

Executive Summary: Bethlehem E-Bike Network

Planning phase. An independent plan; nothing is funded or built yet.

The idea. A planned network of solar-powered bike stations across Bethlehem, PA. Take a bike at any station, leave it at any other. About half would be e-bikes, then regular bikes, e-scooters (where state and local rules allow; may start later), mountain bikes, and adaptive, cargo and tandem bikes, mixed station by station by demand. Docks would charge e-bikes automatically under solar canopies with on-site batteries.

Where. About 120 planned stations: one at every park (two at bigger parks) and beside planned Bethlehem Connect electric-bus stops (a separate independent plan). They'd also go downtown, on the SouthSide and near campuses, with each landowner's agreement.

How it works. Unlock with an app, QR code or kiosk. Trip data is aggregated, private by default and never sold. A future opt-in rider app could track your miles and sync with apps you choose.

Safety. Licensed electricians do all electrical work. Batteries and chargers would meet fire and electrical codes, and every site would need fire-marshal review. Every station would have an ADA-accessible route.

Phases. A 6–10 station pilot comes first, then a Bethlehem-wide network, then the Lehigh Valley and other Pennsylvania towns. Small one- and two-seat electric vehicles come later, after legal review.

Approach. Buy proven bike-share technology; build only the privacy-first analytics and the rider app's extras. Community chat lives in Project OS.

People and planet. It serves riders without a car, low-income riders and people with disabilities, with recycling at every station and certified battery recycling.