

16th Street Mall

DENVER, CO

Landscape Forms Element: Custom Lights

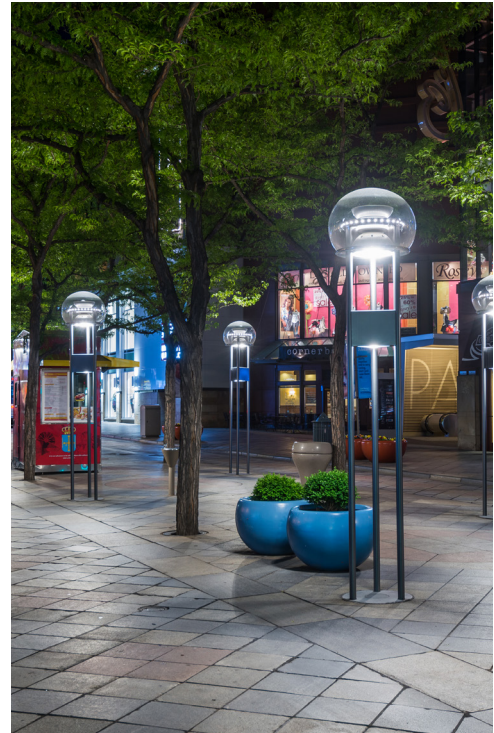
Denver's 16th Street Mall has been the centerpiece of the city's downtown since 1982. The original 13 block pedestrian retail space and public transit corridor designed by architect I.M. Pei is now over a mile long and serves more than 45,000 shoppers and public transit riders a day. After years of heavy use a new Denver Downtown Area Plan called for upgrades to the Mall, including refurbishing the custom light designed by Howard Brandston that had become an iconic element. Strikingly original in form and groundbreaking in function, it was designed to provide multiple layers of light and employ incandescent bulbs.

Three decades later, the fixtures were in disrepair, the multilayered lighting scheme had been abandoned, and warm-color bulbs had been replaced by yellow-color high pressure sodium sources. The non-profit Downtown Denver Partnership (DDP) looked to lighting specialists Clanton & Associates for expertise and Clanton turned to Landscape Forms lighting engineers and Studio 431 custom products division to carry out the retrofit.

Studio 431 engineers determined that it would be more cost effective to replicate than to repair the fixtures and advised replacing the steel materials with long-lived, corrosion-resistant aluminum parts. Studio 431 Vice President Robb Smalldon explains, "We reverse-engineered the fixture, working from existing lights to replicate the intention and dimensions of the original design as closely as possible. It was an honor for us to help realize the vision for this important public place."

In parallel efforts, the Landscape Forms Lighting Group assessed DDP's performance expectations and recommended using LEDs, rather than proposed metal halide bulbs, to achieve greater energy efficiency and better light color and distribution, and re-enable the multi-dimensional illuminance central to the original design.

Drawing on its innovative work with LED arrays and diffuser lenses, the group engineered and built a prototype for testing on site. The re-engineered LED light illuminates the pedestrian walkway with light of comfortable intensity, in color that properly renders skin and clothing, and replicates the original "twinkle ring" of small lights encircling the pole that casts light sideways to illuminate the fronts of stores and restaurants. Two lights were installed and tested for more than a year. At the end of the trial period DDP enthusiastically opted for LED and 187 lights were installed on the Mall in the fall of 2016. The Studio 431 team was on site during the installation, training the contractors and monitoring the process.



In addition to reducing energy and maintenance costs, the new 16th Street Mall light is a thing of beauty that provides a better user experience. In a post-installation survey, Mall users showed a perceived increase in visual performance and safety. Rick Utting, Landscape Forms Director of Engineering + Lighting, declares, "The gem of this story is that we were able to use new technology to fulfill a lighting legend's forty-year-old vision."

