

CITY OF SPOKANE

INLAND NORTHWEST REGIONAL GIGAPOP

Connecting the Inland Northwest to the World

A regional GigaPop network will provide reliable, cost-effective, high-speed network connectivity in the Inland Northwest by providing technology- and information-based economic growth. The Pacific Northwest GigaPop, established at and operated by the University of Washington, will extend this connectivity to Eastern Washington by this proposal. Currently, Eastern Washington and Idaho are disadvantaged by distance and a sparse telecommunications infrastructure. ***The City respectfully requests \$1.5 million in federal support to connect Spokane and Eastern Washington to the PNWGP.***

The Inland Northwest Regional GigaPop is a planned point-of-presence in Spokane, Washington, that will connect via an optical west-to-east network from Seattle. In addition to access to high performance networks serving education, research and development in the U.S., Canada, Europe and Pacific Rim, this connection will enable regional high-speed data exchange with Pacific Northwest National Laboratory in Tri-Cities and Washington State University in Pullman. The proposed path design includes an add/drop site at Yakima for potential use for economic development purposes. The City has teamed with PNNL to pursue state and federal funding for this west-east link, and supports PNNL's complementary submittal for federal appropriation to extend the network from Richland to Boise, Idaho, and on to Pullman and Spokane. This complete network loop is tentatively called the Northwest TeraLink.

The Inland Northwest Regional GigaPop is the next generation high-bandwidth network connectivity that will exponentially enable and differentiate the region for economic growth and development, research and education. The nation's computer, software, Internet, and now biotechnology industries have grown first and fastest where reliable, cost-effective, high-speed network connectivity is available.

The Spokane/Inland Northwest area has extraordinary connectivity and bandwidth within the region due to investments over the last decade in fiber-optic infrastructure, including the Virtual Possibilities Network (VPnet), that links together over a dozen Eastern Washington research institutions. The Inland Northwest Regional GigaPop will complement VPnet by providing much greater bandwidth (10Gbps) between Seattle and Spokane than current bandwidth (155Mbps) maintained by VPnet.

The deployment of a direct 10 Gigabit Ethernet link from the Pacific Northwest GigaPop in Seattle to Eastern Washington will enable our region to:

- Participate with the national and international research community.
- Develop new products, including next generation technologies, protocols, services and applications.
- Evaluate new products and projects by academic and federal research institutions thousands of miles away more easily.
- Pursue commercialization of applications using this type of next generation network capability such as film colorization, video resolution improvements, video encoding, and new R&D opportunities for industries such as bio sciences, medical, environmental and data mining.

- In addition to Spokane’s extraordinary connectivity infrastructure, it is also an ideal geographical location for disaster recovery operations, the development of large data storage and archival backup facilities, and crisis management centers.

A consortium of interested participants from the following institutions and organizations support this request:

<i>Gonzaga University</i>	<i>Spokane Public Schools</i>	<i>Zero dB</i>
<i>Washington State University</i>	<i>Eastern Washington University</i>	<i>VPnet</i>
<i>Whitworth College</i>	<i>Inland Northwest Health Services</i>	<i>City of Spokane</i>
<i>Community Colleges of Spokane</i>	<i>Liberty Lake Internet Exchange</i>	<i>Avista Corporation</i>
<i>Pacific Northwest Laboratories</i>	<i>Spokane Regional Chamber</i>	<i>Spokane Area EDC</i>

10 Gigabit Ethernet is currently available from several telecommunication carriers, but the costs associated with this bandwidth are prohibitive. The above partners believe that an investment in this regional technology initiative will create startup companies and research centers, and expand existing companies and jobs. The cluster of networking companies as well as the education and research community could utilize this increased bandwidth to collaborate with others across the nation or around the world.

A conservative estimate of employment potential is that an initial 2,000 new jobs in high tech and bio tech/sciences will be created over the next five years due to the establishment of the Eastern Washington Regional Gigapop.

For more information:

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