



LIGHT AND THE CITY

Infrastructure improvement projects in the developed world have brought public attention, and in some cases action, to the replacement of aging bridges, highways and water systems. Yet a more organic, and often less costly, effort to enhance the built environment is a growing public/private movement to install new lighting into the urban fabric. Style and excitement are transforming previously static neighborhoods and districts.

Instead of being sparked by government-funded mandates, the

current urban revitalization trend is often the result of successful collaborations to bring people together in cities to live, work, play and be entertained, in any combination of these interactive activities. In today's contemporary world, lighting provides the interwoven, illuminated warp-and-weft of the social and structural fabric that makes up the modern city.

Lighting changes can be as extensive as the nine-block, \$850-million mixed-use Kansas City Power & Light District project, or a

single elegantly lit structure, such as the waterfront of the Brooklyn Bridge (above), that becomes an identifiable icon in its urban locale. Cities such as Sydney, Chicago and Louisville have announced plans for multi-block, public/private sector-funded improvements in the infrastructure and the commercial development that follows.

Municipal officials are well-aware that a strong tax base is supported by the success of prosperous urban tenants serving the region's population. Overall

▲ BROOKLYN BRIDGE PARK

Brooklyn Bridge Park will create an 85-acre civic landscape, transformed from a post-industrial waterfront along the East River's shoreline. Pier One, first of the phased sites completed, combines natural open and planted spaces. Above, event attendees occupy terraced steps and the lawns. Michael van Valkenburgh Associates are landscape architects for the overall project. Photo: Etienne Frossard.



▷ City Streetscapes

Avenue of the Arts Philadelphia, Pa.

Photos:
James Abbott, Barry Halkin

Located along several blocks of Broad Street, to the north and south of Philadelphia's white marble and granite City Hall, is the Avenue of the Arts, home to numerous retail shops plus cultural, dining and arts venues. Color-changing LEDs give the streetscape a lively coordinating visual identity during the evening hours.

Here, looking north on Broad Street in the Avenue of the Arts—in a registered historic district that includes the Academy of Music, which dates from 1857—The Lighting Practice illuminated the facades of twelve buildings in a six-block area. For color-changing buildings, TLP used Color Kinetics Colorgraze, Colorblast, and Light System Manager as the controller, and wireless signal transmission by City Theatrical Show DMX.

A BALLET OF LIGHT

The Center City District of Philadelphia, a collective of private sector organizations that promotes the downtown area as a destination for arts and culture, sponsored the lighting of the façades of a dozen buildings along stretches of Broad Street. Design and programming by The Lighting Practice.

illuminance levels create nighttime environments that instill feelings of safety and enjoyment that bring revenue to the city's coffers. Lighting that makes creative use of today's technology is key to attracting residents and visitors into urban areas.

One primary target market spurring investment in downtown upgrades and improvements in areas of population density is the growing number of young adults who have moved into city neighborhoods. A study sponsored by the

Pew Charitable Trusts found that young adults are drawn to the city "by its vibrancy, diversity, culture and nightlife." The 30-city survey revealed six cities (see Table 1) where the increase in the number of 20-to-34-year olds during a six-year period was more than double the median survey increase.

The study's authors expressed caution, noting that the boom, however promising, could be interpreted as fragile. In some cities, including Philadelphia, concerns about life in the city—crime, the

perennially troubled school system, and a soft job market—could lure half of those in the 20-to-34-year-old group to relocate to communities outside of the city center.

Lighting has more than done its part to visually improve the quality of life in these six cities and other domestic and international urban centers. A review of significant recent projects to support this concept can be grouped into three categories:

- ▷ City Streetscapes
- ▷ Urban Renewal & Revitalization
- ▷ Illumination of Iconic Structures

TABLE 1. Growth in 20- to 34-year-olds
(As share of overall city population 2006-2012)

City	Change in %
Philadelphia	6.7%
Boston	5.7%
Nashville	5.6%
Baltimore	5.4%
San Francisco	5.3%
Denver	5.0%
30-city median	2.7%

Source: U.S. Census Bureau, American Community Survey, One-Year Estimates 2006-12. ©2014 The Pew Charitable Trusts.



► Urban Renewal & Revitalization

Newstead Gas Ring

Brisbane, Australia

Photo:
Courtesy Heath Williamson

The Newstead Gas Ring is an iconic piece of Brisbane's historical architecture, now becoming a hub of a major urban regeneration project. Planning that has extended over two decades is being implemented to transform the formally derelict post-industrial wasteland into a busy and vibrant contemporary living, working, and commercial environment. New lighting has brought the superstructure to life with a design by Heath Williamson of Fire-fly, who developed a program using 500 Anolis LED lighting fixtures placed on every bracing cross-member of steel on the middle and top rings.

BROUGHT BACK TO LIFE

Lighting has introduced into the scene such structures as Brisbane's once-abandoned Newstead Gas Ring. Constructed on the banks of the Brisbane River in 1887, its 499-ft circumference is supported by 20 66-ft tall

► Urban Renewal & Revitalization

Canada Square at Harbourfront Centre

Toronto, Canada

Photo:
Light Monkey Photography

Canada Square at Harbourfront Centre in Toronto was originally conceived by landscape architects Michael van Valdenburgh Assocs. as a space that frames an idealized view of the harbor and the islands beyond. Now the heart of Toronto's waterfront, it underwent an extensive transformation, creating lively public spaces and amenities such as entertainment venues and dining options where there had once been block-long stretches of underused shipping facilities.

Laura Solano, a principal of MVVA, points out that the design was planned so that all of the square's support and lighting elements are integrated into this Redwood grove landscape. "The wooden poles by Structura offered the perfect complement to this tree grove in scale and in their materiality," says Solano. Structura's glue laminated Accoya wood round, tapered wood and metal poles are 25-ft. high, fitted with Selux Olivio 70W T6 metal halide accent lighting heads.



MAKING NEW PEOPLE-PLACES

Harbourfront Centre's extensive site transformation has created two squares—one with islands of planted trees, and the other an outdoor exhibition and marketplace



GOOD FOR BUSINESS AND FOR PEOPLE

Businesses along the streets feeding into Guelph's Market Square have benefitted from increased traffic created by the newly illuminated landscaped space fronting City Hall, featuring a skating rink in winter and a fountain during the rest of the year.

A new annex to the city's 1850s-era city hall prompted the construction of a public square that could be used as a skating rink. Placement of the posts, positions of the street lighting, lights near the benches, and the overall ambiance was defined collaboratively between landscape architects Janet Rosenberg & Studio and lighting designers Éclairage Public. Four Technilum poles were posted around the rink, each fitted with 12 Lumenbeam Large Color Changing fixtures. The luminaires were configured for pole-mounting, and snoots reduce the impact of long-distance lighting.



► Urban Renewal & Revitalization

Guelph Market Square
Guelph, Ontario, Canada

Photos:
Courtesy Lumenpulse



Completed in 1912, the 10-story Galleries Lafayette department store is a landmark of Art Nouveau architecture in Paris. One of the city's quartet of world-class specialty stores that also includes Printemps, Le Bon Marché, and La Samaritaine, Galleries Lafayette celebrated its one-hundredth anniversary by commissioning French light designer Yann Kersalé and architect Djuric Tardif to wrap the exterior in a web of 19,200 Traxon XL-3 RGB LEDs encased in aluminum bars. A pair of LEDs line both sides of each bar, one facing the façade and the other pointed toward the street. Colors can be adapted for special events and changed for the seasons. The design will remain in place until 2018.

► Illuminating Iconic Structures

Galleries Lafayette
Paris, France

Photos:
Courtesy Traxon



ALL WRAPPED UP

More than 30 million people visited the 710,000-sq.-ft. Galleries Lafayette store on Boulevard Haussman last year, making it the second most-visited attraction in Paris, after the Eiffel Tower. To celebrate its centennial in 2013, a \$100.4 million renovation was launched by interweaving miles of computer-controlled LEDs on its façades.



▷ City Streetscapes

Streets Ahead—Phase 1 Belfast, Northern Ireland

Photos:
Courtesy Traxon

When the city of Belfast's Dept. of Social Development set aside funds for reviving its urban landscape, new seating, signage, landscaping, public art and lighting were included in the project, which was identified as "Streets Ahead." Phase 1 included 14 streets that have been transformed to attract residents and tourists and form a cultural core used for major public events and gatherings. Drawing on the city's maritime tradition as its historical theme, the east side of Donegall Place features eight illuminated 54-ft-high sculptural interpretations of a ship's mast.



SIGNALING A NEW CHAPTER

Once one of the world's major shipbuilding centers, Belfast is rewriting its economic forecast by recasting its City Centre area to attract tenants to fill offices and id retail spaces. A multidisciplinary effort led by AECOM includes lighting design by AT Atkins.

▷ City Streetscapes

Fulton Street Mall Brooklyn, New York

Photo:
Horton Lees Brogden Lighting
Design

An investment of \$15 million is transforming Brooklyn's Fulton Street into a modern shopping thoroughfare. Located in the most populous of New York City's five boroughs, Fulton Street went into decline as a shopping destination toward the end of the 1990s. As Brooklyn became a growing alternative to Manhattan, several civic improvement groups banded together to attract mid- and upper-mid price stores and shops. The goal was to create a clean, contemporary physical environment with improved landscaping, additional seating and public spaces, and infrastructure improvements.

Horton Lees Brogden Lighting Design created a pole lamp with two high color rendering ceramic metal halide heads to illuminate both the street and pedestrian sidewalks. Three pole types were used: 33-ft-tall with 250- and 70W CMH for most fixtures; and at Albee Square, 17-ft-tall single-head fixture with 100W CMH, and 17-ft-tall double-headed fixture with two 70-W CMH lamps.



CHANGING CHARACTER

A dramatic facelift has turned Fulton Street from a truck-clogged commercial street catering primarily to vendors of lower-priced products to a broad-based shopping destination catering to Brooklyn's many income levels. The pedestrian side of the double-headed pole lamps illuminates the façades of buildings that frame the retail corridor.