

ALLO Fiber | City Checklist

Experience Fiber **Internet** + **TV** + **Phone** Like Never Before.





Gigabit Internet speeds have the power to move communities forward by contributing to economic development and heightening quality of life. ALLO Communications, a Nelnet Company, brings proven expertise that provides value in a variety of forms of network ownership and operation for building and operating a gigabit network for superior Internet, telephone, and television services.

We've found that an important factor in determining the viability of a fiber-to-the-premise project is the cost of construction. We would love the opportunity to evaluate the feasibility of constructing a fiber network in your community.

A significant item in our analysis of a community is the state of the city's GIS records and communication infrastructure. You will find a brief questionnaire attached that will help us gather the information we need to evaluate the overall cost of construction for your community. We can also work with you to complete the checklist and can provide feedback regarding the unique opportunities and challenges of your community.

ALLO CAN PROVIDE MANY LEVELS OF SERVICE TO YOUR COMMUNITY

- ▶ Comprehensive design, build, and operation of the network
- ▶ Support of network, through network operations, field technical support, design and engineering, sales, marketing, and more
- ▶ Financing alternatives, such as city-owned, carrier-owned, public-private partnership, and others
- ▶ Complete service platform, including Internet, metroethernet, MPLS, voice (POTS, PRI, SIP) and IPTV

ALLO is excited about bringing fiber to your community and we hope that you share our enthusiasm.

Get Your City Ready for Fiber

Building a fiber network that passes every business and home is a complex and expensive engineering and construction project. However, by working together prior to construction, we can ensure an efficient project that minimizes the inconvenience to residents.

Below, you will find the three key areas identified from our experience in other communities and guidelines provided by the Fiber to the Home Council and the U.S. Conference of Mayors that will help your city prepare for a fiber network. You can learn more about the process of installation on our AlloCommunications.com/Fiber-Installation.

I. YOUR EXISTING INFRASTRUCTURE

In order to determine the cost, complexity, and timeline of a fiber installation in your city, we need to understand the layout of your city. This means gathering information about your existing infrastructure such as conduit and various utility lines and poles. This allows us to effectively design an installation path.

How you can help: We ask that you provide a detailed list of infrastructure that is owned, leased, or controlled by the city, as well as answers to the questions on the attached infrastructure datasheet.

II. ENSURING ACCESS TO THIS INFRASTRUCTURE

The most time and labor-intensive part of the fiber process is laying the fiber necessary to bring it directly to consumers' homes. Utilizing existing utility poles and conduits helps us minimize cost and installation time. Gaining access to this existing infrastructure is crucial to an efficient and effective installation.

How you can help: We ask that you provide clear descriptions of any existing state laws, local ordinances, and/or commercial agreements, as well as your help during installation to gain access to these areas and infrastructure.

III. SPEEDY INSTALLATION

Regardless of the final outcome, no city or its residents like disruptive construction – we like to make this part as painless as possible. We create a roadmap that includes timelines and processes, including an efficient and consistent permitting process to work together to have fiber installed with minimal disruption. To that end, we provide you with a comprehensive Permitting, Construction, and Maintenance Plan so we're all on the same page.

How you can help: Please review this plan in detail. If your city's processes differ, or if there are any local, city, or state-wide requirements we should be aware of, please let us know about situations and processes so that we may take them under consideration before construction begins.

Additional Resources

GOVERNMENT RESOURCES

Federal Communications Commission (FCC documentation)

[ECFR.gov](https://www.ecfr.gov) (CFR Title 47, Chapter 1, Subchapter C, Part 76)

The FCC has set up rules regarding equipment attachment. While the federal laws were not drafted with today's broadband providers in mind, they are a good model of how to determine reasonable terms and clear schedules for pole attachment process.

Federal Communications Commission's National Broadband Plan

[Broadband.gov/Plan](https://www.broadband.gov/Plan)

In its National Broadband Plan, the FCC estimated that the expense of obtaining infrastructure permits and leasing pole attachments and rights-of-way can total 20% of the entire cost of a fiber-optic network.

FCC's Broadband Acceleration Initiative

[FCC.gov/Encyclopedia/Broadband-Acceleration](https://www.fcc.gov/Encyclopedia/Broadband-Acceleration)

The FCC has an ongoing Broadband Acceleration Initiative that is considering a range of reforms at the national level.

ALLO Fiber Data Request List

ESSENTIAL NETWORK DESIGN INFORMATION REQUIREMENTS FOR FIBER ROUTE PLANNING

The data outlined below helps us determine how to most efficiently design our network and where our fiber routes would go in your community. This data also helps us identify any areas that may require special consideration during our planning or construction process.

Addresses

- ▶ Feature Type: geospatial point shapefile (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Physical address
 - Include street name, street suffix/prefix, street number, unit number (if applicable), zip code, and city name.
 - Include multi-dwelling unit data with individual unit numbers where possible.
 - Address type
 - Include address type using the following options: apartment, duplex, triplex, quadplex, condo, large commercial unit, small business unit, office building, restaurant, single family unit, church, government, or vacant.

Streets

- Feature Type: geospatially correct polyline shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Street name

Right of Way

- Feature Type: polygon shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Geo-reference
 - Type of right of way

Parcels or Lot Lines

- Feature Type: polygon shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Physical address
 - Parcel type (e.g., government, school, park, etc.)
 - Easements (e.g., water, sewer, power, communications, etc.)
 - Rights of way

Utility Poles

- Feature Type: point shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Pole Owner/Operator
 - Pole function (e.g., communications and/or utility)
 - Pole type (e.g., wood, concrete, steel, etc. - or decorative)
 - Pole height and class
 - Pole ID
 - Operating entity (e.g., traffic, water, power department, etc.)

Existing Aerial & Underground Electrical Utility Facility Routes

- Feature Type: polyline shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Type (e.g., primary, secondary, service, water, gas, other as available)

Utility Meter

- Feature Type: point shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Meter Type
 - City/State
 - Address
 - Unit Number

PREFERRED NETWORK DESIGN INFORMATION REQUIREMENTS TO MINIMIZE DISRUPTION

The data below helps us minimize disruption during our construction process to avoid unnecessary digging. Where possible, we will lease existing conduit or dark fiber and also try to coordinate with known construction projects. We ask for potential central office (CO) sites to explore options ideally suited for minimal impact on the community.

Building Footprint

- Feature Type: polygon shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Physical address

City Boundaries

- Feature Type: polygon shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Jurisdiction name

Easements

- Feature Type: polygon shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Geo-reference
 - Type of easement

Existing Spare Conduit Available for Lease

- Feature Type: polyline shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Location of existing conduit, preferably geospatially accurate data
 - Size and number

Existing Dark Fiber Available for Lease

- Feature Type: polyline shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Type (e.g., 288ct, 144ct, etc.)
 - Fiber quality tests

Infrastructure Maintenance Plan (Road and Power)

- Feature Type: shapefile (.shp) or geodatabase (.gdb)
- Attributes Needed:
 - Street maintenance locations with extents and schedule
 - Pole maintenance areas and schedule

Manholes

- ▶ Feature Type: point shapefile (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Type (e.g., sewer, water, utility)
 - Depth
 - Size
 - Operating entity (e.g., traffic, water, power department, etc.)

Overhead Strand (Guys and Anchors): city owned, operated, or controlled

- ▶ Feature Type: polyline shapefile (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Type (e.g., primary, secondary, service, etc.)

Potential Central Office (CO) Site Locations by Address

- ▶ Feature Type: polyline; shapefile (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Type (e.g., fire station, police station, city property, substation, library, school, pump station, water tank, etc.)
 - Note: We would need space to set a 12'x30' precast one-story aggregation, non-occupied building with surrounding space; approximate total 1,400 sq. ft.

Streetlights

- ▶ Feature Type: point shapefile (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Owner
 - Pole height
 - Pole ID
 - Photocell: indicate y/n
 - Bank-switched: indicate y/n

Zoning

- ▶ Feature Type: polygon shape (.shp) or geodatabase (.gdb)
- ▶ Attributes Needed:
 - Zoning type
 - Type description



Contact Information

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