

Pittsburgh: 36,536 streetlights converted and connected

Pittsburgh replaced every high-pressure sodium cobra-head in its roadway network with LED and put the result on Dimonoff | SCMS. The conversion is complete, and the city tracked it publicly the whole way.

PUBLISHED OUTCOMES

36,531

ROADWAY STREETLIGHTS
CONVERTED FROM HIGH-
PRESSURE SODIUM TO LED [↗](https://engage.pittsburghpa.gov/pghled)
([HTTPS://ENGAGE.PITTSBURGHPA.GOV/
PGHLED](https://engage.pittsburghpa.gov/pghled))

\$16M

PROJECT FUNDING: \$3M
AMERICAN RESCUE PLAN,
\$12M BONDS (USD) [↗](https://pghled.org/) ([HTTPS://
PGHLED.ORG/](https://pghled.org/))

\$0M

PROJECTED ANNUAL UTILITY
SAVINGS FOR THE
CONVERTED NETWORK
(USD) [↗](https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights) ([HTTPS://WWW.WESANEWS.
ORG/ENVIRONMENT-ENERGY/2025-06-0
4/PITTSBURGH-NEW-LED-STREETLIGHT
S](https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights))

12,003 t

PROJECTED ANNUAL CO2
REDUCTION, METRIC TONS [↗](https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights)
([HTTPS://WWW.WESANEWS.ORG/ENVIR
ONMENT-ENERGY/2025-06-04/PITTSBUR
GH-NEW-LED-STREETLIGHTS](https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights))

The situation

Pittsburgh's roadway network ran to **36,536 high-pressure sodium cobra-head fixtures**. Sodium lighting is fixed output: it cannot be dimmed, it cannot be metered at the pole, and it cannot report anything about itself. An outage becomes known when someone reports it, which means the interval between a light going dark and a crew arriving is set by how often residents complain rather than by how fast the city can respond.

The city also has a standard to meet. Its Dark Sky Lighting ordinance, introduced by the Division of Sustainability and Resilience in 2021, asks for light directed only where it is needed, warmer colour temperatures and uniform output. Meeting that fixture by fixture, in the field, across 36,536 poles is not a maintenance task anyone can schedule.

What was deployed

The Department of Mobility and Infrastructure converted the network to LED with The Efficiency Network, and selected Dimonoff | SCMS to monitor and control it.

Each fixture carries an RME wireless node. The nodes form a self-healing mesh — if one path fails, traffic reroutes without a site visit — managed by G3+ gateways that report into the platform. From there the city meters energy at the pole, sees an outage the night it happens instead of the week it is reported, and sends a crew only when the diagnostics say one is needed.

Remote dimming is what makes the Dark Sky ordinance practical at this scale: levels are set per zone or per event from the platform, not

fixture by fixture from a bucket truck.

The project was funded by **\$3 million** in American Rescue Plan stimulus and **\$12 million** in bonds. The conversion is finished: all 36,536 fixtures are LED and the network is running on the platform. Pittsburgh carried a schedule and a neighbourhood progress map on its own site at PGHLED.ORG throughout the build — an unusual degree of public accountability for a lighting project, and a useful thing to point a council at.

Why it matters for your network

Pittsburgh is the case for treating the mesh as infrastructure rather than as a lighting accessory. A network that reaches every pole in the city is the expensive half of anything the city adds later — environmental sensing, parking occupancy, public-safety beacons — and once the LED conversion has paid for reaching those poles, that half is done.

It is also the case for a project run in public. The schedule, the neighbourhood map and the progress tracker stayed on the city’s own site for the duration, which is what a procurement team should be looking at when it wants to know how a conversion of this size actually paces.

DEPLOYMENT

Platform	Dimonoff SCMS
Network	RME wireless nodes in a self-healing mesh, managed by G3+ gateways

Control

Remote dimming by zone or by event, energy metering at the pole

Compliance

Pittsburgh Dark Sky Lighting ordinance (2021), 2700 K fixtures

PARTNERS

- The Efficiency Network (TEN)

SOURCES

- [City of Pittsburgh – LED Modernization Project \(Engage PGH\)](https://engage.pittsburghpa.gov/PGHLED/) (<https://engage.pittsburghpa.gov/PGHLED/>)
- [City of Pittsburgh – PGHLED.ORG project site and progress tracker](https://pghled.org/) (<https://pghled.org/>)
- [90.5 WESA – Pittsburgh switches on first wave of new LED streetlights \(June 2025\)](https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights) (<https://www.wesaneews.org/environment-energy/2025-06-04/pittsburgh-new-led-streetlights>)
- [Dimonoff – Pittsburgh Undertakes Connected LED Street Lighting Project Through a Smart City Management System](https://www.dimonoff.com/news/pittsburgh-streetlight-conversion/) (<https://www.dimonoff.com/news/pittsburgh-streetlight-conversion/>)
- [Completion of the conversion is self-reported by Dimonoff \(August 2026\); the City's published schedule ran to 2027](https://www.dimonoff.com/news/pittsburgh-streetlight-conversion/) (<https://www.dimonoff.com/news/pittsburgh-streetlight-conversion/>)