



Project Highlight

Chicago Smart Lighting Program Chicago, IL

AMERESCO 

Historic Efficiency Project Replaced 85% of City's Street Lights With Smart City Technology for Energy Savings and Enhanced Public Safety

Technology Type:

Energy Efficiency | LED Lighting

Energy Project Size

\$160 MILLION

Energy Consumption Reduction

50%

LED Lighting Fixtures Replaced

270,000+

Annual Energy Savings

~\$10 MILLION



Summary

The City of Chicago chose Ameresco to help transform the city's streetlight system by replacing 85% of the existing lights with smart LEDs. The Smart Lighting Project, one of the largest modernization programs in the US, was designed to reduce energy consumption and maintenance costs, streamline lighting management, and increase public safety. In addition, the project cultivated community involvement and job creation using local businesses to assemble and install the new fixtures.



Solution

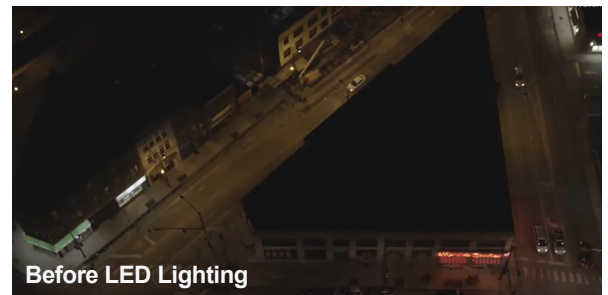
Ameresco began the Smart Street Lighting Project with an extensive analysis of the state of the street and alley lighting fixtures and equipment, and an evaluation of the city's network system to address infrastructure upgrade needs. Surveying over 300,000 lights, the company determined which equipment required replacement or repair and reconciled the GIS asset locations to establish a trackable blueprint to monitor the project's progress. Ameresco hired local subcontractors and trained new hires on assembling the LED technology to create job opportunities for the city's residents.

- Replaced 270,000 street, alley and viaduct lights with LED lighting
- Identified network integration opportunities to build out a Smart City system and contracted with a Lighting Management System (LMS) vendor
- Developed an app to support the installation and maintenance of the new lighting fixtures and nodes
- Provided integration services allowing streetlights to be monitored and controlled on smartphones



“This project provides clearer, more reliable energy-efficient lighting in every Chicago neighborhood with an expected savings of \$100M over the next 10 years. If a city of this size can pull it off, then cities all across the country can too. We like to experiment and pilot things in Chicago and then figure out how it can lead to a systemic change.”

Gia Biagi, Commissioner
Chicago Department of Transportation



Before LED Lighting



After LED Lighting



Benefits

In addition to reducing energy consumption by 50%, the LED lights improved visibility and heightened safety for residents and visitors of Chicago. The upgrades also allowed the city to be eligible for an estimated \$35 million in energy efficiency rebates and are projected to save taxpayers \$100 million through lower electricity costs over the next 10 years. Other benefits include:

- LMS system provides real time outage alerts integrated with city's 311 system and enables remote management and monitoring of fixtures
- Lighting improved clarity of images from city video cameras to support Chicago PD
- Network connectivity allows for additional smart city technology capabilities
- Developed community partnership and created job opportunities for Chicago residents and local businesses

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

