



## Public Utility Districts: An Untapped Catalyst for Expanding Fiber Broadband in America

America has seen over \$172 billion invested into broadband network development over the past 9 years,<sup>1</sup> including \$17 billion just last year. Much of this investment has been focused on rural broadband expansion to address the digital divide, and Congress is in debate over a massive, proposed infrastructure bill that could offer an additional investment between \$100 billion and \$250 billion in broadband network construction and deployment.

Several US states are taking innovative approaches to accelerating network expansions and fiber overbuilds of legacy coaxial cable and copper networks. On July 25, 2021, the State of Washington legally sanctioned the funding and approval to create “Public Utility Districts” (PUDs) which are authorized to build starter networks in underserved areas, which municipal and private partners can later expand.<sup>2</sup>

In this approach, the Public Utility District is approved to deploy fiber optic cable in an existing electric, water, or other right-of-way. The PUD is also authorized to sell service on a “retail,” not wholesale, basis. Private companies and municipalities within the designated district boundaries can then purchase access to the network at discounted rates to expand that starter network into desirable locations.

### How GIS accelerates broadband deployment for PUDs

A Public Utility District receives a substantially discounted engineering GIS system of record, such as M4 Solutions by VertiGIS, that enables the PUD to accurately map its starter network in the context of its existing utility assets. For example, if a public water utility plans to expand its service offering into broadband, M4 enables the provider to overlay its existing water distribution network against new fiber optic cable, whether the utility has a current GIS or not. M4’s native integration with Esri’s ArcGIS platform enables fast adoption for the many PUDs that already utilize ArcGIS to manage their utility network facilities. Otherwise, M4 can convert industry-standard file formats into a geospatially correct map. The public utility can then accurately track the location of the fiber optic network builds and depict access points to potential municipal and private buyers.

With field enablement tools, VertiGIS mobile solutions enable on-the-ground personnel to capture data about obstacles they encounter in the build-out process in real-time. Since many of these areas are remote and do not have reliable wireless access, VertiGIS allows users to capture notes wherever they work, and with full access to their network maps, regardless of connectivity. Then their device transmits collected data to the

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<sup>1</sup> <https://www.ncta.com/broadband-facts>

<sup>2</sup> <https://muninetworks.org/content/transcript-community-broadband-bits-episode-451>

system-of-record, M4 Solutions, when an Internet connection is available. From there, a VertiGIS tool called Pinpoint811 helps the utility to prevent costly damages to new and existing subsurface assets, as it coordinates 811 requests for excavation and construction projects with local one-call agencies and on-the-ground locators.

## A game-changing marketing tool for PUDs

The accurate, detailed, up-to-date network map becomes a valuable marketing tool to attract buyers, by clearly depicting network access points and providing data about potential revenues and total addressable market. Buyers want to know about potential return on investment (ROI) before they consider a network expansion project. They need tools, such as M4's RevGen, which empowers users to discover new, promising leads through analyzing as-built and planned fiber routes, demographic information, CRM data, and costing profiles specific to the network geography. The powerful capabilities in VertiGIS solutions give potential buyers this data, arming prospective buyers with the insight they need to be fully confident in a new market opportunity.

But, perhaps the most valuable aspect of the VertiGIS Public Utilities package is that Public Utility Districts can offer these powerful field enablement tools to municipal and private buyers at a significantly discounted rate.

Think about it this way, a Public Utility District can track its network throughout construction and promote that network with Total Addressable Market statistics for potential expansion areas. Prospective buyers (municipalities and private network providers) can understand the economics of potential build outs, and clearly model proposed networks, working with the PUD. If these prospective buyers decide to move forward with a network expansion project, the buyer is eligible for discounted access to the powerful VertiGIS field enablement toolset, equipping their personnel or third-party contractors with the data and mobility they need. The PUD maintains a comprehensive map of the network in their district, while the buyer benefits from the lower cost of operational support software, enhancing their margin, and streamlining their construction and engineering operations.

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To learn more about VertiGIS solutions for Public Utility Districts, contact our broadband segment director Tom Mirc at [tom.mirc@vertigis.com](mailto:tom.mirc@vertigis.com).