

EXECUTIVE SUMMARY

The need for a New River Valley Community Fiber-Optic Network is clear and urgent. The current regional economy is overly dependent on declining manufacturing, employment is too heavily concentrated, and incomes lag behind state figures. The goals of attracting and retaining good employers, leading in university research and entrepreneurial development, fostering community connectivity, enhancing quality of life, and providing higher quality public and private services efficiently and effectively require a state-of-the-art telecommunications system. That system is currently unavailable in the New River Valley. In fact, of the major employers responding to our survey, six (employing 9,384 people) are less than satisfied with the speed of their connections, even though all six were using the fastest available connections. This demonstrates that not only is broadband necessary to attract new industries, but it is also critical to retaining local employers and growing higher education and entrepreneurial ventures.

This Plan envisions a NRV Community Fiber-Optic Network that begins by establishing inter-county, intra-county, and local access points. There are many other shorter-term options for increasing local access to higher-speed connectivity, and these are not seen as “bad.” However, an open-access fiber network is preferred as it is the only long-term solution. This fiber-optic design would create a New River Valley economic engine, interconnecting higher education institutions, major industrial parks and commercial centers, schools, and local governments (including fire and rescue). All 127 sites are considered potential anchor tenants.

The value of a regional fiber-optic network, as described here, is estimated at about \$10.5 million. The actual out-of-pocket costs of creating the network may be substantially less, through grant funding, collaborating with existing providers, tapping in-kind support in the region, and phasing implementation. The many layers of value that the network would bring are difficult to quantify, given the transformational nature of the change. Some local governments have come to see broadband access as a public good that must be invested in long-term, regardless of short-term return. Undoubtedly, though, to generate local commitments to the process, more detailed financial analysis is needed to define the benefits of broadband.

The creation of a new regional legal entity to develop, own, and manage the network is required. This entity is envisioned as either a regional non-profit or a regional public-private partnership. The best course will depend on participants and on federal and state legislative response to recent court telecommunications decisions. This plan envisions the next critical steps being this entity and subsequent analysis regarding the financial feasibility of various network phases. Priority linkages include: Blacksburg-Radford Army Ammunition Plant, Radford-Dublin-Pulaski, and Dublin-Giles connections. Small demonstration projects, including wireless, are also needed.

Time is of the essence for this project. Surrounding regions are already well along in developing fiber-optic networks. While no project is a total solution for all economic development needs, the lack of a regional fiber-optic network is the greatest barrier to future economic well-being in the New River Valley. Moreover, clear collaborative opportunities are apparent to successfully create the New River Valley Community Fiber-Optic Network.