



Fiber Optic Networks

Future Proof Your Networks

When planning your fiber network, it's important to leverage the best available resources for every aspect of your project, from concept through creation. Black & Veatch is a true turnkey service provider with nationwide scale and delivers world-class engineering expertise and experience required to ensure your project will be successful.

Why Fiber Optics?

To meet the demands of current and future applications, communication networks must provide an adequate foundation for growth, expansion and backhaul. Fiber is the gold standard for today's telecommunications networks. Fiber technology provides almost unlimited growth capacity for network providers to supply a wide range of services including highspeed data, video on demand, high definition TV and gaming services. Whenever feasible, fiber is the medium of choice for utilities, municipalities, and small and large commercial carriers.

Advantages of a Fiber Optic Network

- **Unequaled capacity:** Large bandwidth for numerous applications
- **Useful life:** 20 years or more
- Lower operating expenditures: Reduced operation and maintenance costs
- **Scalability:** The ability to easily provide incremental growth and customization
- **Flexibility:** Support for the full spectrum of services and applications
- **Network expansion:** Future growth at a lower incremental cost
- **Operational flexibility:** Opens new opportunities for consolidating data equipment locations, back-up and redundancy

Why Black & Veatch?

Black & Veatch provides the ideal combination of skills and experience necessary to develop your fiber optic network from feasibility through design and construction. Black & Veatch has developed more than 40,000 miles of fiber optic networks, including utility private networks, local and long-haul networks for regional and national carriers, and backhaul for wireless carriers. With our extensive experience providing solutions for fiber-optic network deployment, we understand the challenges related to designing and building advanced communication infrastructure.



Black & Veatch Fiber Services

- Feasibility studies
- Financial modeling
- Infrastructure & technology assessment
- Conceptual design & cost estimates
- RFP development
- Material procurement
- ROW permitting & zoning
- Final engineering & design
- Installation & testing
- Project & construction management
- Construction

Technology & Applications

- Fiber to the x (FTTx) Solutions
- Fiber to the home (FTTH)
- Fiber to the premise (FTTP)
- Fiber to the curb (FTTC)
- Fiber to the cell site (FTTCS)
- Aerial / underground
- Distributed antenna system (DAS)
- SONET/ATM
- Ethernet
- DSS fiber design & installation
- OPGW fiber design & installation
- Head-end/data center/central office design