. Clinton Presidential Center and Park (Clinton Center).

Riverfest is a visual and performing arts festival held annually, usually during Memorial Day weekend on the banks of the Arkansas River. Attendance for Riverfest in 2015 was 225,000 and 235,000 in 2014.<sup>46</sup>



As previously mentioned, also located along the Arkansas River is the Clinton Center. The Center attracts hundreds of thousands of visitors to the area and also provides direct access to the Clinton Presidential Park Bridge, part of the River Lights.<sup>47</sup>

In 2015, the Statehouse Convention Center was host to more than 300,000 visitors at more than 200 events. The facility is located along the Arkansas River and has seen a year-over-year increase in number of events in 2014 and 2015.<sup>48</sup>

Dickey-Stephens Park, which is home to the Arkansas Travelers, a minor league baseball team, is located in North Little Rock and has views of the Arkansas River from the stadium. Total attendance for home games for the Arkansas Travelers was 326,109 translating into an average attendance of 5,097 per game.<sup>49</sup> In 2015, the attendance for games was the highest ever in its seven year history with a total of 337,556 attendees.<sup>50</sup>

Average daily traffic counts for the Main Street Bridge show 10,000 cars utilize the bridge each day. Both the Junction Bridge and the Clinton Presidential Park Bridge allow only pedestrian traffic, but they are visible from all three major vehicular bridges spanning the Arkansas River in the downtown area. In addition to the traffic on the Main Street Bridge, the Interstate 30 Bridge has an estimated count of 114,000 vehicles per day.<sup>51</sup> More than 24,000 vehicles travel on the Broadway Bridge each day.<sup>52</sup> The bridges are featured on OnlyinArkansas.com, a blog celebrating the state, as a point of interest. Travelers are encouraged to visit the bridges twice during their stay, once during the day and then again at night, to experience the lighting.<sup>53</sup>

### Downtown Riverside RV Park

On the North side of the Arkansas River, visitors can stay at the Downtown Riverside RV Park and enjoy views of the bridges as mentioned in a recent review:

“We specifically went to visit the Clinton Presidential Library and downtown Little Rock. There is something to be said for location! With this park, all of the above are within walking distance. Literally the park is at the foot of the Clinton Presidential Bridge, which **is lit up every night with dancing lights**. Quite the show over the Arkansas River.”<sup>54</sup>



## The Bay Lights



The Bay Lights is the largest architectural light art piece designed by world renowned artist Leo Villareal, which he says was inspired by the earth's natural rhythms.<sup>55</sup> The project was announced in 2011 to celebrate the San Francisco-Oakland Bay Bridge 75th anniversary.<sup>56</sup> The sculpture is installed on 300 vertical cables, 500 feet (152.4 meters) at its tallest point, and stretches 1.8 miles (2.9 kilometers) long.<sup>57</sup> If the lights were stretched to their full length, it would equal the length of more than 26 football fields. The Bay Bridge is a double-decker suspension bridge, which was the longest bridge in the world at the time of construction. An estimated 100 million vehicles travel over the bridge annually.<sup>58</sup>

"As The Bay Lights is at the forefront of new technologies, it is perfectly suited to represent our City, which is known as the Innovation Capital of the World."

*San Francisco Mayor Edwin Lee*

With 25,000 Philips Lighting programmable white LED lights,<sup>59</sup> it is believed to be the world's largest LED light sculpture.<sup>60</sup> This unique application of LED lighting and software designed by the artist has the ability to create 255 levels of brightness per node.<sup>61</sup> The algorithms were originally designed to provide unique patterns for two years.<sup>62</sup>

Originally, the lighting of the bridge was intended to be a temporary, two-year display.

At the time of the installation, the Bay Bridge lighting was expected to be a tourist draw, but the impact became much broader than anticipated and led to The Bay Lights becoming a permanent display in 2016. The installation went dark from March 2015 to January 2016 to convert the lighting for permanent use. Leading up to Super Bowl 50 at Levi's Stadium, The Bay Lights began shining again January 30, 2016, at 7:25 p.m.<sup>63</sup>

## Economic Development

The installation of The Bay Lights has contributed significantly to economic development in the Embarcadero area of San Francisco.

### Hotels and Restaurants

More than 30 hotels and restaurants are located in the immediate vicinity with views of the Bay Bridge. Some restaurants and bars offering a view of the bridge have reported as much as a 30 percent increase in business since the initial display.<sup>64</sup>

Pete Sittnick, owner of the Waterbar and Epic Steakhouse, both of which have views of the bridge, noticed a 10 percent increase in revenue between 2012 and 2013, which has been attributed to patrons wanting to view the bridge lights. Additionally, after the bridge was lighted, Sittnick noticed increasing requests for later dinner reservations. Sittnick's properties also saw increased business and people staying longer in the bar areas. Requests in the online reservation system began to include a request for a table with a view of the bridge. Waterbar and Epic were also the locations for celebrations marking the farewell of the original installation in March 2015 and the relighting in January 2016.

Reviews of Waterbar from Yelp below exemplify that The Bay Lights is a big draw for the restaurant:

- "The Waterbar is a dining experience. We sat next to the windows facing the bay and the bridge. Our view was of the pretty dancing lights of the bridge and the water, which made for a beautiful ambiance."
- "Pace livens up at happy hour with beautiful views of the newly lit Bay Bridge."
- "In the evening, with all the lights from the bridge, it is a truly stunning and memorable backdrop."
- "I recommend sitting at the bar to get a great view of the bridge, which lights up at night."



## Area Redevelopment

Lumina, a 656-unit one million square-foot condominium development currently under construction is located on the south side of Folsom Street and overlooks the San Francisco-Oakland Bay Bridge. Developed by Tishman Speyer, marketing of the property features a photo rendering of the condominium and The Bay Lights at dusk.<sup>65</sup> The project cost was estimated at \$620 million.<sup>66</sup>

Park 181, located at 181 Fremont Street, is another development that is expected to be completed by June 2016. A short film featuring the rendering of the building against the skyline also prominently features the Bay Bridge and the lights coming on at dusk.<sup>67</sup>

Salesforce Tower is also under construction in the area and features views of the Bay Bridge. The 61-story Class A office building will be the tallest building in the western United States. Designed to achieve LEED Platinum certification, the building totals 1.6 million square feet.<sup>68</sup> Total cost of construction is estimated at \$1.1 billion.<sup>69</sup>

## Economic Impact of Installation

In 2012, the original installation of The Bay Lights cost an estimated \$8 million dollars. Annual electricity costs were \$11,000. An additional \$4 million was spent in 2015 to convert the lighting to a permanent display.

The combined impact of the construction in 2012 and 2015 of both installations and electricity for the installations expanded the San Francisco County Gross Regional Product (GRP) by \$10 million. The total impact on San Francisco County is nearly \$18 million, including taxes as well as the initial investment that remained in the County. State and local taxes generated as a result of the installations are more than \$570,000. The following table provides additional information about The Bay Lights impact on the County's economy.

### The Bay Lights Installations Impact

Jobs Supported	Payroll	Contribution to GRP	State and Local Tax	Total Impact
88.5	\$7,206,579	\$10,166,318	\$573,499	\$17,977,644

## Media Coverage

The original lighting of the bridge was featured on CNN with a 45-second video embedded into the story to show the light display.<sup>70</sup> Other outlets covering the original lighting include *The Huffington Post*,<sup>71</sup> NPR,<sup>72</sup> *Wired*,<sup>73</sup> the *Wall Street Journal*,<sup>74</sup> *The New York Times*,<sup>75</sup> *Forbes*,<sup>76</sup> *Business Insider*,<sup>77</sup> and *The Boston Globe*.<sup>78</sup>

The relighting of the Bay Bridge was featured in many national news outlets. Discovery News featured a story about the relighting that included an embedded YouTube video nearly two minutes in length of the bridge lights.

The original lighting was listed as the one thing to see in 2013 by Hemispheres magazine. It reportedly received more than half a billion media impressions in the first six months of the installation.

In May of 2016, The Bay Lights was identified as one of ten places to immerse yourself in digital art in a USA Today article published in May 2016. While the locations are not ranked, The Bay Lights is the first location listed.<sup>79</sup>





An eleven-page insert was placed in the *San Francisco Chronicle* to tell the story of the relighting of The Bay Lights in January of 2016.<sup>80</sup> Using SRDS (Standard Rate & Data Service) Media Planning Platform, the advertising cost of this insert is estimated to be more than \$48,000.

IlluminateSF.com is a website managed by San Francisco Travel to create a “City Gallery of Light Art.”<sup>81</sup> The site is a one-stop location for information about installations, experiences, artists, light art map and the annual light festival.<sup>82</sup>

San Francisco Travel is including The Bay Lights as a primary image for San Francisco, and while it will not replace the Golden Gate Bridge, it is the “go to” shot to represent the City at night.

### Impossible Light

*Impossible Light* is a feature length documentary that tells the story of the lighting of the Bay Bridge in 2013. The film premiered at the SXSW Film Festival in 2014 which boasted an attendance of more than 70,000 people.<sup>83</sup> The film was screened at the San Francisco International Film Festival, Newport Beach Film Festival, Maui Film Festival, MARFA Film Festival and many others.<sup>84</sup>

### Social Media

#### Twitter

@TheBayLights, a Twitter handle dedicated to promoting the display, has 3,747 followers and 874 likes. Another twitter account tweeting about the bridge is @baylightsfilm.

Others Tweeting on the Day of the Relighting
Good Day Sacramento – 65,000 followers
SF Station – 41,000 followers
99.7 Now – 89,300 followers
106 KMEL – 64,900 followers
WILD 94.9 – 65,400 followers
NBC Bay Area – 149,000 followers
ABC 7 News – 253,000 followers

Presenting Sponsors of the Permanent Display		
Heineken	Philips Lighting	Epic Steak
First Republic	Hotel Vitale	San Francisco
Lumina	San Francisco	Chronicle
Salesforce	Travel	KPIX 5
Mozilla	Waterbar	San

#BayLightsForever and #BayLights have also been used in tweets about the Bay Bridge lighting. #BayLights has an estimated reach of 10,747 with 11,589 impressions.<sup>85</sup>

When The Bay Lights was re-lit in January, Nancy Pelosi, Minority Leader of the U.S. House of Representatives, was present and posted the event on her Twitter feed. She has 792,000 followers and the tweet received 161 likes and 42 retweets.



#### YouTube

More than 100 videos of The Bay Lights are posted on YouTube. One of the most popular videos is posted by The Creators Project and includes an interview with Leo Villareal and has more than 100,000 views. Videos range from the time lapse from sunset to the lights coming on, fireworks over the Bay Bridge, installation interviews and a TEDx Talk.<sup>86</sup> The TEDx Talk channel has 4.2 million subscribers and The Bay Lights: Ben Davis at TEDxSF has 818 views and features Ben Davis, CEO of Illuminate the Arts, telling the story of The Bay Lights.

#### Instagram

In an analysis of Instagram posts related to The Bay Lights, the research found more than 9,000 posts with more than 424,000 total likes featuring the lighting of the Bay Bridge. Those posts, which included almost 6,300 unique uploaders, generated approximately 22,000 comments.<sup>87</sup>

## Partnerships

Illuminate the Arts (ITA), an organization focused on public art in San Francisco, and the California Department of Transportation partnered to bring one of the largest public art displays in history to life. All financial support for the project was provided with private funds.<sup>88</sup> While the display was originally permitted for two years, March 2013 through March 2015, ITA led the effort to bring the lights back permanently in January 2016.<sup>89</sup>

The Bay Lights is considered ITA's flagship project and, in fact, the organization was created to support the bridge lighting. To maintain the installation, the California Department of Transportation, the Metropolitan Transportation Commission and ITA came together again. The California Department of Transportation (CalTrans) agreed to maintain the lights on a permanent



basis if ITA could raise \$4 million for materials and installation. ITA successfully raised the funds with more than 100 individual donors contributing \$5,000 or more.<sup>90</sup> The most significant donation of \$2 million was made by Ted Taube, a prominent Bay Area philanthropist, who described the temporary light installation as “inspiring and dazzling.” When he learned of an imminent deadline to raise \$4 million, he quickly made the decision to commit to a matching gift through Traube Philanthropies.<sup>91</sup> Following completion of the permanent installation, the lighting was gifted to CalTrans.<sup>92</sup>

“Inspiring and dazzling”

Ted Taube  
Philanthropist

Ongoing support of ITA comes from the opportunity to dedicate a Bay Light through donations. Each of the 25,000 light nodes can be individually dedicated through the Shine It Forward program, which was initiated in December 2015.<sup>93</sup> Approximately 1,500 lights from the Gift of Light dedication program associated with the two-year temporary installation have

been given a light in the permanent installation to recognize their earlier gifts. That program raised approximately \$75,000, while the Shine It Forward program has generated approximately \$125,000 in its first six months.<sup>94</sup>

Shine It Forward has two levels for dedications, with most lights available for \$100, while the necklace lights are \$2,500 each. The top eight lights on the installation are reserved for ITA's Luminary Awards.

Another partnership that has come from the lighting of the Bay Bridge is ITA and the Berkeley Social Cohesion Lab, which will spend 2016 researching the psychological, physiological and social benefits of a publicly accessible work of art.<sup>95</sup>

## Sustainability

Designed to use 85 percent less energy than traditional lighting technologies, The Bay Lights' \$11,000 annual energy use for the initial two-year display was offset by a donation of solar credits from Clean Path.<sup>96</sup> Clean Path, located in San Francisco, is an investment firm focused on solar projects in North America.<sup>97</sup>

## Tourism

The Bay Lights is an important component of the "gallery of light art" in San Francisco. It is one of 27 installations in the city featured on the San Francisco Travel website. It was estimated the initial installation would be seen by 50 million people and create an economic impact of \$97 million.<sup>98</sup>

"The original Bay Lights installation served as a major source of pride in San Francisco and helped to increase tourism in the area," said Saeed Shahmirzai of Zoon Engineering, the Bay Bridge MEP Integrator. "Thanks to advanced LED and system monitoring technology from Philips, we are able to build on those benefits and install an energy-efficient work of art that makes the Bay Bridge a true beacon of the San Francisco Bay Area."<sup>99</sup>

## Light Art Map

The Bay Lights is the first attraction of 26 listed on the Light Art Map that provides a self-guided tour of installations across 12 San Francisco neighborhoods. The Bay Lights is also featured on the cover of the map.<sup>100</sup>

## Illuminate SF Festival of Light/Guide to Light Art

The Bay Lights is included in the annual Illuminate SF Festival of Light. The event features four guided tours, guided illuminated bike rides, artist talks and self guided itineraries. The festival, in its third year in 2015, runs from Thanksgiving to New Year's Day each year.<sup>101</sup> Most installations are accessible by public transportation and most offer free admission.<sup>102</sup> Light festivals of this kind are proving to be significant contributors to cities' economies in what are often off-season times. The Bay Lights is one of four North Beach/Embarcadero area installations featured in the Guide to Light Art, which was developed in 2015 and is expected to be updated annually.<sup>103</sup>

## Sight Seeing Tour

The Bay Lights is included as part of the CitySightseeing San Francisco Night Tour. During this 90-minute tour of the city, tourists stop at The Bay Lights for photo opportunities.<sup>104</sup>

In addition to tours on land, evening boat tours are also available for visitors to the area. Friday Night Bay Lights Sail is organized by SF Bay Adventures.<sup>105</sup> Many other evening/sunset boat tours travel under the Bay Bridge.<sup>106</sup>



## Trip Advisor

The Bay Lights is also a well-reviewed attraction on Trip Advisor. Below are some recent reviews posted on the site.<sup>107</sup>

- “Back and here to stay, I hope. The nightly illuminations are delightful, and the programming is much better now. The guy behind this is also doing a high rise nearby and they should have a great view. For us on the ground, enjoy! Very San Francisco!”
- “The bridge itself is very nice – well worth seeing in the daylight. However, it looks beautiful when the lights come on, dancing and shimmering in rhythmic patterns.”
- “Go to one of the local bars or restaurants and try and get a seat with a view of the bridge as it gets dark. With a glass in hand on a balmy night, enjoy one of the more romantic sites in San Francisco.”
- “The views are so awesome and the light shows are awesome! Beautiful pictures. Absolutely must do in San Francisco! We had a full moon over the bridge when we were there.”
- “The Bay Bridge is beautifully lighted at night and it can be seen from many of the restaurants in the area. Don't miss it as the new bridge shines!”

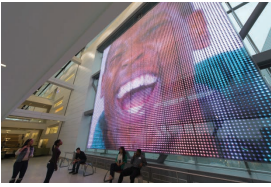
## Additional Illuminate the Arts Projects

Buckyball, also by artist Leo Villareal, will be on display at the Exploratorium on Pier 15 for six months in 2016. The Buckyball is available free of charge for the public to view.<sup>108</sup>

Since early 2016, ITA has been working to raise funds for a new project, LightRail. This project will be the world's first subway-responsive light sculpture. LightRail will be a 2.1-mile (3.4-kilometer) long piece of artwork located at Market Street to celebrate a history of multi-modalism.<sup>109</sup>



## Gateway Community College



Gateway Community College (Gateway), which was created from the merger of the former South Central Community College and Greater New Haven State Technical College in 1992, made a decision to relocate its campus to downtown New Haven in 2012. This new location, in the shadow of Yale University, is a state-of-the-art urban campus featuring 90 general purpose classrooms, 22 computer labs, 10 meeting spaces, a two-story Library and Learning Commons, and many other amenities to support its student body.<sup>110</sup>

The college offers more than 100 accredited degree and certificate programs that are accessed by 14,000 students each year. In developing its new campus, Gateway leaders wanted to create a facility that provided a sense of pride among students and visitors to the campus.

As part of the new campus design, Gateway received funding from the Connecticut Commission on Culture and Tourism Art in Public Spaces program to install a large LED digital mural that would feature faces of students, faculty and staff. The program sets aside one percent of the construction budget of each state-funded project for the integration of public artwork. The College Faces installation, one of more than 50 works of public art found on community college campuses in Connecticut, was designed by Electroland, and is seen as a symbol of Gateway's mission to bring the school community out into the streets, just as it brings the community into the campus.<sup>111</sup>

### Community Engagement

Gateway's new campus was selected to participate in the state's Art in Public Spaces Program, which held a competition to determine the nature and design of the art installation. That competition received many responses, with a variety of ideas about how to approach the project. Some took a more traditional approach, calling for the use of classical art displays. The final selection was made by a committee of state officials.

The winning designer was Cameron McNall of Electroland, who envisioned a large digital light display that showcases the faces of the Gateway community, including students, faculty and staff. Electroland, which is based in Los Angeles, includes artists who are internationally recognized for their large-scale interactive light and sound displays.<sup>112</sup> The designer initially proposed a more abstract lighting design, but he was asked to develop a more site-specific idea, which resulted in the College Faces design.<sup>113</sup>

The faces featured on the installation are actually slow-motion videos that transition to a new face every 30 seconds. The College Faces mural, which is 36 feet by 36 feet (11 meters by 11 meters), is visible from both inside the college facility on an interior pedestrian bridge, as well as from New Haven Street.

The entire Gateway student population was offered the opportunity to volunteer to be featured in the College Faces project. All who volunteered – approximately 350 – were photographed over a three-day period and are part of the installation, which Gateway officials say accurately portrays the diversity of the student population. Cameron McNall worked with the featured participants throughout the shoot to ensure that the photographs were kept within his design. Additionally, because of the unique nature of the space, which has a structural crossbar interrupting the mural, McNall also ensured that placement of the faces was appropriate.

The majority of Gateway's students complete their education within three years. Given the anticipated turnover in student population, the plan calls for "refreshing" the photography every five years, assuming funds are available for those updates.

## Economic Impact of Installation

The College Faces installation cost was \$734,000. The contribution to the Gross Regional Product (GRP) of New Haven County was \$794,000. The total impact of the project was almost \$1.5 million, including more than \$80,000 in state and local taxes generated. The following table provides additional data about the impact.

### College Faces Impact

Payroll	Contribution to GRP	State and Local Tax	Total Impact
\$580,353	\$794,346	\$82,314	\$1,460,563

### Media Coverage

Because the College Faces mural is visible to passing motorists and pedestrians, as well as students and visitors to campus, it serves to heighten awareness of Gateway's presence in the downtown area.

Additionally, it has been featured on websites and in marketing materials produced by Gateway.

The College Faces project is an integral component of the campus and, as such, is the focus of some campus marketing efforts. While it is impossible to tie the College Faces mural directly to enrollment increases at Gateway, the installation does play a key role in student recruitment. It is included as a key stop on the Gateway Self-Guided Tour brochure, which is available online and in printed form, and is also pictured on the Gateway Community College website.<sup>114</sup> In the last five years, Gateway has seen an 11 percent increase in its student population.<sup>115</sup>

The Gateway installation is featured on the Connecticut Department of Economic and Community Development website, which showcases several public art installations on community college campuses. The site includes a photograph of the College Faces mural, along with a link to a more comprehensive description on the Arts in Public Spaces site.<sup>116</sup> It is also featured in a PowerPoint presentation about the Arts in Public Spaces Registry produced by the State as an example of public art.<sup>117</sup>

A video showing the transition to various faces on the mural is available on Vimeo and has been viewed more than 200 times. The video, provided by Electroland, includes shots of the College Faces screen from both inside the pedestrian bridge and from the outside street view.<sup>118</sup>





The College Faces project has also received recognition on other social media outlets. Posts and photographs of the installation can be found on Twitter, Instagram and Pinterest. It is also featured on the CodaWorx website, which is a global platform to showcase design projects featuring artwork.<sup>119</sup>

A feature story on Inhabitat.com provides a comprehensive look at the new Gateway campus, including the College Faces installation. This site is focused on design and innovation in sustainability and has more than 550,000 registered subscribers.<sup>120</sup>

The Gateway installation has been recognized with two awards. In 2014, the Lighting Control Innovation Award of Merit, was presented by the Illuminating Engineering Society. The same year, CodaWorx recognized the project with a Merit Award in the education category.<sup>121</sup>

## Partnerships

When Gateway made the decision to relocate its campus to downtown New Haven in 2012, the selected site had fallen into disrepair. The City of New Haven sold the property to the State for \$1 in hopes that the College would help revitalize the city's Ninth Square neighborhood adjacent to Yale University.<sup>122</sup> While the new campus was located in a thriving city and provided easy access to cultural and retail amenities nearby, Gateway officials wanted to develop a strong relationship with the surrounding neighborhoods. Additionally, it was hoped that the facilities would be used and supported by the broader community.

The College Faces installation was an important tool in taking the College and its students into the neighborhood. The interactive wall engages the community by encouraging passersby to look into the facilities and understand more about the students, faculty and staff.

While the installation's designer was committed to maintaining the integrity of the project and did not want logos and other forms of advertising incorporated into the display, Gateway officials have utilized the project to promote causes that align with the school's mission. This has included a very limited number of one-day events such as displaying the red dress logo that commemorates women's health issues and to recognize two key local elected officials who have been major supporters of Gateway. However, the college is very cautious about deviating from the original intent of the artist.<sup>123</sup>

"It was important to project a public face as Gateway moved into downtown New Haven in the shadow of Yale University."

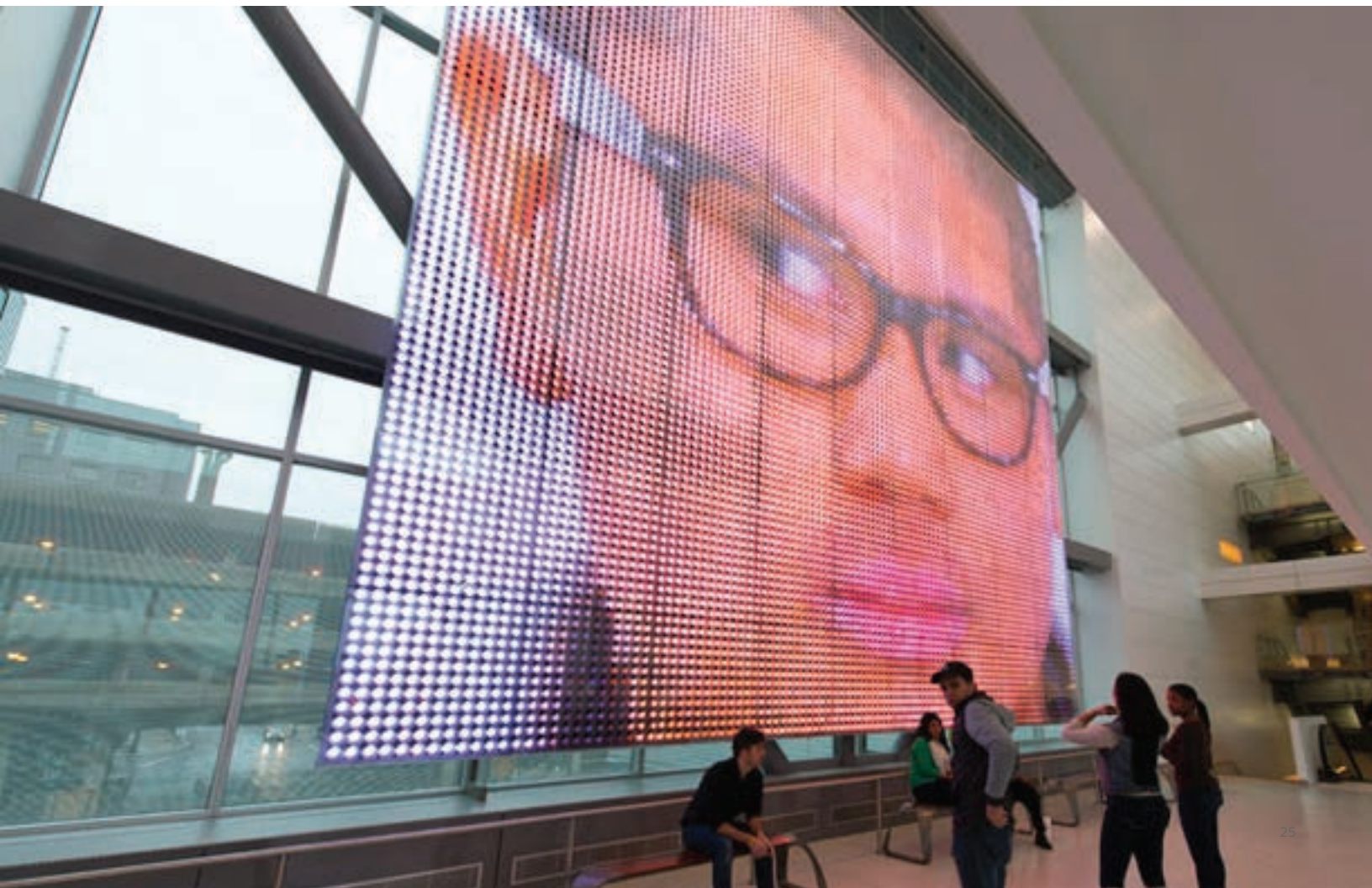
*Tamara Dimitri,  
Connecticut Arts in Public Spaces Program*

## Sustainability

Gateway has made a strong commitment to sustainability in the development of its new campus. The facility has achieved LEED Gold certification from the U.S. Green Building Council in recognition of more than 50 features, including recycled building materials, campus-wide recycling, brownfield redevelopment, access to public transportation, green housekeeping, indoor air quality management, light control systems, an outdoor garden and water-efficient landscaping, and use of renewable green power.<sup>124</sup> In addition to its LEED certification, the campus received an Award of Merit from the Connecticut Green Building Council in 2013 for the College's continued investment in Connecticut's green community.<sup>125</sup>

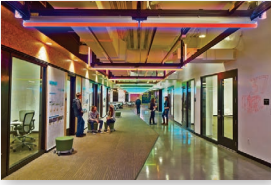
The College Faces project, which features 47,000 LED light nodes, is an important component of the college's commitment to sustainability. The use of Philips Lighting LED light strands<sup>126</sup> not only provides full-color video capabilities for the installation but is also energy efficient.<sup>127</sup>







## District Hall



District Hall, which is the heart of Boston's new Innovation District, opened in 2013 as the world's first public innovation center with dedicated civic space for the public to gather and exchange ideas. Part of what sets District Hall apart from other innovation spaces in Boston is its ground-floor location with public, drop-in meeting space, which is more inviting than what may be found in similar facilities.

As the centerpiece of Seaport Square, the 12,000-square-foot (1,114.8-square-meter) facility provides a place for entrepreneurs and innovators to meet, exchange ideas and host events. District Hall includes a restaurant and café, flexible event space, lounge and working space, and flexible pods for meetings, classes and exhibitions. The architecture is reminiscent of an industrial past as it is located on the site of a former rail yard.<sup>128</sup>

"The lights down the center of the space are very visible from outside. They make people curious and reinforce an inviting quality. In fact, they have a beacon effect that sucks people into the space."

*Nicole Fichera,  
General Manager, District Hall*

When the space was designed, everything about the physical look and feel was intentional in creating a welcoming environment. As part of that design effort, special lighting provided by Philips Lighting was installed in the middle of the space to create an interior street feeling. As the "front door" for the Boston innovation community, District Hall has a civic presence on the street that invites people in.

District Hall is operated by the Venture Café Foundation, a not-for-profit sister organization to the Cambridge Innovation Center. The Foundation is also responsible for providing programming at the facility.

Since its opening, the lighting has been integrated into the innovative nature of the space as local technologists custom program the color-changing installation.<sup>129</sup>

## Economic Impact

The installation of the lighting at District Hall cost an estimated \$25,000. Philips Lighting was an in-kind sponsor of the project. This expanded the Suffolk County Gross Regional Product (GRP) by \$21,308 and had a total impact of \$37,413. The following table provides additional details about the impact.

### District Hall Lighting Impact

Payroll	Contribution to GRP	State and Local Tax	Total Impact
\$16,304	\$21,308	\$802	\$37,413

## Community Engagement

### District Hall Visitors

The impact of the District Hall lighting can perhaps best be quantified by the users of the facility. The space is home to a variety of special events, networking functions, meetings, training sessions, and general office/workspace.

With an official opening in October 2013, preceded by some pre-opening activities, District Hall welcomed more than 7,600 people at 57 events in its first few months. Key events during that period included the City of Boston Social Media Summit, the 1776 Challenge Cup and the Boston Legal Innovation Meetup. In addition to these events, District Hall also hosted drop-in meetings in the open lounge space, office hours with business experts and visits from international delegations.<sup>130</sup>





In its first full year of operation, District Hall hosted more than 500 events with 30,000 attendees and 25,000 users of public meeting space. In addition to these traditional uses of the space, District Hall also saw an aerial performance by acrobats, start-up founders playing jazz on a writeable piano, and demonstrations of how electrical signals from plants become music, as well as Welcome Wednesday pop-up retail for local entrepreneurs.<sup>131</sup>

With continued rapid growth, in 2015 District Hall saw more than 800 events with 30,000 attendees, in addition to 35,000 users of open meeting space. Training opportunities and resources for entrepreneurs also expanded in 2015 to include office hours with investors, attorneys, and marketing and PR experts; leadership and skills development through the Intelligently Exchange program; and partnerships to support entrepreneurship for military veterans.<sup>132</sup>

Following is a summary of key metrics by year:

	2013 <sup>133</sup>	2014 <sup>134</sup>	2015 <sup>135</sup>
Events	57	500+	800+
Event Attendees	7,600	30,000+	30,000+
Public Meeting Space Users	N/A	25,000+	35,000+
In-Kind Space Value	\$132,000	\$1,000,000	\$1,000,000
Space Revenue	\$28,500	\$400,000	\$500,000

Not only have each of these visitors been exposed to the lighting that sets the creative and inviting mood for the space, but the rapidly growing use of District Hall is an indication how lighting can effectively draw in the public from the outside.

## Media and Recognition



District Hall has been recognized as a leader in the design of innovation spaces, with the Brookings Institution saying, “District Hall is the hub for Boston’s Innovation District, facilitating networking and idea sharing.”<sup>136</sup>

The facility has been featured in a variety of architecture, business and consumer publications ranging from *Fast Company* to *Architectural Record*. Many of these articles mention the role that lighting plays in the design of District Hall. The following are highlights from those articles:

- “Writeable wall surfaces by IdeaPaint, easily reconfigurable furniture by Hawthorn, and programmable lighting created in partnership with Philips Color Kinetics all work together to allow users to customize the space.” *ArchDaily*<sup>137</sup>
- “The cantilevered roof gestures toward the harbor, and large glass panels and bright LED lights make it a beacon at night, a transparent advertisement for the bustling activity within.” *Fast Company Design*<sup>138</sup>
- “The main gathering space is accessible from all the major surrounding streets, and the entrances are visually connected by colored lighting, ‘reinforcing the role of the building as a public place and path,’ according to the architects.” *Fast Company Design*<sup>138</sup>

- “Across a walkway colored by a Philips Color Kinetics light installation stand three function rooms that can host meetings or be fitted out for pop-up retail.” *Metropolis*<sup>139</sup>
- “Perks: The only writing on the walls at District Hall is on the dry-erase paint. Customizable color-changing LED lights and a piano help drive home the ‘whistle while you work’ approach.” *The Improper Bostonian*<sup>140</sup>
- “Architect David Hacin walks the pathway that joins District Hall’s two halves. A constantly changing array of neon chasing lights adds to the festive atmosphere, and contrasting floor textures— the shiny part reflecting the light show — give the space the quality of a busy urban street.” *Design New England*<sup>141</sup>
- “With multiple meeting ‘pods,’ a lofty and dividable event space and the in-house restaurant and café, District Hall has all the amenities necessary to appease the tastes of a city’s booming entrepreneurial scene, not to mention additional aesthetics designed to enhance the space’s creative energy, like the entrance room’s ever-changing, rainbow-colored fluorescent lights.” *BostInno*<sup>142</sup>

District Hall has also received an award for its design, which acknowledged the lighting in the facility. *Architect magazine* recognized District Hall with an Honorable Mention in the 2014 Annual Design Review Awards. In its description of the facility, the magazine said, “In support of the center’s purpose as an incubator, the interiors are designed to be easily reconfigurable, and include roll-down partitions, Haworth furniture, IdeaPaint wall surfaces, and Philips Color Kinetics programmable LEDs.”<sup>143</sup>



## End notes

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