

## **Connected Communities**

Leaders are evolving to a digital platform to stay competitive and adjust to changing conditions and citizen needs.



## **Fiber and Wireless Communications**

Fiber and wireless networks are the heartbeat of a connected community because they link the layers of sensors, data, devices, and systems to make a connected community possible. Deployment of fiber optic and deep fiber networks facilitates wireless technology and helps a community evolve. Fiber networks enable high-speed broadband, 4G-LTE, 5G, and WiFi. These networks connect the mobile user and smart sensors to the community, expand IoT apps, and provide last-mile connectivity to help bridge the digital divide in rural and underserved areas.

As a technology integrator, Black & Veatch works within the distributed infrastructure and data nexus to plan, design, and build world-class communications and technology solutions across city systems including energy, grid, water, and transit and transport.

## **Smart City Digital Tech Integration**

Digital apps have latency, bandwidth, coverage, resiliency, and security requirements, which emphasizes digital tech integration. Black & Veatch helps communities design and build their infrastructure to efficiently interconnect and integrate with its physical assets, like kiosks, street lights, cameras, utility systems, and related apps. Our insight helps communities get the desired functions and expected value of smart technologies. For example, we often recommend adding fiber to an IoT security camera to provide a robust internet connection. This ensures the camera can send captured images to the cloud for real-time facial recognition processing.

## **Smart Ways to Pay**

When it comes to funding and financing projects, it pays to think creatively and look at all viable options. Black & Veatch creates innovative revenue models, alternative financing, and Public-Private Partnerships (P3) to deploy projects that generate ongoing revenue streams—often with no additional city capital or operational funds.

- Traditional Procurement.
- State/Federal Grants
- Asset Leasing
- P3



Black & Veatch is helping these clients evolve their digital capabilities:

**MIEMSS** is migrating its analog system to an IP environment to upgrade 24/7 EMS communications across the State of Maryland.

**Verizon** is broadening internet access and smart city technologies by deploying kiosks in New Rochelle, NY.

**City of San Diego** is bringing smart city technologies to low to moderate-income areas of San Diego (a collaborative effort with Atonix Digital).

