

# **Prioritization of Federal Funding Opportunities for Multi-Use Projects**

## **MULTI-USE OF OPTICAL FIBER INFRASTRUCTURE**

The concept of “multi-use” as it relates to optical fiber infrastructure pertains to the ability to utilize both existing and new build optical fibers for additional advantageous and complimentary applications that can provide situational awareness, enhance life and safety, and increase the economic benefit.

## **BACKGROUND**

Federal, state, and private funding of fiber optic infrastructure is at an unprecedented level right now. In November 2021, the Infrastructure Investment and Jobs Act (IIJA) was enacted into law, which provided \$65 billion for broadband. The National Telecommunications and Information Administration (NTIA) is using those funds to expand broadband Internet access and adoption in the U.S., expand the use of spectrum by all users, and ensure that the Internet remains an engine for continued innovation and economic growth. This rapid broadband infrastructure build will continue for the foreseeable future. However, even with this considerable increase in funding, new build or even revitalization of existing communications infrastructure is expensive and constrained by both economics for the singular application (telecommunications and broadband) as well as by a limited pool of field technicians.

In addition to broadband intended infrastructure, the IIJA provided significant funding to rapidly address other critical aging underground and aerial infrastructure, including electric substations and the electric grid, water infrastructure, bridges, rail, and surface transportation. The transformation to clean energy, emergence of electric vehicles, dramatic anticipated surge of artificial intelligence and computing power, and ever-increasing population pressure on water resources is driving this multi-pronged impetus to improve our nation’s infrastructure.

Multi-use of optical fiber cables in reusable conduit for opportunities that extend well beyond broadband dramatically impact the ability of the U.S. to provide more safe, resilient, and sustainable infrastructure for multiple critical vertical markets. Multi-use also increases the return on investment on expended funds. For example, broadband buildout along rail lines can simultaneously be used to detect rail damage and rolling stock wheel defects. Along highways and local roads, the fiber optic communication cable can also be used to enable smart roads to improve safety, efficiency and reduce congestion. And as part of the electric grid, fiber optic cable can be used for communication, SCADA systems, and as distributed temperature, strain, and vibration sensors to improve grid efficiency and resiliency.

For a multi-use effort to be successful, it will require increased awareness in both the private and public sectors. The federal government can lead the effort by requiring multi-use of fiber optic cables in federal funding opportunities and by prioritizing projects that include multi-use of optical fiber in conduit in broadband and infrastructure funding opportunities.

## **REQUEST: FISCAL YEAR 2025 APPROPRIATIONS REPORT LANGUAGE**

### *Transportation HUD Appropriations Bill*

The Committee directs the Secretary of Transportation to include in the standard notice of funding opportunity [NOFO] language in the Department's discretionary grant programs evaluation factors that prioritize projects that include proposals for “multi-use” of fiber optic cables to improve situational awareness, enhance life and safety, or increase the economic benefit of the installed fiber optic cable. The Secretary, in consultation with the Secretary of Energy and Secretary of Commerce, is also directed to develop and publish guidelines and best practices for States, Indian Tribes, and units of local government to increase awareness of the benefits of “multi-use” of fiber optic cable as well as increase the percentage of project proposals including “multi-use.”

### *Commerce Justice Science Appropriations Bill*

The Committee directs the Secretary of Commerce to include in the standard notice of funding opportunity [NOFO] language in the Department's broadband grant programs evaluation factors that prioritize projects that include proposals for “multi-use” of fiber optic cables to improve situational awareness, enhance life and safety, or increase the economic benefit of the installed fiber optic cable. The Secretary, in consultation with the Secretary of Energy and Secretary of Transportation, is also directed to develop and publish guidelines and best practices for States, Indian Tribes, and units of local government to increase awareness of the benefits of “multi-use” of fiber optic cable as well as increase the percentage of project proposals including “multi-use.”

### *Energy and Water Appropriations Bill*

The Committee directs the Secretary of Energy to include in the standard notice of funding opportunity [NOFO] language in the Department's electric grid discretionary grant programs evaluation factors that prioritize projects that include proposals for “multi-use” of fiber optic cables to improve situational awareness, enhance life and safety, or increase the economic benefit of the installed fiber optic cable. The Secretary, in consultation with the Secretary of Transportation and Secretary of Commerce, is also directed to develop and publish guidelines and best practices for States, Indian Tribes, and units of local government to increase awareness of the benefits of “multi-use” of fiber optic cable as well as increase the percentage of project proposals including “multi-use.”

## **CONTACT INFORMATION**

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