What Makes Columbus Smart?

**Smart Street Lighting**—Saves energy, improves safety, and reduces traffic congestion.

- AEP Ohio will upgrade approximately 1,000 street lights to networked LED fixtures, with plans to network another 201,000 street lights pending regulatory approval.
- Columbus Public Utilities plans to replace 53,000 street lights with LED bulbs and to add more street lighting following a piloting phase.
- AEP Ohio and the City of Columbus are discussing the scope of smart street lighting equipment and features, including congestion and parking space monitoring and shot spotting technology. AEP Ohio plans to provide, at minimum, networking capability that will allow sensor/monitoring equipment upgrades in future phases.
Smart Transportation—Improves safety and mobility, reduces carbon footprint, and provides greater access to services.

- AEP Ohio plans to invest $7 million to install 1,275 electric vehicle (EV) charging stations, including 275 public charging stations—25 of them DC fast chargers—and 1,000 Level 2 residential chargers, pending regulatory approval.
- AEP Ohio is increasing its EV fleet and has made a commitment to purchase 48 additional EVs.
- Columbus is demonstrating connected, autonomous, shared electric shuttles at Easton Town Center.
- Columbus will connect 3,000 vehicles on the road, including installing pedestrian detection and collision avoidance technology on Central Ohio Transit Authority buses.
- More than 60 leading businesses and institutions in the Columbus region set a goal to reduce single occupancy vehicle traffic by 10 percent.

Distributed Energy Resources—Improve sustainability, efficiency, and reliability.

- AEP Ohio has proposed investing $52 million to build 8–10 electric company solar-powered microgrids at critical locations throughout the city. Each microgrid could be supported by a roughly 3-megawatt-hour storage system and 500 kilowatts of solar generation. The proposal is awaiting regulatory approval.

Data Analytics and Intelligent Services—Increase efficiency, improve city services, and enhance quality of life.

- The City of Columbus and Ohio Department of Transportation plan to aggregate travel time and route data to provide information via smart phone apps for freight routing, delivery, and event routing.
- Information collected from AEP Ohio’s smart lighting system will populate a data exchange being established by the City of Columbus.
- The City of Columbus plans to enhance web-based applications related to EV charging facilities location, public transit fares, and traffic congestion.
- AEP already has deployed 132,000 smart meters in the central Ohio area, and is in the process of replacing another 542,000 meters in the smart city footprint.

Contacts

**AEP Ohio**
Scott Osterholt
Director of Grid Modernization & Risk Management
ssosterholt@aep.com
614-883-6672

**Columbus**
Michael Stevens
Chief Innovation Officer
mhstevens@columbus.gov
614-645-2287

**EEI**
Becky Knox
Senior Director, Retail Energy Policy
bknox@eei.org
202-508-5563

---

Edison Electric Institute
701 Pennsylvania Avenue, NW
Washington, DC 20004-2696
202-508-5000 | www.eei.org