

STATE: WASHINGTON

Date of Reports: Two major reports on broadband have been issued in the past year:

- Broadband Study Report. This report was prepared for the Washington Utilities and Transportation Commission (WUTC) by CBG Communications, Inc. (a consulting group) dated June 27, 2008. This was a study of five Washington State counties with disparate demographic characteristics. The report extrapolates from the results of the 5-county study, statewide policy recommendations.
- High Speed Internet Strategy Final Report. High-Speed Internet and Deployment Strategy Recommendations for the State of Washington also prepared by CBG Communications for the High Speed Internet Strategy Work Group (herein "Work Group") dated December 1, 2008.

Nature of report (preliminary, final, advisory, executive/legislative):

- Broadband Study Report - Final/Advisory
- High Speed Internet Strategy Final Report - Final/Executive/Legislative/Advisory

Key recommendations:

- The state should adopt a definition of high-speed internet service (HSIS) that is consistent with the Federal Communications Commission's (FCC's) "broadband" speed tiers in the download and upload direction; except the state's definition should not include the bottom FCC tier in either the download or upload direction. The Work Group believes this tier cannot be characterized as "high speed" internet.
- High-speed internet should also be defined by the applications it can enable, instead of just by upload and download speed; including applications that range from basic e-mail and YouTube video, to the more robust telecommuting, high definition video, telemedicine, and supercomputing applications.
- The state desires HSIS mapping at the census block level, but this would require significant time and expense on the part of the service providers and the state. Alternatively, the state should consider mapping at the census tract level, where data will be more readily available based on the new FCC requirements, be less costly for service providers and the state, while ensuring consistency between state and federal reporting requirements.
- The map itself should be produced by a third-party entity that signs Non-Disclosure Agreements (NDAs) with service providers and provides only a finished product to the state; thereby ensuring the confidentiality of proprietary, competitively sensitive, and security sensitive data.

- Map should provide adoption information, availability information, the HSI technology used, and available speed tiers. It should link to providers' websites to obtain pricing data. The map should also allow for an interactive, web-based version that receives queries and inputs from consumers.
- Local technology planning teams (LTPTs) should be coordinated by the Washington Department of Information Services (DIS) at the state level; along with a facilitator, designated by and working in conjunction with DIS, that will assist the LTPTs in conducting a local needs assessment, developing a strategic technology plan, identifying funding sources, and helping to implement the plan.
- LTPTs should be organized at the county level.
- Washington State University (WSU) Extension should be considered as the facilitator based on:
 - Existing presence in each local area
 - Current involvement in technology programs
 - Synergistic organizational characteristics
- LTPTs should work to leverage existing grassroots community technology efforts.
- DIS should oversee benchmarking and tracking residential, business, non-profit, and institutional high-speed internet adoption on a statewide basis. This should be accomplished by using a variety of information including: updated mapping, FCC and other federal agency data, consumer input, localized surveys, and national tracking surveys.
- In order to spur development of high-speed internet, the state should undertake a variety of initiatives, including:
 - Expanding the Community Technology Opportunities Program (CTOP), soliciting funding in the form of grants and donations from a variety of entities.
 - Establishing a variety of low cost hardware/software programs aimed at residential and business consumers.
 - Establishing a variety of low cost hardware/software programs aimed at existing public access locations, such as community technology centers and libraries.
 - Supporting loan programs for small businesses in order to enhance workforce training and business technology acquisition efforts.
 - Other initiatives aimed at boosting economic development.
- A variety of metrics and benchmarks should be employed in order to measure the level of success of the HSI deployment and adoption strategy including:
 - A continual increase in basic high-speed internet availability such that 99+% availability is determined in targeted areas by 2012.
 - A continual expansion in the HSI speed tier level provided and applications enabled.
 - A continual increase in high-speed internet adoption and usage.
 - A continual expansion in technology literacy and access to HSI technology.

- A continual increase in service provider participation in the deployment and adoption initiative.
 - A continual increase in end user satisfaction.
- Two major legislative initiatives are needed. First, DIS should be authorized to coordinate the entire deployment and adoption strategy implementation, including seeking federal funding to support such an initiative. Second, initial funding needed should be authorized to begin implementation, at least for a staged effort.

Key Programs Initiated: None

Recommended Appropriations:

- The funding needed will range from a minimum staged effort on all fronts (mapping, LTPT implementation, updating mapping, and support for internet resource development) estimated at an initial \$532,250 beginning in FY 2010, to a comprehensive statewide effort on all fronts estimated at a total of \$3,979,000 over 2 years (FY2010 - FY2011).
- Specific funding levels for spurring HSIS deployment in Washington cannot be accurately estimated at this time until: priority needs are identified through the initial mapping process, and goals are developed by the LTPTs based on an analysis of gaps found in high-speed internet availability and adoption.
- The deployment and adoption initiative should be pursued in a phased manner, based on the most efficient and effective use of available funding.

Web link to agency or task force:

<http://dis.wa.gov/hiswg/default.htm>

<http://www.wutc.wa.gov/webimage.nsf/0/0C107F2AECEC013A8825733800684FCF>

Statement of Values:

- The deployment and adoption of high-speed internet services and information technology has resulted in enhanced economic development and public safety for the state's communities, improved health care and educational opportunities, and a better quality of life for the state's residents;
- Continued progress in the deployment and adoption of high-speed internet services and other advanced telecommunications services, both land-based and wireless, is vital to ensuring Washington remains competitive and continues to create business and job growth; and
- The state must encourage and support strategic partnerships of public, private, nonprofit, and community-based sectors in the continued growth and development

of high-speed internet services and information technology for state residents and businesses.

- In order to begin advancing the state towards further growth and development of high-speed internet in the state, and to ensure a better quality of life for all state residents, the State must conduct a statewide needs assessment of broadband internet resources through an open dialogue with all interested parties, including providers, unions, businesses, community organizations, local governments, and state agencies. The legislature intends to use this needs assessment in guiding future plans on how to ensure that every resident in Washington state may gain access to high-speed internet services and, as part of this effort, to address digital literacy and technology training needs of low-income and technology underserved residents of the state through state support of community technology programs.

Where we've been: Not addressed.

Where we are today:

- The level of broadband availability varies widely within and across each of the five counties covered by the Broadband Study. Some urban areas have 1 Gbps service. In rural areas, higher speeds were found only in areas along a provider's backbone connection, or not at all.
- The major inhibitors to broadband access are:
 - Low population density
 - Distance from major transportation corridor.
 - Terrain
 - Permitting requirements for right-of-way, tower siting, etc.
 - Failure to include providers in planning efforts from the outset.
 - Lengthy ROIs
 - Shortcomings of existing deployed technology (i.e. wireless line-of-site issues).
- Adoption of broadband services follows availability.
- Use and value of broadband to consumers increases where broadband options are available and plentiful.
- Even where broadband is available, a certain segment of the population simply does not want or need it.
- Lack of a truly reliable, competitive broadband environment creates the following negative economic impacts:
 - Movement of businesses away from low or no broadband areas to areas with a better broadband environment.
 - Higher operational costs.
 - Difficulty in recruitment.
 - Slower, more inefficient and inconsistent operations.
 - Less provision of services to, and access of services by, citizens thus reducing related quality of life components.

- Providers are very reluctant to provide existing infrastructure information - or even service deployment information - based on their characterization of such information as proprietary and confidential. The State may not be able to completely develop detailed and targeted investment incentives or service deployment options for particular areas without access to the information they possess.

Where we want to be: Not addressed. Unclear. No specific goals set other than those summarized under "Statement of Values".

How are we going to get there? See "Key Recommendations" and "Statement of Values."

Broadband functionality (tiers of service)

The Work Group recommends Washington adopt a definition of HSIS that is:

- Consistent with the FCC broadband speed tiers in the download and upload directions. However, the Work Group's definition will not include the bottom FCC tier in the download or upload direction. The first tier then is ≥ 768 kilobits per second (kbps) download and > 200 kbps upload.
- Consistent with realistic asymmetrical operation in the upload direction, but sets a symmetrical operation goal for each tier, which is consistent with the top end of each of the FCC's speed tiers, and is consistent with required categories contained in Form 477