

Broadband Infrastructure

Guiding Global Network Connectivity

Experts in high-speed bandwidth infrastructure solutions.

Empowering Connectivity: AECOM's global broadband team is your guide to traverse the world's digital infrastructure, from subsea to continental connectivity, to terrestrial planning and design, we unlock the global backbone.



Advisory

- Grant Application Consulting and Writing
- Route and Permit Analysis
- Business Plan, Proforma and Capital Investment
- Financial and Operational Modeling
- Cost Benefit Analysis
- Broadband Action and Expansion Plans
- Public/Private Partnership Modeling
- GIS Mapping and Data Analyses
- Fiber Strategy and Roadmapping
- RFP/RFI Technical Writing and Evaluation



Technical

- Long Haul, Middle and Last Mile Outside Plant Engineering (Aerial and Underground)
- Gigabit, Passive Optical and Active Ethernet Network Design
- Wireless - 4/5G, LTE, DAS and WiFi
- BMH to CLS Connectivity
- GIS and Data Integration
- Broadband Liability Analysis
- Conceptual Development and Design
- Data Center and ILA Connectivity
- Pole Attachment Analysis and Risk Management



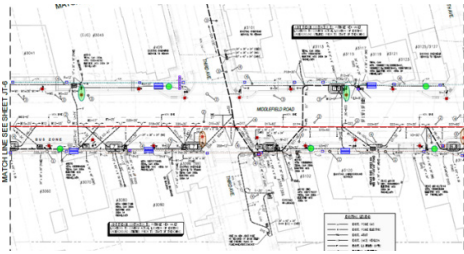
Project Delivery

- Program, Project and Construction Management
- Grant Administration and Management
- Supply Chain, Procurement and Logistics Support
- Field Verification and Inspections
- Network Installation and Configuration
- Port Provisioning
- Digital Project Delivery
- Owner's Representative
- Permitting (ROW, RR and Environmental)



Operations

- Disaster Recovery Planning
- Risk & Change Management
- Transition to Operationalizing Infrastructure
- Field and Network Operations and Maintenance
- Security Operations
- Circuit Provisioning
- Network Refresh
- Existing Conditions Analysis
- Service Offering and Catalog Development
- 3rd Party Field Audits
- Damage Prevention



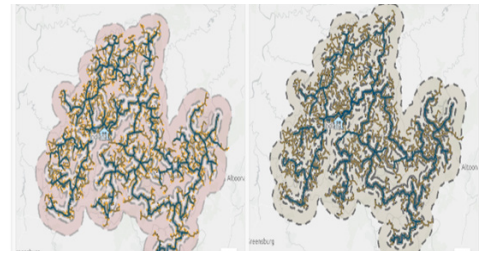
Design, Construction and O&M:

Responsible for design, construction and network operations of high availability longhaul, middle and last mile networks. The network planning included management of dark fiber and conduit assets, RSAs and MOU, infrastructure relocations, splicing/testing, outside and inside plant engineering and site protection.



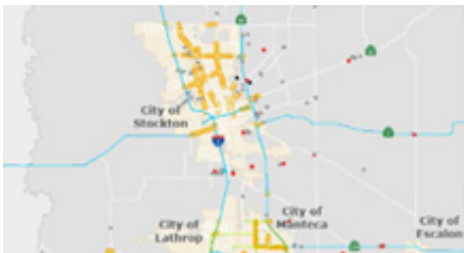
Western Reserve Broadband Engineering Study:

Detailed analysis, examining the existing broadband infrastructure to identify the strengths and limitations of the present network. A comprehensive Gap Analysis was conducted to pinpoint the discrepancies between current capabilities and future requirements, providing a strategic roadmap for necessary enhancements and expansions.



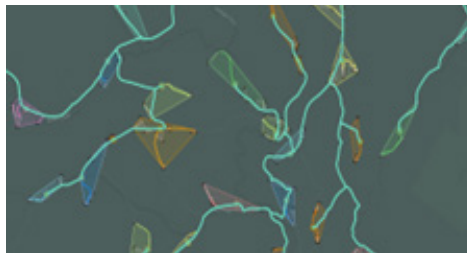
REA High Level Design:

Strategic framework and technical specifications for REA Energy's Fiber to the x (FTTx) project. In addition, our team assisted in the grant application process and developed a sound financial strategy for the project's execution. This dual-faceted approach by aimed to optimize the project's infrastructure planning and secure essential funding for successful deployment.



Multiple Longhaul Route Analysis:

Identified liabilities, permit and environmental resource constraints and construction feasibility. Traversed rural, suburban and urban pathways along with PoP to ILA connectivity. Field and desktop design reviews culminated in the production of a permit and broadband liability matrix, route recommendations and ROW standards summary.



Community Internet Solutions:

High-level design initiatives, crafting strategic blueprints and precise technical outlines tailored for various Fiber to the x (FTTx) projects. We provided guidance through the grant application process and a financial approach the projects' implementation. This was instrumental in planning advanced infrastructure and helping to acquire funding for realization of these initiatives.



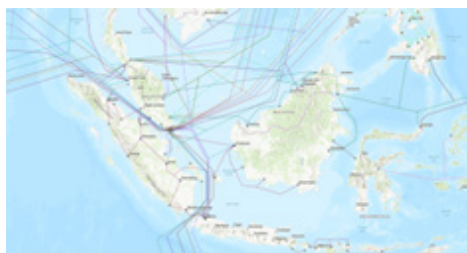
City of Dublin Fiber-to-theHome (FTTH) Pilot:

Designed and oversaw the installation and testing of a proof of concept FTTH system featuring innovative techniques, including TRAXyl FiberTrax, which minimized the need for trenching by applying fiber cable in resin on the pavement surface, and involved outfitting four homes with new fiber connections while configuring the optical line terminal at a local data center.



City of Richmond Node Analysis:

Fiber readiness analysis to scrutinize 15 designated priority growth nodes for their current and future broadband capabilities to support and stimulate anticipated population and commercial expansion, by mapping existing assets, performing a gap analysis, and providing strategic recommendations for both immediate and long-term network enhancements.



Confidential Cable Landing Analysis:

Subsea BMH to CLS analysis assessed potential subsea landing options, longhaul and middle mile terrestrial pathways, infrastructure readiness, and regulatory compliance. Data-driven evaluations predicted possible challenges and opportunities, which aided in optioneering decisions. The outcome guided the next phase of project feasibility and readiness.



Smartest Street in America – San Mateo County, CA:

Improvement project to create a safer, more community-oriented space, including installation of county-owned fiber optic cable to offer public WiFi service and support an IoT infrastructure network overlay. The project integrates numerous smart city technologies and devices to enhance pedestrian safety, operational efficiency, and the overall user experience.