



Project Highlight

City of Goodyear, AZ

AMERESCO 

Citywide LED Streetlight Retrofit Powers Energy Efficiency and Smart City Readiness

Technology Type:

Energy Efficiency | LED Street and Area Lighting | Energy Savings Performance Contract (ESPC)

LED Streetlights Installed

9,160

Annual Energy & Maintenance Savings

~\$402,000

Energy Project Size

~\$2,950,000

Annual Carbon Reduction

~3,634 metric tons



Summary

Ameresco was selected by the City of Goodyear to modernize its streetlighting system by replacing outdated high-pressure sodium (HPS) fixtures with new energy efficient light-emitting diodes (LEDs) and advanced photocells. This citywide upgrade improves lighting quality and consistency while reducing energy use. The integration of smart photocell technology positions the City for future smart city applications, enabling seamless connectivity and enhanced control for a more sustainable, tech-ready infrastructure.



Solution

Ameresco implemented a citywide streetlighting modernization to improve energy efficiency, lighting quality, and future connectivity. The project replaced outdated infrastructure with advanced technology designed to reduce maintenance costs, enhance visibility, and prepare the city for smart applications. By upgrading to LED fixtures and integrating smart photocells, the city now benefits from consistent and quality lighting, improved reliability, and a foundation for future innovation.

- Replacement of 9,160 existing streetlights with LED fixtures
- Installation of advanced photocells that enable future smart city applications



Benefits

The LED streetlight upgrade significantly reduced energy consumption and operational costs while improving overall system performance. In addition to delivering long-term savings, the project enhanced lighting quality and consistency. The new fixtures also help the city align with Dark Sky Association guidelines, minimizing light pollution and supporting environmental goals. Additional benefits include:

- Reduction of overall electricity consumption
- Minimized maintenance costs related to streetlighting
- Mitigated sky glare generated by lighting
- Expected to achieve simple payback in 7.7 years
- Reduced electricity consumption by 4,500,000 kWh annually
- Reduced carbon emissions by over 3,634 metric tons, equivalent to removing 691 passenger cars from the road or energy use of 369 typical American homes for 1 year

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 infrastructure solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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