



Bluebird Network Middle Mile Grant

National Telecommunications and Information Administration

Because success is all about good connections



Company Background

Missouri Network Alliance - dba. Bluebird Network

About Bluebird Network

Bluebird supports businesses, schools, hospitals and many other data-driven enterprises with high-capacity transport, high-capacity internet services, and data center solutions.

Missouri – Broadband Technology Opportunities Program (BTOP)

Year 2011: BTOP grant project awarded to Bluebird and successfully completed within 3 years. Bluebird partnered with MoDOT for data services, site leases, and expanded corridors.

Our History

Bluebird Network began as a collection of Missouri and Illinois telephone companies, which connected to each other and to the internet, as well as other carriers beyond their service areas. These companies formed Missouri Network Alliance, Illinois Network Alliance, and Bluebird Media to provide high speed bandwidth across the Midwest. Bluebird also acquired two data center's location in Springfield, MO & Bettendorf, IA in addition to its acquisition of PEG Bandwidth which increase serviceable areas deeper into Illinois, Iowa, & Indiana.

Current Network Statistics

Today, our network has over 11,000 fiber route miles of high-speed broadband and fiber-optic connections with over 153 Points of Presence (PoP) including the major cities of Chicago, Springfield, St. Louis, Kansas City, Columbia, Tulsa, Peoria, Rockford, Bloomington, Normal and the Quad Cities.



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NTIA Middle Mile Grant Benefits

Missouri / Oklahoma

Middle Mile Grant Benefits

Enables Missouri's Governor initiate of "Internet for All" by reaching fiber-to-the-home service providers, aggregating data & voice traffic for unserved & underserved locations.

Provides connectivity to major cities at carrier-neutral internet exchange facilities.

Enables the option for direct connectivity to cell towers, hospitals, educational facilities, in addition to numerous public & private community anchor institutions.

Provides options for additional providers through leased fiber with regeneration facilities.

Enables the demand for high-capacity bandwidth growth.



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NTIA Middle Mile Grant Details

Missouri

Project Name

Missouri Network Alliance dba Bluebird Network Missouri NTIA MMGP

Counties Impacted

Barton, Callaway, Camden, Christian, Cole, Crawford, Dallas, Franklin, Gasconade, Greene, Jasper, Laclede, Lawrence, Maries, Newton, Osage, Phelps, Polk, Pulaski, Washington, and Webster

Project Details and Benefits

The project is predominately located within unserved and underserved areas in Missouri and is comprised 325 miles of fiber along the following routes:

- Jefferson City to Washington
- Springfield to Carthage
- Rolla to Strafford
- Washington to Rolla

The routes have the potential to grow and strengthen fixed wireless and cellular connectivity across the 21 counties connected by the project, including advancements in new wireless technologies which require fiber connectivity.

The routes will also support a new initiative to bring fiber connectivity to farms enabling next generation farm devices.



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NTIA Middle Mile Grant Details

Missouri & Oklahoma

Project Name

Missouri Network Alliance dba Bluebird Network MO to OK NTIA MIMGP

Counties Impacted

Craig, Creek, Delaware, Mayes, Osage, Ottawa, Rogers, Tulsa, and Wagoner in Oklahoma. McDonald, Jasper, and Newton in Missouri

Project Details and Benefits

This project will extend middle mile infrastructure to unserved and underserved areas and promote broadband connection resiliency through the creation of alternative network connection paths. It will expand from Missouri into the state of Oklahoma and will increase redundancy and resiliency as well as increasing competition in this rural area.

This project will also reduce costs and spur the more rapid deployment of last mile services in rural areas. The routes have the potential to grow and strengthen fixed wireless and cellular connectivity, including advancements in new wireless technologies which are not supported by other means than fiber.



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Construction Methods

Missouri & Oklahoma

Primary Methods

Underground

- Plow
- Bore

Exploring Alternative Methods

Expanded Corridor

- 6FT to 12FT

Reducing fiber installation depths

- Less than ~30" when rock is encountered – shallow up to 18" when in solid rock

Microtrenching

- The practice of cutting thin channels about 1 to 3 inches wide and 6 to 24 inches deep into roadways and other rights-of-way in which to lay fiber. Once the cable is installed, the channels are backfilled with asphalt or another matching filler material.

Aerial

- Installing of new poles



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Preliminary Route Specifics

Missouri & Oklahoma

Fiber Route Miles

Estimated at 514

Conduits

Two at 1.25" or 2" diameter

Points of Presence (PoP) - High speed traffic aggregation through backbone PoP locations

Missouri

- Mt. Sterling (TBD)
- Jefferson City
- Washington
- Rolla
- Lebanon
- Springfield
- Mt. Vernon
- Joplin

Oklahoma

- Miami
- Pryor
- Tulsa



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