RECASTING A SHOWBIZ CITY IN BEST LIGHT

AMERLUX'S HIGH-PERFORMING AVISTA LED LIGHT ENGINE REDUCES ENERGY COSTS BY 75% IN LA'S HISTORIC DOWNTOWN AREA

Home to nearly four million people, Los Angeles is a sprawling city renowned for its appealing climate, metropolitan culture and storied position as the seat of the entertainment industry. Steeped in rich history, the city's unique spirit is derived from its century-old legacy and love of modern architecture. As a result, Los Angeles was steadfast on embracing new technologies and preserving its past when it planned to upgrade the streetlights within its historic downtown section several years ago.

"We needed a more creative solution for some of our bigger post-top and glass globe fixtures throughout the city and downtown. This led us to Amerlux's Avista fixtures, which are working very well."

— Norma Isahakian, Assistant Director for the Los Angeles Bureau of Street Lighting

Avista® AVI
The Avista is designed to integrate into almost any post top luminaire as a powerful, energy efficient, and long lasting LED system.

Among the more than 185,000 of Los Angeles' roughly 215,000 streetlights that have so far been upgraded to LEDs by the city's Bureau of Street Lighting, the 1920s-era streetlights within the historic downtown section of LA were a particular target for upgrade by the city. Previously lit with older, inefficient 250-Watt high pressure sodium (HPS) technology, the lighting in the downtown area—home to the city's popular Arts District and "Historic Core" section—was in need of modernization but required a more customized approach to ensure its continuity and compatibility with current LED technology.

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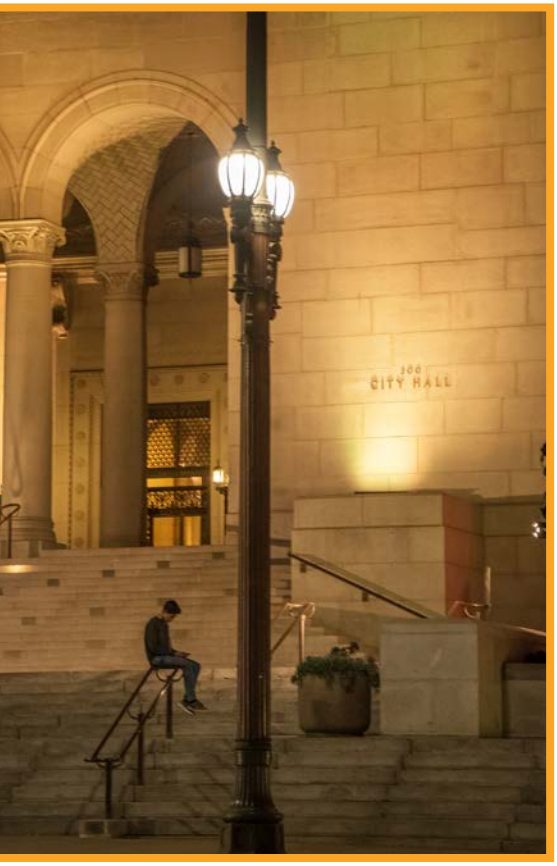
A SUPERIOR SOLUTION

With streetlamps sitting 25 feet high and topped with unusually large fixture housings that measured 3-4 feet from their base to their finial, "maintenance of the city's vintage street lighting fixtures downtown was an involved and costly process, which often required the city to close the street and detour traffic," said Charles Valdepena, principal of Los Angeles-based manufacturer's rep agency ACV Lighting Consultants. He said the old HPS lamps and ballasts required frequent maintenance by the city, as well as special disposal at an additional cost. Most importantly, "the HPS lamps cast a dingy, yellow light that depreciated in lumen output significantly as they aged, creating not only an aesthetic issue but a safety concern for the city and the increasing number of residents and visitors drawn to that area of town," Valdepena added.



With the old HPS lamps also suffering from glare issues and the loss of much of their light output upwards into the night sky—an unwelcome by-product for apartment dwellers and businesses nearby—"the city wanted more light on the ground and needed to bring the lighting up to date," he said.

Working closely with the team from LA's Bureau of Street Lighting, whom he met at the LightShow West trade show in Los Angeles in 2012, Valdepena carefully reviewed the city's specifications for lighting in these historic fixtures and ultimately recommended the use of Amerlux's Avista, an advanced LED light engine ideal for retrofitting traditional and post-top luminaires, as well as new construction applications. Featuring a completely sealed LED optical chamber, the highly-efficient Avista delivers cutting-edge optics and extraordinary output to meet the most demanding street lighting needs within today's cities and municipalities, while its simple-to-install design incorporating adjustable height levels allows users to position the light exactly where it's needed for optimal application and maximum performance, taking exterior LED lighting to the next level.

After working with Amerlux's engineering team to secure lab-tested confirmation that the Avista lighting solution met and/or exceeded all of the IES' "RP8" street lighting guidelines for footcandles, lumens, and other key performance measures, the city installed a group of the fixtures on Main Street as a test. Following its success, the city completed the installation of more than 600 Avista fixtures across a six-mile swath of the downtown area, which encompassed LA's famed Spring Street, Hope Street, Olive Street, Figueroa Street, and Olympic Boulevard from 2nd to 9th Street. Since completion of the upgrade, the city and its taxpayers are enjoying an up to 75 percent reduction in lighting energy consumption and costs in the upgraded area, while visitors are benefiting from enhanced visibility and greater peace of mind.

TRANSFORMING THE CITY'S LANDSCAPE

"The downtown area went from dingy, yellow 250-Watt HPS fixtures with a monochromatic 2100K color temperature and 'glare bomb' properties to long-life, 60-Watt LED technology with a much cooler color temperature and significantly improved color rendering," Valdepena said of the transformation, which has been met with only positive feedback from the city and its occupants. "The effect is now a brighter, pleasant, soft blanket of light that enhances visual acuity and uniformly distributes the majority of light downward where it's needed."

Candace Leos, Communications Manager for The Midnight Mission, a more than 100-year-old homeless shelter located within Los Angeles' famed 52-block ''Skid Row'' section, just blocks from the historic downtown area, agreed. "Safety is a big issue for the entire downtown area and has been a widespread problem," confirmed Leos, who frequently ventures through downtown LA on her way to and from

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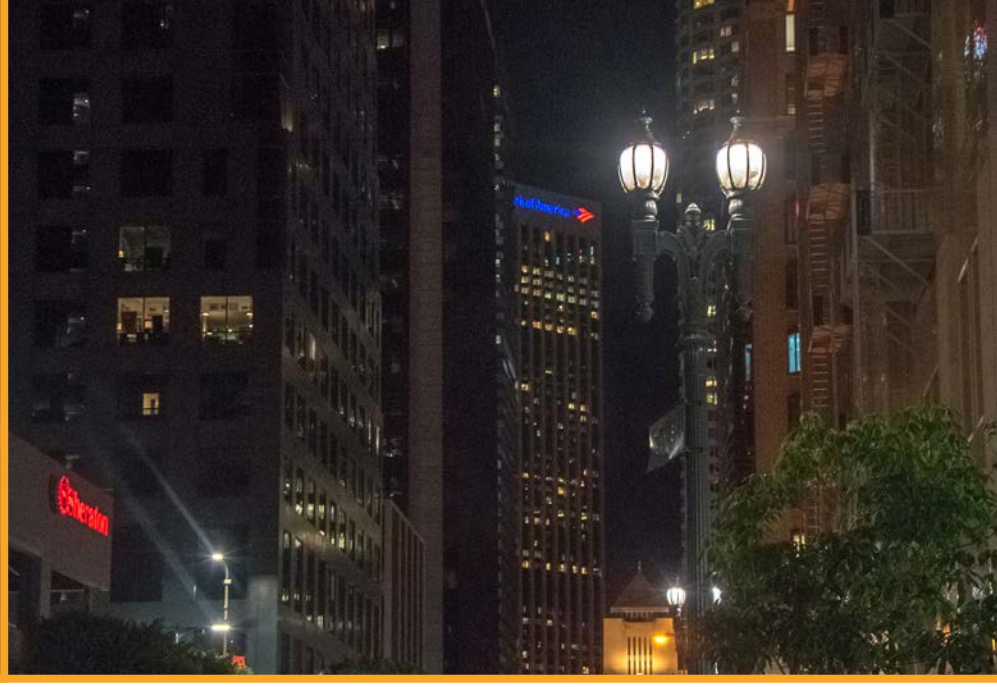
"The new lights that were installed are beautiful. They're brighter and cover a wider area, allowing people to see more clearly than before and, ultimately, make me feel safer." — Candace Leos, communications manager for The Midnight Mission homeless shelter, who walks to work

work. "The new lights that were installed are beautiful. They're brighter and cover a wider area, allowing people to see more clearly than before and, ultimately, make me feel safer. I've always loved the historic feel of downtown LA and think that it's important to hold onto that history," she said. "It's great that the city was able to bring its lighting into a more modern era without compromising the look and feel of the old fixtures."

"These ornamental, decorative fixtures help define LA and we want to keep them at all costs," confirmed Norma Isahakian, Assistant Director for the city's Bureau of Street Lighting. "While the majority of the city's streetlamps involve cobra-head fixtures, some of our bigger post-top and glass globe fixtures throughout the city and downtown couldn't just use a standard screw-in lamp. We needed a more creative solution and this led us to Amerlux's Avista fixtures, which are working very well," Isahakian said. "Our total LED program is saving up to 75 percent in energy consumption, which amounts to quite a bit of cost savings annually, and is meeting all of our lighting needs. Overall, we're well-lit on the streets, people love the white light and improved CRI, and we feel very positive about the LEDs installed throughout the city and downtown area."

Based on its proximity to many iconic landmarks, including LA's City Hall, Grand Central Market, and Olvera Street, "this was a dream project," Valdepena said of the successful upgrade he helped oversee using Amerlux's Avista LED technology. "I grew up in downtown LA and it fills me with a tremendous sense of pride to have helped positively upgrade the landscape in this historic city."

"The nearly century-old fixtures in LA's downtown area are extremely important to the city," Valdepena concluded. "Designed to the city's specific needs and lighting standards by Amerlux's team of engineering experts, Amerlux's Avista LED retrofit kit was the only light engine approved for downtown LA's historic fixtures and successfully uses new technology to help preserve their vintage beauty."



Images courtesy of Charles Valdepena and Rob Aguilar

PROJECT SUMMARY

End User

The City of Los Angeles/Bureau of Street Lighting

Project Scope

Upgrade of more than 600 1920s-era high pressure sodium-lit streetlights in downtown LA to Amerlux's Avista LED light engine in 2014-2015

Agency Rep

ACV Lighting Consultants (Los Angeles)

Upgrade Benefits

- The city has reduced its power consumption from street lighting by 75 percent and is enjoying commensurate energy cost savings.
- The LED Avista light engine improves visibility, minimizes glare, and makes neighborhood residents and tourists feel brighter and more secure.
- The Avista lamps' 50,000+-hour rated life will deliver years of maintenance-free operation.
- The Avista LED light engine represented a unique solution for upgrading specialized applications, such as downtown LA's oversized, vintage streetlamp fixtures.

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