

## KENTUCKY

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Kentucky ranked 43<sup>rd</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Kentucky also ranked 23<sup>rd</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Kentucky ranked 29<sup>th</sup>, 27<sup>th</sup>, and 7<sup>th</sup> respectively.

Based on a comparison of all seven states included in this scan, Kentucky ranked the 5<sup>th</sup> lowest in subscribership ratios and number of internet service providers. Kentucky ranked 6<sup>th</sup> worst in SDSL and fiber, and 3<sup>rd</sup> best in cable modem technologies.

For residential connections only, Kentucky had a subscribership ratio of 52% in 2009 56% as of 2010, one of the largest increases in subscribership ratios between the two study periods, a 0.04 percentage points improvement.

Kentucky had 122 internet service providers in 2009 and 125 as of 2010, across all technologies.

Based on US Census data, Kentucky's broadband adoption rates is 57.8% and 3.5% for dial-up connections. 31.6% of Kentucky's households (1,750,335) did not have a computer, and 7.0% who had a computer, but didn't have internet service.

In Kentucky, 65.1% of urban households had adopted broadband compared to 49.0% of rural households.

### **Identify state entities that are responsible for administering Kentucky's commitment to broadband development:**

Kentucky began earlier than most CARN states to establish a foundation of its knowledge of technology, innovation, and research and development initiatives when in 2000 it created the Kentucky Innovation Commission, to serve as an independent advisory commission to provide the state with policy recommendations when it passed the KY Innovation Act (HB 572). This act called for a \$53 million dollar investment in the fields of research, development and technology. It also established the Kentucky Rural Innovation Fund to provide vouchers to rural Kentucky based small businesses to facilitate research and spur innovation. This program was funded with \$1 million dollars. During the same year, Kentucky also set up the parameters of telecommunication regulations when it subjected municipal utilities planning to provide telecommunication services to be regulated by the Public Service Commission.

In 2002, Kentucky created the Center for Information Technology Enterprise (CITE) to serve as the administrator of ConnectKentucky, a private non-profit organization who acts as a public-private partnership to lead technology-based initiatives in the Commonwealth. In 2004, Governor Fletcher unveiled the ConnectKentucky Progress Report to showcase the rapid success of ConnectKentucky. In

2005 and again in 2007, Kentucky formally recognized the efforts of ConnectKentucky for its innovative and progressive approach to accelerate technology initiatives throughout the state. ConnectKentucky operates the Computer 4 Kids program (formerly known as No Child Left Offline) part of the Kentucky “Prescription for Innovation,” a comprehensive statewide effort to drive economic development through broadband deployment. Today, ConnectKentucky receives thousands of dollars in private sector donations for these programs and has served as a model for other states particularly, Tennessee and Ohio. ConnectKentucky also created the Connect Equestrian View, a two year project to improve digital inclusion.

In 2004, Kentucky established a 19-member Kentucky Broadband Task Force to examine the deployment of broadband in Kentucky and report findings to the state. During the same year, HB 627 required the Office of the New Economy to develop baseline assessment of broadband deployments while also setting the regulatory boundaries for the regulation of broadband services in the state.

Kentucky Governors have also played a key role in broadband development since 2002 when Governor Patton issued, “Kentucky Prepares for the Networked World,” and again in 2010, when Governor Beshear created the Kentucky Office of Broadband Outreach and Development by executive order.

In 2006, with the passage of HB 550, the Kentucky Infrastructure Authority was authorized to establish an incentive program to assist in the provision of broadband deployment projects when it created the Broadband Deployment Act.

Kentucky relies on the Commonwealth Office of Technology to develop strategies and policies to support and promote information technology as it manages the Kentucky Information Highway (KIH-2). Kentucky has a rich history of establishing high technology, innovation and research entities throughout the Commonwealth as it was an early developer of innovation centers to coordinate a statewide strategic plan.

**Identify possible suggestions for improving Kentucky’s commitment to broadband development:**

Missed policy and legislative opportunities to improve Kentucky’s commitment to broadband development include, 1.) Urge the state to adopt a common registry for telehealth and to require it to be component of any electronic health network; 2.) Require private telecommunication service providers to extend their access to rural customers such as Cincinnati Bell; 3.) Remove statutory language that prevents broadband services from being subject to administrative regulation by the Public Service Commission; 4.) Establish a Rural Enhancement and Development Committee in the state legislature to review rural development policies and programs to improve the quality of life for rural residents; 5.) Authorize funding to help administer the ConnectKentucky program from the Cabinet for Economic Development’s High-Tech Investment Pool; 6.) Establish a legislative task force to provide home laptop computers to middle school students through the 12<sup>th</sup> grade; and 7.) Provide that businesses in Kentucky with gross earnings less than \$50,000 be offered the same rate for broadband as residential customers. All of these policy recommendations were legislative proposals that did not pass in Kentucky.

**Scan federal funding opportunities provided by BTOP or NTIA for Kentucky:**

<b>Public Purpose</b>	<b>Kentucky</b>
Public Computer Centers	\$24,855,667
Infrastructure	\$535,308
Broadband Data & Development	\$5,302,717
Sustainable Adoption	
State Specific Totals:	\$30,693,692
Share of Nationwide Grants:	\$124,750,072

Kentucky will receive only \$30,693,692 in federal funding from BTOP and NTIA sources. Kentucky will also share in a portion of \$124,750,072 from federal sources in conjunction with other states.

Kentucky will receive \$24,855,667 in federal funding to develop Public Computer Centers, or 83% of the total. Broadband Data and Development goals will receive \$5,302,717 and only \$535,308 is dedicated for the state for Infrastructure development.

## Kentucky Broadband Legislative and Policy Adoptions

1998 – [HJR 89](#), provides that a Task Force on Utility Tax Policy to direct a comprehensive study of the taxation of public service companies that supply utility service to citizens.

2000 – [HB 572](#) which created the ‘Kentucky Innovation Commission’ to serve as an independent advisory commission to provide the Governor and the General Assembly with advice, direction, and policy recommendations relating to the status of Kentucky knowledge-driven businesses, research and development initiatives, and related high-skill training and education. Known as the Kentucky Innovation Act, this legislation advances the knowledge-based economy through technological innovation and knowledge transfer.

2000 – [HB 477](#) – Regulation of local government telecommunication services which provides that a municipal utility providing or planning to provide telecommunication services shall be subject to regulation by the Public Service Commission of Kentucky.

2000 – [HB 897](#), prohibits regulated utilities from using revenues to fund unregulated affiliates from including expenses in the rate base. Prohibits the subsidization of non-regulated activity from the regulated business.

2002 – Kentucky created the Center for Information Technology Enterprise (CITE) was launched. Project [ConnectKentucky](#) was formed as a public private partnership to lead technology-based initiatives. ConnectKentucky is part of Connected Nation, a 501 (c)(3) non-for-profit organization.

2002 – [HB 634](#), provides that mobile telecommunications shall be taxed in accordance with federal law.

2002 – Office of the Governor issues ["Kentucky Prepares for the Networked World,"](#)

2004 – [HB 627](#), establishes a 19-member Kentucky Broadband Task Force to examine the deployment of broadband in Kentucky and report findings and recommendations. Requires the Office of the New Economy to develop a baseline assessment of broadband deployment. Prohibits any type of state regulation of broadband services, affirms the right of service providers to obtain access to the publicly switched network, affirm the right to charge for access for broadband services, and affirm the duties of local exchange carriers to provide unbundled network elements to providers allowed by federal law.

2005 – [HR 124](#), recognize ConnectKentucky for its innovative and progressive approach to accelerate technology initiatives throughout Kentucky.

2006 – [HB 550](#) created the Broadband Deployment Act managed by the Kentucky Infrastructure Authority and creates the Broadband Deployment Account and requires the authority to establish an incentive program to assist in the provision of broadband deployment projects.

2006 – [HB 337](#), deregulates the telephone service industry by limiting the jurisdiction the Public Service Commission has over telephone utilities.

2007 – [SB 74](#) recognized the contributions made by Connect KY. Requires The Department for Local Government shall 1.) track the deployment and adoption of broadband and information technology in KY, 2.) enable public-private partnerships among broadband providers and relevant government entities to encourage the deployment and adoption of advanced broadband services, 3.) serve as a resource for all citizens, broadband providers, and technology businesses regarding broadband and information technology issues, 4.) report progress on deployment and adoption to the Legislative Research Commission upon request and at least annually, and 5.) ensure notification to the public of the availability of public funds for broadband and information technology investments prior to awarding contracts or grants. May contract with nonprofit organization to accomplish objectives.

## **Kentucky Broadband and Policies That Didn't Get Adopted**

1998 – [HB 772](#), requires that municipalities and local governments to compete with private sector companies on the same terms and conditions that apply to the private sector. Ensures rights of way and access is available to private sector on a nondiscriminatory basis.

2000 – [HJR 129](#) – creating a Task Force on Bridging the Technology Gap as a subgroup of the Kentucky Information Technology Advisory Council within the Governor's Office of Technology. The task force will study the current and widening digital divide in the Commonwealth and establish 2 pilot projects ( 1 from a rural area and 1 from an urban area) and a 5 year plan for closing the technology gap.

2001 – [SCR 16](#), directing a study of the unequal availability of high speed internet access throughout the Commonwealth and ways to make high speed internet access both available and affordable to traditionally underserved areas. Subcommittee of Information Technology of the Interim Joint committee on State Government and shall report to the Legislative Research Commission.

2002 – [HB 161](#), requires the Governor's Office for Technology to implement an internet-based common registry for telehealth and establish standards for the central registry.

2003 – [HB 126](#), authorizing the Governor's Office for Technology to implement an internet-based common registry for telehealth and require the central registry to be a component of any electronic health network.

2003 – [HR 51](#) – Urging Cincinnati Bell to provide fair and equal broadband internet access through their Asymmetric Digital Subscriber Line (ASDL) to rural customers in Gallatin, Grant, and Pendleton counties.

2004 - [SB 215](#), establishes that broadband services shall be market-based and not subject to state administrative regulation. Prevents agencies from imposing restrictions on broadband service providers with the rates, terms, and conditions for entry into the market and to restrict the availability of facilities or equipment to provide broadband services.

2004 – [HR 278](#), authorizes the Legislative Research Commission to appoint two members from the cable industry to the Broadband Task Force.

2004 – [HR 281](#), authorizes the Legislative Research Commission to appoint two members from the cable industry to the Broadband Task Force.

2004 – [HR 287](#), encourages the Office of the New Economy to cooperate with Kentucky's Center for Information Technology Enterprise Incorporated (CITE) in studying state agency and university resources which could be made available for improving broadband and cellular access and service in rural communities.

2004 – [HJR 150](#), directs the Office of the New Economy to conduct inventory of state owned resources which could be shared through public-private partnerships to improve rural communities' access to broadband and cellular service.

2005 – [HB 97](#), to establish the Rural Enhancement and Development Committee to review rural development policies and programs to improve the quality of life for rural areas. Will improve infrastructure including telecommunications and broadband access.

2006 – [HJR 199](#), Commends the Kentucky's No Child Left Offline initiative and urges the Commonwealth Office of Technology and the Office of Surplus Properties to continue to make available all applicable surplus computers for the initiative.

2006 – [HB 74](#), establishes the Rural Enhancement and Development Committee as a subcommittee of the Legislative Research Commission. Promote policies and programs to improve the quality of life for citizens within the rural regions of Kentucky. Would promote infrastructure development including telecommunications and broadband access.

2006 – [HB 348](#), would create a Metropolitan and a Micropolitan Issues Committee to review programs and policies that affect these populations. Would study infrastructure developments including telecommunications and broadband access.

2007 – [HCR 126](#), recognizes ConnectKentucky as the Commonwealth's telecommunications and information technology resource.

2008 – [HB 406](#), bill would have required funding of \$1.2 million in each year of the biennium to administer the ConnectKentucky program from the Cabinet for Economic Development's High-Tech Investment Pool without identifying any services to be rendered. Governor Beshear vetoes this language as it represents a 26% increase in funding in a tight budget environment. Governor Beshear points to the ConnectKentucky success.

2009 – [HCR 158](#), resolution to establish a legislative task force to provide home laptop computers for middle school students through the 12<sup>th</sup> grade.

2010 – [HCR 12](#), resolution to establish a legislative task force to provide home laptop computers for middle school students through the 12<sup>th</sup> grade.

2011 – [HB 117](#), provides that any business in Kentucky with annual gross earnings of less than \$50,000 shall be offered the same rate as the bundled residential or individual rate for broadband telecommunication service.

2011 – [HCR 7](#), resolution to establish a legislative task force to provide home laptop computers for middle school students through the 12<sup>th</sup> grade.

## MARYLAND

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Maryland ranked 6<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Maryland also ranked 32<sup>nd</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Maryland ranked 25<sup>th</sup>, 40<sup>th</sup>, and 31<sup>st</sup> respectively.

Based on a comparison of all seven states included in this analysis, Maryland ranked the best in subscribership ratios, and sixth worst in number of internet service providers. Maryland ranked 5<sup>th</sup> worst in SDSL, sixth worst in fiber and cable modem technologies.

For residential connections only, Maryland had a subscribership ratio of 71% in 2009 and 72% as of 2010, one of the smallest increases in subscribership ratios between the two study periods, a 0.01 percentage points improvement.

Maryland had 89 internet service providers in 2009 and 102 as of 2010, across all technologies.

Based on US Census data, Maryland's broadband adoption rates is 74.1% and 2.2% for dial-up connections. 20.0% of Maryland's households (2,214,385) did not have a computer, and 3.7% who had a computer, but didn't have internet service.

In Maryland, 74.5% of urban households had adopted broadband compared to 63.6% of rural households.

### **Identify state entities that are responsible for administering Maryland's commitment to broadband development:**

In 2000, eMaryland Initiative was created to promote the deployment of internet-based technologies. Established at the University of Maryland it was designed to promote and advance development of ecommerce in the state. In 2001, the Task Force on Enhanced Wireless 911 was created to report findings back to the General Assembly. In 2002, the State Superintendent was authorized to develop resources and standards for offering courses on the internet using developing technologies.

In 2003, the Task Force on Broadband Communications Deployment in Underserved Rural Areas was created and charged with reviewing developments in other states to expand broadband in rural areas. It was created to encourage the development of goals to deploy broadband in rural areas and to implement the recommendations.

In 2006, the Rural Broadband Coordination Board was created to deploy broadband in rural and underserved areas of the state. It established the Rural Broadband Assistance Fund in the Department of Business and Economic Development. The Governor included \$4 million annually from the general

fund beginning in FY 2008 and 2009, including \$2 million from the Maryland Economic Development Assistance Fund. Legislation will terminate in 2020.

In 2007, the Maryland Department of Transportation is required to evaluate the Department's Telework Partnership with Employer's Initiative, a program designed to encourage employers to allow employees work from a satellite office or, from their home. In 2010, county boards of education were authorized to establish a virtual school for K-12 children.

**Identify possible suggestions for improving Maryland's commitment to broadband development:**

Missed policy and legislative opportunities to improve Maryland's commitment to broadband development include, 1.) Establishing a pilot program to build interactive teleconferences in rural counties; 2.) Establishing a pilot program to implement wireless technologies in all schools; 3.) Creating an Internet Consumers Bill of Rights to require service providers to provide access transport services to other persons or businesses; 4.) Creating a study commission to look for alternative ways to provide access to broadband; 5.) Establishing a Task Force to study the necessity of tax credits to foster telework; 6.) Providing tax exemptions for purchase of broadband infrastructure equipment investments and to provide tax credits to help spur investments; 7.) Establish a Task Force to encourage and monitor competition among broadband service providers; 8.) Requiring the state to appropriate funding to help construct network facilities where commercial access is lacking; 9.) Extend provisions of Public Utility Companies to wireless telecommunication services, requiring service providers to report back to the PSC, and requiring the PSC to make recommendations to improve the development of competition; 10.) Create a state debt to be used as a grant to construct statewide fiber optic network; 11.) Exempt installation of broadband communications infrastructure from licensing requirements in rural or underserved areas; 12.) Establishing a task force to study the use of telemedicine in medically underserved populations; 13.) Forcing broadband service providers to make the service available in all areas of the county if they currently provide service to more than 50% of the population; 14.) Requiring health insurance providers to reimburse health care providers for a covered service if rendered by telemedicine and to provide coverage for participants; and 15.) Urging counties and municipalities to facilitate the creation of public-private partnerships to provide access to broadband internet services.

**Scan federal funding opportunities provided by BTOP or NTIA for Maryland:**

<b>Public Purpose</b>	<b>Maryland</b>
Public Computer Centers	\$932,116
Infrastructure	\$115,240,581
Broadband Data & Development	\$4,755,768
Sustainable Adoption	
State Specific Totals:	\$120,928,465
Share of Nationwide Grants:	\$109,772,429

Maryland will receive a total of \$120,928,465 in federal funding from BTOP and NTIA sources. Maryland will receive \$115,240,581 for the goal of improving broadband Infrastructure, representing 96% of total federal funding. Maryland will not receive any federal money for Sustainable Adoption dedicated solely to the state. Maryland will receive \$4,755,768 for Broadband Data and Development and only \$932,116 for Public Computer Centers. Maryland will also receive a portion of \$109,772,429 federal funding in conjunction with other states.

Maryland's \$115 million dollar NTIA grant is the second largest in the US behind West Virginia's \$126 million dollar NTIA grant. Pennsylvania's grant was the third largest at \$99.6 million dollars.

## **Maryland Broadband Legislation and Policy Adoptions**

2000 – [HB 276](#), eMaryland Initiative was created. Established at the UofM to promote the deployment of internet-based technologies. Designed to promote and advance development of ecommerce in the state. Same as SB 196.

2001 – [HB 1078](#), creating the Task Force on Enhanced Wireless 911 Service and report findings to General Assembly by December 1, 2001. Same as SB 505.

2002 – [HB 1197](#), provides that the State Superintendent of Schools may develop resources and standards for the offering of courses or services on the internet or through developing technologies.

2002 – [HB 1237](#), extending the Innovative Partnership Program for State community colleges for a number of years.

2003 – [HB 697](#), Task Force on Broadband Communications Deployment in Underserved Rural Areas was created. Task Force was charged with considering developments in rural areas around the country, evaluating resources and infrastructure available in MD rural areas, encouraging development of goals to deploy broadband in those rural areas, and implement the recommendations. Task Force final report due by June 30, 2005. Same as SB 487.

2005 – [HB 963](#), Extending the termination date of the Broadband Communications Deployment in Underserved Rural Areas to June 30, 2006. Same as SB 454.

2006 – [SB 728](#), requiring the University of Maryland School of Medicine to conduct a study regarding telemedicine.

2006 – [SB 753](#), establishes the Rural Broadband Coordination Board (RBCB) dedicated to deploying broadband in rural and underserved areas of the state. Establishes the Rural Broadband Assistance Fund (RBAF) as a nonlapsing special fund in the Department of Business and Economic Development (DEBED). Governor must include in FY 2008 and 2009 budgets at least \$4 million annually from the general fund, including \$2 million each year from the Maryland Economic Development Assistance Authority Fund. Legislation terminates in 2020.

2007 – [HB 1150](#), requiring the Maryland Department of Transportation to evaluate the Department's Telework Partnership with Employers' Initiative.

2007 – [HB 1379](#), provides that the Public Service Commission does not have jurisdiction over specified voice over internet protocol services. Same as SB 864.

2010 – [HB 1362](#), authorizing county boards of education to establish a virtual school.

## **Maryland Broadband Legislation and Policies that Didn't Get Adopted**

2000 – [HB 487](#), establishing a pilot program to build interactive teleconferences in Allegany, Garrett, and Washington counties.

2000 – [HB 514](#), establishing a pilot program to implement wireless communication technologies in all Baltimore County Schools.

2000 – [HB 571](#), creating an Internet Consumers Bill of Right that requires cable operators to provide broadband Internet access transport services to other persons.

2000 – [HB 986](#), establishing a Study Commission on Broadband Internet Transport Service. Purpose of the Study Commission is to study and make recommendations regarding the various means to provide access to broadband internet transport service and its current availability, available and needed infrastructure for providing access, monitoring and regulating the development and operation of broadband. A report shall be submitted to the Governor and the General Assembly by December 31, 2001. Study Commission ends after December 31, 2001.

2000 – [HB 1150](#), establishing a Task Force to study the creation of tax credits for the costs of providing teleworker benefits to employees.

2000 – [HB 1429](#), establishes the Maryland School Telecommunications Fund to support rates for telecommunication services provided to public schools.

2000 – [SB 161](#), exempting from the sales and use tax the machinery or equipment related to the telecommunication or internet service business.

2001 – [HB 57](#), establishing a pilot program to implement wireless communication technologies in all Baltimore County Schools.

2001 – [HB 137](#), establishing a Task Force to encourage and monitor competition among providers of telecommunication services and report findings to the General Assembly. Same as SB 246.

2001 – [HB 622](#), establishing a Task Force to study the creation of tax credits for the costs of providing teleworker benefits to employees.

2001 – [HB 768](#), exempting from the sales and use tax the machinery or equipment related to the telecommunication or internet service business. Same as SB 787.

2001 – [HB 1137](#), exempting from the sales and use tax equipment used for biotechnology and internet infrastructure. Same as SB 792.

2001 – [HB 1228](#), providing for the construction of network facilities in areas where existing commercial access is lacking, and requiring the Governor to provided specified funding for network and into include funding in the state budget.

2001 – HB [1447](#), creating a Joint Committee on Technology.

2002 – [HB 13](#), applies consumer protection provisions for wireless customers and extends provisions of Public Utility Companies to wireless telecommunication services.

2002 – [HB 110](#), requires the Public Service Commission to make recommendation to improve the development of competition of the telecommunications service market.

2002 – [HB 1048](#), allowing a state income tax credit for expenses paid in the establishment of a teleworking arrangement. Limits the tax credit to \$500 per year.

2002 – [HB 1073](#), local governments allowed to grant cable television franchises property tax credits to invest in technology empowerment zones or offer bundled technology services at discounted rates in technology empowerment zones.

2002 – [HB 1111](#), providing for the construction of network facilities in areas where existing commercial access is lacking, and requiring the Governor to provided specified funding for network and into include funding in the state budget.

2002 – [HB 1166](#), establishing a teleworker tax credit program in Frederick, Montgomery, and Prince George's county.

2002 – [HB 1213](#), requiring the Governor to establish a statewide Telework Partnership with Employers Pilot program and to require the Governor to provide money in the budget and to assist in the development of the Pilot Program.

2002 – [HB 1406](#), allowing a state income tax credit for expenses paid for making an arrangement for telework, \$500 credit for employee and \$10,000 credit for employer.

2002 – [SB 528](#), creating a sales and use tax exemption for investments made in biotechnology and internet infrastructure.

2002 – [SB 677](#), establishing a Task Force to study costs for providing a telework benefits to employees and to make recommendations.

2003 – [HB 768](#), requiring the Secretary of Budget and Management to establish a statewide Telework and Workforce Development Pilot program to educate private sector employers on the advantages of telework. Same as SB 496.

2004 – [HB 1118](#), establishing a Teleworking Implementation Program and requiring state agencies to submit a telework plan to the Department of Budget and Management. Same as SB 484.

2005 – [HB 41](#), providing a tax credit against income tax for an employer who incurs costs related to teleworking expenses. May not exceed \$5,000. Same as SB 115.

2005 – [HB 60](#), establish a Teleworking Implementation Program. Same as SB 117.

2006 – [HB 1013](#), providing a tax credit against income tax for an employer who incurs costs related to teleworking expenses. May not exceed \$5,000.

2006 – [HB 1025](#), establish a Teleworking Implementation Program. Same as SB 30.

2006 – [HB 1156](#), establishing the Maryland Rural Broadband Coordination Board and requiring state government units to cooperate with the establishment of broadband telecommunication services in rural and underserved areas. Creates a Rural Broadband Assistance Fund as a special fund in the Department of Business and Economic Development. Passed, but [vetoed](#) by Governor (duplicative).

2006 – [HB 1511](#), creation of a state debt not to exceed \$2 million dollars and the proceeds to be used as a grant to the Board of Directors of the Lower Shore Broadband Cooperative, Inc. to construct a statewide fiber optic network. Same as SB 789.

2007 – [HB 1069](#), requiring the Public Service Commission to adopt regulations requiring broadband provider reports to the Commission on the deployment of broadband service to the public.

2008 – [HB 987](#), requiring the Public Service Commission to adopt regulations requiring broadband provider reports to the Commission on the deployment of broadband service to the public.

2008 – [HB 1144](#), requiring the Department of Budget and Management to list public-private partnership for purpose of fostering high speed internet service and other information technology services.

2008 – [HB 1389](#), establishes a pilot program on smart grid deployment under the Public Service Commission.

2008 – [HB 1619](#), exempts installation of broadband communications infrastructure provided by nonprofit telecommunications service provider from licensing requirements in a rural or underserved area of the state. Same as SB 1006.

2009 – [HB 1072](#), establishes a pilot program on smart grid deployment under the Public Service Commission.

2009 – [HB 1121](#), requiring the Department of Budget and Management to list public-private partnership for purpose of fostering high speed internet service and other information technology services.

2009 – [HB 1293](#), establishing a Teleworking Implementation Program requiring the Secretary of Budget and Management to establish telework policy for state government.

2009 – [HB 1537](#), establishing a Task Force to study feasibility of Teleworking Centers on the Eastern Shore for Chesapeake Bay Bridge Commuters.

2011 – [HB 16](#), establishing a Task Force to study the Use of Telemedicine in medically underserved populations including completing a cost-benefit analysis and make recommendations to the Governor. Same as SB 406.

2011 – [HB 1201](#), requiring broadband service providers to make the service available in all areas of the county by a specified data if the service is available to more than 50% of addresses within the political subdivision.

2011 – [SB 298](#), requiring health insurance carriers to reimburse a license health care provider for a covered service if rendered by telemedicine.

2011 – [SB 744](#), requiring health insurance carriers to provide coverage for specified telemedicine services.

2011 – [SJR 5](#), urging counties and municipalities to facilitate the creation of public-private partnerships to provide access to broadband internet services.

## OHIO

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Ohio ranked 26<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Ohio also ranked 7<sup>th</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Ohio ranked 5<sup>th</sup>, 8<sup>th</sup>, and 5<sup>th</sup> respectively.

Based on a comparison of all seven states included in this analysis, Ohio ranked 3<sup>rd</sup> best in subscribership ratios, and the best in number of internet service providers, access to SDSL, Fiber, and Cable Modem technologies.

For residential connections only, Ohio had a subscribership ratio of 61% in 2009 and 65% as of 2010, one of the largest increases in subscribership ratios between the two study periods, a 0.04 percentage points improvement.

Ohio had 176 internet service providers in 2009 and the same number in 2010 across all technologies.

Based on US Census data, Ohio's broadband adoption rates is 63.9% and 2.9% for dial-up connections. 25.7% of Ohio's households (4,681,232) did not have a computer, and 6.8% who did have a computer, but didn't have internet service.

In Ohio, 66% of urban households had adopted broadband compared to 57.1% of rural households.

### **Identify state entities that are responsible for administering Ohio's commitment to broadband development:**

In 2005, the Public Utilities Commission was prohibited from establishing any requirements for the unbundling of network elements for the resale of telecommunications. In 2007, state franchising authority supercedes local franchising authority and reaffirmed that the Public Utilities Commission has no jurisdiction over cable and video service.

In 2007, by executive order 24S, Governor Strickland ordered the establishment of the Ohio Broadband Council to unite key state agencies in developing a strategic plan for the deployment of a new, statewide broadband data network. The new broadband data network to be established by the Broadband Council will be known as the Broadband Ohio Network. Will have two components: NextGen Network to provide broadband data services to all state agencies, boards and commissions and OSCnet (formerly known as the Third Frontier Network) and is housed at the Ohio Supercomputer Center and focus on innovation and research. This Council expired on the last day of Strickland's governorship.

In 2007, Governor Strickland launched Connect Ohio is currently implementing a statewide broadband training program, Every Citizen Online in order to increase sustainable broadband adoption in Ohio. The project provides free computer training sessions at public libraries and community colleges through the

state and introduces new users to the internet. Connect Ohio has a three year strategy that involves a partnership between state and broadband service providers to create detailed maps of broadband coverage and to supply computers to areas that lack computer access.

In 2009, SB 162 redefined a public utility to specifically exclude broadband service providers. The legislation also created a Community-Voicemail Pilot Program funded by an assessment on each local exchange carrier. The pilot program lasted for two years and funding was capped at \$500,000. The voicemail system is for individuals who are in a state of transition and have no access to traditional telephone services.

In 2010, the Office of the Ohio Consumer’s Counsel was able to negotiate an agreement with Frontier, as a condition of its planned merger with Verizon, to commit to deploy broadband to 85 percent of its territory in southeastern Ohio. The plan is expected to be completed by 2013.

**Identify possible suggestions for improving Ohio’s commitment to broadband development:**

Missed policy and legislative opportunities to improve Ohio’s commitment to broadband development include, 1.) Requiring “open access” requirements for broadband service providers to allow access to other internet service providers; and 2.) Removing the restrictions against the regulation of broadband service providers by the Public Utilities Commission.

**Scan federal funding opportunities provided by BTOP or NTIA for Ohio:**

<b>Public Purpose</b>	<b>Ohio</b>
Public Computer Centers	\$2,163,655
Infrastructure	\$95,506,096
Broadband Data & Development	\$7,025,762
Sustainable Adoption	\$6,856,399
State Specific Totals:	\$111,551,912
Share of Nationwide Grants:	\$130,886,976

Ohio will receive \$111,551,912 in federal funding from BTOP and NTIA for broadband adoption and deployment. Ohio will receive \$95,506,096 for the purpose of building out broadband Infrastructure, representing 86% of total dedicated federal funding for the state. Ohio will receive \$7,025,762 for Broadband Data and Development, \$6,856,399 will go towards Sustainable Adoption, and only \$2,163,655 will go to Public Computer Centers.

Ohio will also receive a share of \$130,886,976 in federal funding in conjunction with other states.

## Ohio Broadband Legislation and Policy Adoptions

2005 - [HB 218](#), Prohibits the Public Utilities Commission from establishing any requirements for the unbundling of network elements for the resale of telecommunications services that are inconsistent with federal law.

2007 – [SB 117](#), provides for a state franchising system for video service and supercedes local franchising authority, and repeals township cable law. Specifies that the Public Utilities Commission has no jurisdiction of cable or video service.

2007 – [Executive Order 24S](#), Governor Strickland ordered the establishment of the Ohio Broadband Council to unite key state agencies in developing a strategic plan for the deployment of a new, statewide broadband data network. The new broadband data network to be established by the Broadband Council will be known as the Broadband Ohio Network. Will have two components: NextGen Network to provide broadband data services to all state agencies, boards and commissions and OSCnet (formerly known as the Third Frontier Network) and is housed at the Ohio Supercomputer Center and focus on innovation and research. Expires on last day of Strickland’s governorship.

2009 – [SB 162](#), revises state regulation of telephone companies and to remove telegraph companies from utility regulation. Bill redefines “public utility” to exclude providers of broadband services. Bill establishes a Community-Voicemail Pilot Program Fund funded by an assessment on each local exchange carrier. Pilot program lasts for 2 years and expenses capped at \$500,000. The voicemail system is for individuals who are in a state of transition and have no access to traditional telephone exchange service or readily available alternatives, including the homeless, clients of battered-spouse programs, and displaced veterans.

## OH Broadband Legislation and Policies that Didn't Get Adopted

2000 - [HB 582](#), Requires a cable operator that is both a wireline provider of broadband internet access transport service and either an internet service provider or an affiliate of an internet service provider to allow any other internet service provider access to the cable operator's broadband internet access transport service. Imposes "open access" requirements. Same as SB 258.

2005 – [SB 134](#), Prohibits the Public Utilities Commission from establishing any requirements for the unbundling of network elements for the resale of telecommunications services that are inconsistent with federal law.

2005 – [HB 676](#), creates the Ohio Broadband and Wireless Telecommunications Task Force. The Task Force shall examine and make recommendations on the availability of broadband and wireless in rural southeast Ohio. Task Force shall issue a report to the General Assembly and the Governor and shall cease to exist upon submitting its report.

2007 – [HB 72](#), creates the 19-member Ohio Broadband and Wireless Telecommunications Task Force. The Task Force shall examine and make recommendations on the availability of broadband and wireless in rural southeast Ohio. Task Force shall issue a report to the General Assembly and the Governor and shall cease to exist upon submitting its report.

2009 – [HB 276](#), revises state regulation of telephone companies and removes telegraph companies from utility regulation. Specifies that Public Utilities Commission has no authority over an interconnected voice over internet protocol or telecommunication service.

2011 – [HCR 27](#), urging the FCC to reconsider the order granting LightSquared authority to construct cellular stations that would interfere with GPS systems.

## PENNSYLVANIA

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Pennsylvania ranked 12<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Pennsylvania also ranked 14<sup>th</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Pennsylvania ranked 11<sup>th</sup>, 13<sup>th</sup>, and 6<sup>th</sup> respectively.

Based on a comparison of all seven states included in this scan, Pennsylvania ranked the second best in subscribership ratios and number of internet service providers. Pennsylvania ranked 11<sup>th</sup> best in SDSL, 8<sup>th</sup> best in fiber, and 5<sup>th</sup> best in cable modem technologies.

For residential connections only, Pennsylvania had a subscribership ratio of 66% in 2009 and 68% as of 2010, one of the smallest increases in subscribership ratios between the two study periods, a 0.02 percentage points improvement.

Pennsylvania had 162 internet service providers in 2009 and 156 as of 2010, across all technologies.

Based on US Census data, Pennsylvania's broadband adoption rates is 67.4% and 2.9% for dial-up connections. 25.1% of Pennsylvania's households (5,129,874) did not have a computer, and 4.7% who had a computer, but didn't have internet service.

In Pennsylvania, 67.7% of urban households had adopted broadband compared to 65.7% of rural households.

### **Identify state entities that are responsible for administering Pennsylvania's commitment to broadband development:**

In 2002, the small community of Kutztown, Pennsylvania built a fiber-to-the-home network called Hometown Utilicom with 913 direct subscribers. The system has 30 miles of fiber access infrastructure. Residents have saved \$1.5 million due to lower rates and competitive discounts offered by other providers.

In 2003, HB 30 was passed which requires that local exchange telecommunications companies must file a network modernization plan to report on broadband availability on a biennial basis. Legislation defines broadband as 1.5 mbps down and 128 kbps up.

Importantly, the legislation establishes the Broadband Outreach and Aggregation Fund (BOAF) which provide funding to increase awareness and demand for broadband and to provide resources to communities and residents who need broadband services. Political subdivisions, economic development entities, education institutions, health care facilities, local businesses and qualified residents can apply.

In 2004, Pennsylvania enacted Act 183, which established threshold dates for universal broadband deployment in exchange for the easing of some regulations on telecommunication service providers. Telecommunication service providers contend that a majority of their members had broadband deployed throughout their service territories by the end of 2008. The Pennsylvania Telephone Association (PTA) plays a major role in telecommunication policy in Pennsylvania.

In 2007, the legislature recognized the cable service providers as the early adopters of broadband technologies particularly, the Broadband Cable Association of Pennsylvania.

In 2007, the state prohibited the regulation of voice over internet protocol and other internet services and products.

The Keystone Initiative for Network-Based Education and Research (KINBER) is creating a statewide campaign to increase delivery of broadband throughout Pennsylvania. The project has attracted about \$130 million in combined federal and private funding. KINBER is a coalition of Pennsylvania colleges and universities, research and healthcare organizations, and economic development entities.

In 2010, Pennsylvania held a statewide broadband summit. The summit was hosted by Penn State University.

In 2011, SR 10, a resolution was adopted that established principles for technology strategies and broadband mobilization and the need to maximize federal and state money for implementing these strategies.

Pennsylvania's Broadband Map can be found [here](#).

**Identify possible suggestions for improving Pennsylvania's commitment to broadband development:**

Missed policy and legislative opportunities to improve Pennsylvania's commitment to broadband development include, 1.) Establish the Bureau of Broadband Deployment and 2.) Establish a task force to determine the feasibility of a virtual high school.

**Scan federal funding opportunities provided by BTOP or NTIA for Pennsylvania:**

<b><u>PUBLIC PURPOSE</u></b>	<b><u>PENNSYLVANIA</u></b>
Public Computer Centers	\$7,146,129
Infrastructure	\$128,444,692
Broadband Data & Development	\$7,356,301
Sustainable Adoption	\$11,804,015
Pennsylvania Only Grants:	\$154,751,137
Share of Nationwide Grants:	\$154,848,321

Pennsylvania will receive \$154,751,137 in federal funding opportunities from BTOP and NTIA for the state. In addition, Pennsylvania will receive a portion of additional grants totaling \$154,848,321 in federal funding opportunities.

The majority of federal funding is dedicated to improve the state's infrastructure with \$128,444,692 being spent on the build out of broadband, approximately 83% of the total federal funding earmarked for the state. Sustainable adoption efforts will receive \$11,804,015, Broadband Data and Development efforts will receive \$7,356,301 and Public Computer Centers will receive \$7,146,129.

Pennsylvania's \$99.6 million dollar NTIA grant is the third largest in the country, followed by Maryland's \$115 million dollar grant, and West Virginia's \$126 million dollar grant.

## Pennsylvania Broadband Legislation and Policy Adoptions

In 2002, the small community of Kutztown, Pennsylvania built a fiber-to-the-home network called [Hometown Utilicom](#) with 913 direct subscribers. The system has 30 miles of fiber access infrastructure. Residents have saved \$1.5 million due to lower rates and competitive discounts offered by other providers.

In 2003 – [HB 30](#), requires that local exchange telecommunication companies must file a network modernization plan to report on broadband availability on a biennial basis. The legislation will expire on December 31, 2015. Defines broadband as 1.5 mbps down and 128 kbps up.

Importantly, the legislation establishes the Broadband Outreach and Aggregation Fund ([BOAF](#)) which provide funding to increase awareness and demand for broadband and to provide resources to communities and residents who need broadband services. Political subdivisions, economic development entities, education institutions, health care facilities, local businesses and qualified residents can apply. A list of 2010 awardees can be found [here](#).

In 2004, Pennsylvania enacted Act 183, which established threshold dates for universal broadband deployment in exchange for the easing of some regulations on telecommunication service providers. The legislation mandated that all incumbent local exchange carriers have broadband services available no later than 2015.

Telecommunication service providers contend that a majority of their members had broadband deployed throughout their service territories by the end of 2008. The Pennsylvania Telephone Association (PTA) plays a major role in telecommunication policy in Pennsylvania.

2007 – [HR 391](#), a resolution recognize the cable service providers as the early adopters of broadband technologies. Recognizes the Broadband Cable Association of Pennsylvania.

2007 – [SB 1000](#), prohibits the regulation of voice over internet protocol and other internet products and services and provides for the preservation of consumer protections.

The Keystone Initiative for Network-Based Education and Research ([KINBER](#)) is creating a statewide campaign to increase delivery of broadband throughout Pennsylvania. The project has attracted about \$130 million in combined federal and private funding. KINBER is a coalition of Pennsylvania colleges and universities, research and healthcare organizations, and economic development entities.

In 2010, Pennsylvania held a statewide broadband [summit](#). The summit was hosted by Penn State University.

2011 – [SR 10](#), a resolution establishing principles for technology strategies and broadband mobilization and maximizing federal and state money for implementing these strategies.

## **Pennsylvania Broadband Legislation and Policies that Didn't Get Adopted**

1999 – [HB 1516](#), an act regulating access to internet service providers by wireline broadband internet access transport providers.

2001 – [HCR 130](#), a resolution directing the Joint State Government Commission to study the broadband and high-speed telecommunications infrastructure and to report its findings to the General Assembly.

2003 – [SB 900](#), establishes the Pennsylvania Telecommunications Commission and establishes the Bureau of Broadband Deployment and creates the Broadband Deployment and Telecommunications Fund to extend broadband deployment adoption throughout the state.

2003 – [HB 1669](#), creates the Information Highway Development Board to provide for telecommunications competition and universal broadband deployment. The bill would enhance broadband deployment by promoting competition between a wide variety of service providers on an equal and nondiscriminatory basis. A funding mechanism to assist in universal broadband deployment was established.

2003 – [HB 1010](#), establishes the Connecting Pennsylvania Authority to provide for alternative forms of regulation to enhance the deployment of advanced broadband.

2007 – [HB 327](#), an act restricting local political subdivisions from providing broadband services within the service territory of a local exchange telecommunications company.

2007 – [HR 427](#), a resolution urging the Congress to ban internet access taxes.

2007 – [HR 347](#), a resolution establishing a task force to examine the creation of a virtual high school.

2008 – [HB 1490](#), relating to broadband deployment, mapping and availability. Consumer Choice Cable Franchising and High-Speed Broadband Promotion Act. Will provide a baseline assessment of high-speed broadband and update the data every six months, and track adoption rates and identify barriers to adoption.

2009 – [HB 192](#), the Broadband Deployment, Mapping and Availability Act. The Department of Community and Economic Development shall work collaboratively with broadband service providers to maintain and update service inventory. Establish e-community teams to develop proposals to achieve greater deployment of broadband.

2009 – [SR 133](#), a resolution urging the President and the Governor to institute a broadband mobilization strategy to manage funds from the ARRA.

2010 – [HR 973](#), a resolution urging the President and the Governor to refrain from regulating internet broadband services as a common carrier services under Title II of the Communications Act of 1934.

2010 – [HR 878](#), a resolution urging the FCC to refrain from regulating the internet.

2011 – [SR 119](#), a resolution urging the Commonwealth to upgrade its broadband communications network for use by the private and public sectors in the Northern Tier of this state. Same as HR 265.

2011 – [HR 476](#), a resolution urging Congress to pass legislation that will create a uniform national framework on digital commerce to protect consumers from multiple and discriminatory taxes and provide certainty and uniformity for state and local governments.

## TENNESSEE

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Tennessee ranked 46<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Tennessee also ranked 25<sup>th</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Tennessee ranked 22<sup>nd</sup>, 25<sup>th</sup>, and 18<sup>th</sup> respectively.

Based on a comparison of all seven states included in this analysis, Tennessee ranked second worst in subscribership ratios, sixth worst in number of internet service providers, access to SDSL and Fiber. Tennessee ranked fifth best in access to cable modem technologies.

For residential connections only, Tennessee had a subscriber ratio of 51% in 2009 and only 52% in 2010, one of the smallest increases in subscribership ratios between the two study periods, a 0.01 percentage points improvement.

Tennessee had 118 internet service providers in 2009 and as of 2010, it had 116.

Based on US Census data, Tennessee's broadband adoption rates is 59.5% and 3.8% for dial-up connections. 27.6% of Tennessee's households (2,562,953) did not have a computer, and 7.0% who had a computer, but didn't have internet service.

In Tennessee, 64.5% of urban households had adopted broadband compared to 45.8% of rural households.

### **Identify state entities that are responsible for administering Tennessee's commitment to broadband development:**

Tennessee established regulatory parameters to help define role of municipalities to engage in the business of providing internet services. In 1999, SB 1109 authorized municipalities to provide internet services and authorizes electric cooperatives the ability to construct or own systems that provide internet services.

In 2005, Tennessee created the Tennessee Broadband Task Force to examine the deployment of broadband in the state with the enactment of HB 2130. The task force would examine regulation, cost, access to facilities, and market competition of broadband and prepare a baseline assessment of broadband deployment. The task force would report findings back to the Governor, the General Assembly, and the Tennessee Regulatory Authority.

In 2006, Tennessee adopted HB 3635 creating the Broadband Business Certainty Act. This bill prohibits the Tennessee Regulatory Authority from exercising jurisdiction over broadband services, but the TRA could continue regulating existing services that were already under TRA.

In 2007, the Task Force membership was increased from 14 to 16 members and now requires an annual broadband deployment assessment. In 2007, state colleges and universities were authorized to provide free internet services campus wide.

In 2007, Connected Tennessee was established as an independent non-profit organization that aims to accelerate the availability and use of technology. Connected Kentucky operates the Computer 4 Kids program which puts brand new computers into the hands of children in the foster care system and in low income households.

In 2008, the Basic Education Program would develop a formula for distributing internet funding to local schools. These monies would be used to help pay for connecting to the internet.

**Identify possible suggestions for improving Tennessee’s commitment to broadband development:**

Missed policy and legislative opportunities to improve Tennessee’s commitment to broadband development include, 1.) Exclude from charges for internet service sales and use taxes; 2.) Enact the Tennessee Rural Internet Access Authority Act; 3.) Increase state sales tax on broadband communication services from 6% to 8.25% to help fund infrastructure investments; 4.) Provide for annual credit against the total franchise and excise tax liability of a telecommunication service provider; 5.) Require all internet service providers to provide service to all persons on a DSL line or network loop who has at least 10 customers or face violation of the consumer protection act; 6.) Enact the Tennessee Broadband Access Corporation, similar to the Connect Kentucky model to identify broadband deployment and adoption; 7.) Provide laptop computers to seventh graders through the twelve grade; and 8.) Enact the Broadband Infrastructure for Regional Economic Development to urge all municipalities to utilize advanced broadband system and to encourage the construction of broadband systems.

**Scan federal funding opportunities provided by BTOP or NTIA for Tennessee:**

<b>Public Purpose</b>	<b>Tennessee</b>
Public Computer Centers	\$557,020
Infrastructure	\$15,865,636
Broadband Data & Development	\$4,479,620
Sustainable Adoption	\$2,287,387
State Specific Totals:	\$23,189,663
Share of Nationwide Grants:	\$106,048,301

Tennessee will receive only \$23,189,663 in federal funding opportunities from the BTOP and NTIA sources. \$15,865,636 in federal funding will be dedicated to Infrastructure, representing 70% of all federal funding dedicated to the state. \$4,479,620 in federal funding will be used for Broadband Data and Development, \$2,287,387 will be used for Sustainable Adoption, and only \$557,020 will be used for Public Computer Centers.

Tennessee will also receive a portion of \$106,048,301 in federal funding opportunities in conjunction with other states.

1999 – [SB 1109](#), [HB 1032](#), authorizes municipalities to engage in business of providing cable and internet services. A municipal electric system would establish a separate division to deliver the services. Bill provides that electric cooperatives could construct or own system that provides for cable and internet services. Fiscal note estimates increases in state and local revenues, \$1.1 million.

2004 – [SB 3429](#), [HB 3484](#), establishes procedures for purchasers and sellers to request refund for sales tax collected from customers on charges for internet access which under the Prodigy decision (Prodigy Services Corp., v. Johnson, 2003) were ruled to be not subject to sales and use tax. Customers would have 60 days and providers of internet access would have 120 days to request refund from the Commissioner of Revenue.

2005 – Tennessee adopted [HB 2130](#), [SB 2152](#), an act that created the Tennessee Broadband Task Force to examine the deployment of broadband in the state. The task force would examine regulation, cost, access to facilities, and market competition of broadband and prepare a baseline assessment of broadband deployment. Reports back to the Governor, Speaker of the House and Senate, and the Tennessee Regulatory Authority. Fiscal note was \$5,000.

2006 - [SB 3207](#), [HB 3635](#), titled the “Broadband Business Certainty Act of 2006.” The bill prohibits the Tennessee Regulatory Authority from exercising jurisdiction over or relating to broadband services. The bill allows for continued regulation by the TRA of intrastate, existing services that were already under the TRA. Fiscal impact is decrease state revenues of \$511,200.

2007 – [HB 2099](#), [SB 1580](#) was adopted which expanded the Tennessee Broadband Task Force from 14 to 16 members. Included representative of Department of Education and private sector CLEC (competitive local exchange carrier). Also required an assessment of the state of broadband deployment on an annual basis.

2007 – [SB 1064](#), [HB 2066](#), authorizes state colleges and universities to provide free internet access campus wide.

2008 – [SB 3286](#), [HB 3612](#), requires the Basic Education Program (BEP) to develop a formula for distributing internet funding to LEAs. LEA’s are authorized for internet funding and connectivity funding. The state board of education will review annually the funding and make recommendations to the General Assembly of the adequacy of the funding. State Board of Education will promulgate the rules.

## Tennessee Broadband Legislation and Policies that Didn't Get Adopted

1998 – [SB 2635](#), [HB 2362](#), authorizes municipally owned electric systems to provide cable and internet access services.

1998 – [SB 2681](#), [HB 2746](#), authorizes municipally owned electric plants to provide cable and internet service within corporate limits of municipality.

1998 – [SB 3149](#), [HB 2936](#), excludes from telecommunications definition for sales and use taxes access charges for internet services.

1998 – [SB 3198](#), [HB 3214](#), authorizes municipal electric distributors to provide cable and internet access services in six pilot projects.

1999 – [SB 0838](#), [HB 0684](#), authorizes municipalities to engage in business of providing cable and internet services.

1999 – [SB 0684](#), [HB 1773](#), bill redefines telecommunications to exclude access charges for internet services under certain circumstances.

2000 – [SB 2467](#), [HB 3146](#), requires public hearings on proposals by municipal electric plants to offer cable and internet services.

2000 – [SB 2740](#), [HB 2614](#), requires public notification on proposals by municipal electric systems to offer cable and internet services.

2001 – [SB 0464](#), [HB 1845](#), requires a report to the General Assembly of evaluation of municipal electric systems who offer cable and internet services.

2001 – [SB 1876](#), [HB 1892](#), places a one-year moratorium on municipal electric services from providing cable and internet services.

2002 – [SB 1818](#), [HB 1936](#), requires joint ventures between municipal electric plant and other entity who provide cable and internet services to be approved by referendum.

2002 – [SB 2594](#), [HB 2322](#), bill titled, "Tennessee Rural Internet Access Authority Act."

2003 – [SB 1629](#), [HB 1562](#), imposes a tax on broadband personal communication services. Bill would increased the state sales tax on broadband communication services from 6% to 8.25%. Fiscal note estimates increase in state revenues of \$1,350,000.

2003 – [SB 0524](#), [HB 0825](#), declares broadband services to not be telecommunications and not subject to state regulation in terms of facilities, equipment, or rates unless regulatory requirement is imposed equally upon all providers of broadband service. Broadband services means any services that is used to access the internet.

2003- [SB 0409](#), [HB 1011](#), requires joint ventures between municipal electric plants and other entities who provide cable and internet services to be approved by referendum.

2003 – [SB 1574](#), [HB 1907](#), requires joint ventures between municipal electric plants and other entities who provide cable and internet services to be approved by municipal legislative bodies.

2003 – [SB 1571](#), [HB 1952](#), requires joint ventures between municipal electric plants and other entities who provide cable and internet services to be approved by municipal legislative bodies.

2003 – [SB 1572](#), [HB 1953](#), requires joint ventures between municipal electric plants and other entities who provide cable and internet services to be approved by referendum.

2004 – [SB 2741](#), [HB 2891](#) titled the Tennessee Broadband Technology Incentive Act of 2004. Provides for an annual credit against the total franchise and excise tax liability of a telecommunication service provider. Maximum 50 percent tax credit and can be carried forward for 15 years. Tax credit of 5% for the cost of equipment to deploy broadband technologies in counties with population density of 500 square miles or more, 10% credit would population density of 100 to 500 per square mile, and 15 percent credit for population densities of 100 square miles or less.

2005 – [SB 0386](#), [HB 0416](#), Bill titled, “Tennessee Broadband Technology Act of 2005,” and provides a telecommunication carrier, a franchise tax credit and an excise tax credit with an investment. Provides for a 10% credit against equipment purchases for areas with a population density of 100 to 500 per square mile and a 15% credit with a population density of 100 or less per square mile. Aggregate tax credit is limited to 50% of taxpayers total tax liabilities. Applies to general partnerships. Fiscal note is \$1,000,000.

2005 – [SB 0186](#), [HB 0591](#), bill titled, “Tennessee Broadband Technology Act of 2005,” and provides a telecommunication carrier, a franchise tax credit and an excise tax credit with an investment. Provides for a 10% credit against equipment purchases for areas with a population density of 100 to 500 per square mile and a 15% credit with a population density of 100 or less per square mile. Aggregate tax credit is limited to 50% of taxpayers total tax liabilities. Applies to general partnerships. Fiscal note is \$1,000,000.

2006 – [SB 3140](#), [HB 2774](#), makes failure to offer high-speed internet service to all persons on a DSL line or network loop with 10 or more customers a violation of the Tennessee Consumer Protection Act. Violation of this requirement would be construed as an unfair or deceptive act or practice affecting the conduct of trade or commerce, punishable as a Class B misdemeanor. Violators would be subject to all civil remedies available to a victim under the Tennessee Consumer Protection Act.

2007 – [SB 0373](#), [HB 0654](#), specifies that BEP funds may not be withheld from a school system based on the system’s selection of internet service providers.

2007 - [SB 3514](#), [HB 3569](#), limits a municipalities authorization to enter into a business relationship with a third party to provide cable and internet services. Requires both a referendum and a vote of a municipal legislative body prior to offering the service.

2007 – [HB 2100](#), [SB 1572](#) titled the Tennessee Broadband Access Corporation (TBAC), as a quasi-public,, non-profit instrumentality to facilitate broadband access. Fiscal note was \$2.5 million dollars based on the operating budget estimates of Connect Kentucky, a model for this legislation. The TBAC would be authorized to conduct market research to determine the availability of broadband. Would also create a “Broadband Stakeholder Advisory Board,” to help identify deployment and adoption information, to enable public-private partnerships among telecommunication provider, serve as a resource for citizens to address questions and concerns regarding telecommunication issues, and report on progress of goals of the corporation to the Governor, and the Tennessee Broadband Task Force.

2007 - [SB 1277](#), [HB 1771](#), limits a municipalities authorization to enter into a business relationship with a third party provider of cable and internet services. Requires both a referendum and a vote of a local legislative body.

2007 – [SB 1658](#), [HB 2105](#), allows municipalities that operate an electric plan to provide cable and internet services.

2007 – [SB 2078](#), [HB 2067](#), provides that BEP and other state funding to ensure or promote classroom internet connectivity or technology access shall be paid by the state directly to the LEA.

2007 – [SB 1715](#), [HB 2102](#), legislation introduced that requires the Department of Economic and Community Development to establish a ConnectTN program to bring statewide broadband expansion.

2007 – [SB 1716](#), [HB 2103](#) requiring the Department of Economic and Community Development to establish a ConnectTN program to promote the deployment of broadband. Provides that the Commission of Economic and Community Development will consult with the Tennessee Regulatory Authority (TRA) and empower TRA to collect data from broadband providers.

2007 – [SB 1717](#), [HB 2104](#), legislation that would require the Department of Economic and Community Development to establish a ConnectTN program to promote the deployment of broadband. Bill would require the development of eCommunity Leadership Teams in every county. Bill requires the creation of an advisory council of local government leaders to assist in the implementation of the program. Fiscal note for bill is \$2,000.

2008 – [SB3375](#), [HB3620](#), expands the authority of municipal electric plant to provide broadband services. Bill authorizes the cooperative to acquire or construct equipment to provide telecommunication services. Bill redefines “telecommunications” to mean all broadband and internet services. Fiscal note estimates expenditures and revenues will increase by \$100,000.

2009 – [SB 0616](#), authorizes municipal electric systems who provide cable and internet services to obtain a state-issued certificate of franchise authority.

2009 – [SB 1098](#), [HB 1351](#), permits municipal electric plants to provide cable and internet services beyond their service area to state and local government entities who request it.

2009 – [SB 1099](#), [HB1352](#) – Bill authorizes a municipal electric plan to offer internet services within any area that is no more than 10 miles beyond the outer perimeter of the municipal electric system.

2009 – [SB 1276](#), [HB 1957](#) – provides that any municipal electric system that provides cable or internet services shall be subject to regulation by the TRA.

2010 – [SB 3582](#), [HB 3155](#) – provides that any municipal electric system that provides cable or internet services shall be subject to regulation by the TRA.

2010 – [SB 3541](#), [HB 3918](#) – establishes a grant for a pilot project in one LEA to provide laptop computers to all seventh graders for use through the 12<sup>th</sup> grade. Increases technological fundamentals throughout the school curriculum.

2011 – [SB 1495](#), [HB 1837](#) – authorizes a municipal electric system to provide cable and internet services 10 miles beyond their service area.

2011 – [SB 1847](#), [HB 2076](#) – enacts the “Broadband Infrastructure for Regional Economic Development Act of 2011.” Urges all municipalities to utilize advanced broadband systems and to encourage the construction of advanced broadband systems. Requires TRA to file annual report. Defines advanced broadband as 100 Mbps in each direction.

## VIRGINIA

**Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, Virginia ranked 17<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. Virginia also ranked 19<sup>th</sup> in the nation with the number of internet service providers. When measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, Virginia ranked 12<sup>th</sup>, 14, and 20<sup>th</sup> respectively.

Based on a comparison of all seven states included in this analysis, Virginia ranked third best in subscribership ratios, number of internet service providers, access to SDSL and Fiber technologies. Virginia ranked fifth best in access to cable modem technologies.

For residential connections only, Virginia had a subscriber ratio of 63% in 2009 and 67% in 2010, one of the largest increases in subscribership ratios between the two study periods, a 0.04 percentage points improvement.

Virginia had 140 internet services providers in 2009 and as of 2010, it has 136, the third highest among all states included in the scan.

Based on US Census data, Virginia's broadband adoption rates is 69.5% and 2.7% for dial-up connections. 18.5% of Virginia's households (2,935,158) did not have a computer, and 6.8% who had a computer, but didn't have internet service.

In Virginia, 72.9% of urban households had adopted broadband compared to 48.5% of rural households.

**Identify state entities that are responsible for administering Virginia's commitment to broadband development:**

Virginia set out early to establish regulatory and government structure to foster technology and innovation in telecommunications. In 2001, the Virginia Department of Housing and Community Development has helped to educate rural community leaders about the benefits of broadband development and devising community telecommunication plans.

In 2003, HB 2164 established the VA Wireless Services Authority Act which authorized political subdivisions to act as a wireless service authority. HB 2397 provided that the State Corporation Commission had the authority to enforce provisions of the law that permit a locality to offer communication services.

In 2004, Governor Warner allocated \$12 million for broadband technology known as the Regional Backbone and Roots of Progress Initiative. It was funded with \$6 million from the Virginia Tobacco Indemnification and Community Revitalization Commission and \$6 million from the US Department of Commerce. Since 2001, the Virginia Tobacco Commission has funded more than \$53 million dollars

towards projects to create more than 900 miles of backbone and infrastructure as part of the New River Planning District.

The Mid-Atlantic Broadband Cooperative, a non-profit, member-owned entity, has expanded internet service to include 800 miles of new coverage in 20 counties and four cities in rural Southeast Virginia. The Cooperative has been credited with creating over 2,200 job and attracting over \$300 million in new private sector investments, including Microsoft. Completed in 2006, they provide access to over 60 'gigaparks' that allow telecommunication and technology companies the ability to leverage low-cost high-speed fiber optics.

In 2006, HB 400 provided that the Governor's Development Opportunity Fund can provide grants or loans to increase the capacity of high-speed internet access. The Virginia Economic Development Partnership Authority would review existing industrial sites and infrastructure to provide broadband services to rural and underserved areas of the state.

In 2006, Governor Kaine issues executive order 35, creating the Office of Telework Promotion and Broadband Assistance. In 2008, it was codified in HB 1017. The goals of the office are to encourage telework as a family-friendly, business-friendly public policy and to work with public and private entities to develop widespread access to broadband services.

In 2007, Governor Kaine announced the formation of the Virginia Broadband Roundtable to accelerate the attainment of broadband connectivity to every business by 2010. The Roundtable will deliver a "blueprint" to assist communities with broadband planning and deployment.

In 2009, HB 2423 established the Governor's Broadband Advisory Council to advise the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. Also in 2009, the VA Broadband Infrastructure Loan Fund was created by HB 2665. Administered by the Virginia Resource Authority to establish guidelines regarding the loans from the Fund. Loans will be provided to political subdivisions to help foster broadband deployment and adoption. Currently, the legislature has not appropriated any money into the Fund.

In 2010, Governor McDonnell required an Annual Status Report to be issued on the broadband activities in the Commonwealth. The report identifies broadband coverage gaps and to set priorities to reduce the gaps on broadband access.

**Identify possible suggestions for improving Virginia's commitment to broadband development:**

Missed policy and legislative opportunities to improve Virginia's commitment to broadband development include, 1.) Require franchised cable television providers to provide internet service access to its broadband transport services on a nondiscriminatory basis; 2.) Providing an individual and corporate income tax credit to taxpayers in order to accelerate broadband deployment; 3.) Require the Secretary of Technology to monitor the trends in the availability and deployment of broadband communication services; 4.) Specify that the Virginia Public-Private Education Facilities and Infrastructure Act can be used for technology infrastructure investments to deploy wireless services to

schools; 5.) Create an income tax credit and exemptions to foster broadband infrastructure investments; and 6.) Enact the Universal Broadband Deployment Act which establishes a process for the State Corporation Commission to certify priority rural broadband suppliers.

**Scan federal funding opportunities provided by BTOP or NTIA for Virginia:**

<b>Public Purpose</b>	<b>Virginia</b>
Public Computer Centers Infrastructure	\$92,995,941
Broadband Data & Development Sustainable Adoption	\$8,099,979
State Specific Totals:	\$101,095,920
Share of Nationwide Grants:	\$106,048,301

Virginia will receive \$101,095,920 in federal funding opportunities from the BTOP and NTIA sources. \$92,995,941 is dedicated to Infrastructure, representing 91% of total dedicated federal funds to the state. Virginia will also receive \$8,099,979 for Broadband Data and Development. Virginia will not receive any federal funds for the purpose of Public Computer Centers or Sustainable Adoption.

Virginia will also receive a share of \$106,048,301 in federal funding opportunities in conjunction with other states.

## Virginia Broadband Legislation and Policy Adoptions

2003 – **HB 2164**, provides that the VA Wireless Services Authority Act. Authorizes any locality to act as a wireless service authority.

2003 – **HB 2397**, Provides the State Corporation Commission with the authority to enforce provisions of law that permit a locality to offer communication services.

2003 – **SB 875**, A county, city, town, electric commission or board, industrial development authority, or economic development authority may offer qualifying communications services, or enter into public-private partnerships to offer such qualifying communications services, in accordance with the provisions of this article. Cities and towns that operate a municipal electric utility to also operate as a cable company.

2006 – **HB 400**, Adds a provision in the Governor's Development Opportunity Fund to allow grants or loans for the purpose of installing, extending, or increasing the capacity of high-speed or broadband internet access. The bill also amends § 2.2-2238.1 to require the Virginia Economic Development Partnership Authority to review and evaluate, in its program developed under the section, existing industrial sites and infrastructure that will provide broadband or high-speed internet access to rural and underserved areas of the Commonwealth.

2006 – Virginia Governor Timothy Kaine issues **Executive Order 35**, creating the Office of Telework Promotion and Broadband Assistance.

2008 – **HB 1017**, There is hereby established the Office of Telework Promotion and Broadband Assistance in the office of the Secretary of Technology, consisting of a director, appointed by the Secretary of Technology, and such additional telework and broadband professionals as deemed necessary. The goals of the Office are to encourage telework as a family-friendly, business-friendly public policy that promotes workplace efficiency and reduces strain on transportation infrastructure. In conjunction with efforts to promote telework, the Office shall work with public and private entities to develop widespread access to broadband services. It shall be the duty of the director of the Office to advise the Secretary and the Board of Directors of the Innovative Technology Authority, generally.

2008 – **HB 1329**, Requires state agencies to lease or convey a license or other interest in a state-owned communication tower for which they are responsible to qualified providers of wireless broadband service in order to deploy broadband Internet service in areas of the Commonwealth that do not have access to terrestrial broadband or radio frequency Internet service. The requirement is subject to the provider presenting a spectrum and certified structural analysis of the tower and proof that the tower satisfies all applicable local government requirements. The conveyance shall require payment of such consideration as the Director of the Department of General Services deems appropriate and which is commensurate with the consideration paid for use of comparable space on similar towers. This bill is identical to **SB 206**.

2009 – **HB 1660**, State agencies to establish alternative work schedules; reporting requirement.

2009 – **HB 2201**, relating to oversight of research and development in VA. Codifies Office of Telework Promotion and Broadband Assistance. There is hereby established the Office of Telework Promotion and Broadband Assistance in the office of the Secretary of Technology, consisting of a director, appointed by the Secretary of Technology, and such additional telework and broadband professionals as deemed necessary. The goals of the Office are to encourage telework as a family-friendly, business-friendly public policy that promotes workplace efficiency and reduces strain on transportation infrastructure. In conjunction with efforts to promote telework, the Office shall work with public and private entities to develop widespread access to broadband services. It shall be the duty of the director of the Office to advise the Secretary and the Board of Directors of the ~~Innovative Technology~~ *Innovation and Entrepreneurship Investment Authority*, generally. Expires July 1, 2018. Same as SB 1456.

2009 – **HB 2423**, Establishes the Governor's Broadband Advisory Council. The purpose of the Council shall be to advise the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. The council shall be staffed by the Office of Telework Promotion and Broadband Assistance. Technical amendments to the bill adjust the membership of the Council. Same as SB 1336. Report Due October 31, 2011. Not filed with LIS.

2009 – **HB 2665**, relating to the creation of the VA Broadband Infrastructure Loan Fund. There shall be set apart as a permanent and perpetual fund, to be known as the Virginia Broadband Infrastructure Loan Fund, consisting of such sums that may be appropriated to the Fund by the General Assembly, all receipts by the Fund from loans made by it to local governments, all income from the investment of moneys held in the Fund, and any other sums designated for deposit to the Fund from any source public or private. The Fund shall be administered and managed by the Authority as prescribed in this chapter. The Authority shall establish guidelines regarding the distribution of loans or grants from the Fund, prioritization of such loans and grants, and shall establish interest rates and repayment terms of such loans as provided in this chapter. The Authority may disperse from the Fund its reasonable costs and expenses incurred in the administration and management of the Fund.

2010 **Report** to Governor Robert McDonnell, Broadband Activities in the Commonwealth, An Annual Status Report. 2010 was a landmark year for broadband in the U.S. and the Commonwealth. For the first time in history, the U.S. has a national broadband plan, a national broadband availability map under development, and approximately \$150 million in federal funding invested in broadband infrastructure in the Commonwealth. Despite the national attention and funding, Virginia continues to have large geographic areas that remain unserved, lacking the (affordable) broadband services needed to participate in the ever-expanding pool of applications such as distance learning, electronic health records, telemedicine, and teleworking. This is unacceptable. We must leverage existing and emerging technologies to their fullest extent so that all of our citizens will have the opportunity to participate in the global economy.

As such, the Commonwealth remains diligent in our pursuit of ubiquitous affordable broadband services for our citizens. The remainder of this report highlights the initiatives and activities that have occurred during the past year toward the attainment of this goal. For more information, please visit [wired.Virginia.gov](http://wired.Virginia.gov).

## Virginia Broadband Legislation and Policies that Didn't Get Adopted

2000 – [HB 1480](#), Requires franchised cable television franchisees to provide any requesting Internet service provider (ISP) access to its broadband Internet access transport services on nondiscriminatory rates, terms, and conditions. The access is to be provided at any technically feasible point selected by the requesting ISP. If a cable operator providing broadband Internet access transport services becomes subject to more extensive access requirements imposed by any other jurisdiction in the United States, a requesting ISP may require the cable operator to comply with such more extensive access requirements. An ISP that is denied access in violation of this act may bring a private action. The substantially prevailing party may be awarded reasonable costs, expenses, and attorneys fees. The Attorney General and the locality issuing the cable franchise may also bring actions to enforce the requirements for access.

2000 – [SB 707](#), Requires franchised cable television franchisees to provide any requesting Internet service provider (ISP) access to its broadband Internet access transport services on nondiscriminatory rates, terms, and conditions. The access is to be provided at any technically feasible point selected by the requesting ISP. If a cable operator providing broadband Internet access transport services becomes subject to more extensive access requirements imposed by any other jurisdiction in the United States, a requesting ISP may require the cable operator to comply with such more extensive access requirements. An ISP that is denied access in violation of this act may bring a private action. The substantially prevailing party may be awarded reasonable costs, expenses, and attorneys fees. The Attorney General and the locality issuing the cable franchise may also bring actions to enforce the requirements for access.

2001 – [HB 2806](#), Provides an individual and corporate income tax credit to taxpayers in order to accelerate deployment of (i) current generation broadband access to the Internet for users located in certain low-income and rural areas and (ii) next generation broadband access for all users. The tax credit for any taxable year equals the sum of (a) the current generation broadband credit, plus (b) the next generation broadband credit.

The current generation broadband credit for any taxable year equals 10 percent of the qualified expenditures incurred with respect to qualified equipment offering current generation broadband services to rural subscribers or underserved subscribers. The next generation broadband credit for any taxable year shall equal 20 percent of the qualified expenditures incurred with respect to qualified equipment offering next generation broadband services to all rural subscribers, all underserved subscribers, or any other residential subscribers.

The credit in the aggregate for any taxable year will not exceed \$750,000. If the amount of credits applied for exceed that limit, the Tax Department will allocate the credits on a pro rata basis. The credit applies to taxable years beginning on or after January 1, 2002, but before January 1, 2005.

2001 – [SB 707](#), Requires franchised cable television franchisees to provide any requesting Internet service provider (ISP) access to its broadband Internet access transport services on nondiscriminatory rates, terms, and conditions. The access is to be provided at any technically feasible point selected by the requesting ISP. If a cable operator providing broadband Internet access transport services becomes subject to more extensive access requirements imposed by any other jurisdiction in the United States, a

requesting ISP may require the cable operator to comply with such more extensive access requirements. An ISP that is denied access in violation of this act may bring a private action. The substantially prevailing party may be awarded reasonable costs, expenses, and attorneys fees. The Attorney General and the locality issuing the cable franchise may also bring actions to enforce the requirements for access.

2002 - [HB 446](#), Provides an individual and corporate income tax credit to taxpayers in order to accelerate deployment of (i) current generation broadband access to the Internet for users located in certain low-income and rural areas and (ii) next generation broadband access for all users. The tax credit for any taxable year equals the sum of (a) the current generation broadband credit, plus (b) the next generation broadband credit.

2002 – [HB 1226](#), creates the Office of Broadband Deployment. Office will be responsible to coordinate all public and quasi-public efforts to deploy telecommunications throughout VA and to seek public and quasi-public and private funding to carry out its mission. Reports to the Governor, General Assembly and Joint Commission on Technology and Science. Secretary of Technology will be responsible for this Office.

2003 – [HB 446](#), Provides an individual and corporate income tax credit to taxpayers in order to accelerate deployment of (i) current generation broadband access to the Internet for users located in certain low-income and rural areas and (ii) next generation broadband access for all users. The tax credit for any taxable year equals the sum of (a) the current generation broadband credit, plus (b) the next generation broadband credit.

The current generation broadband credit for any taxable year equals 10 percent of the qualified expenditures incurred with respect to qualified equipment offering current generation broadband services to rural subscribers or underserved subscribers. The next generation broadband credit for any taxable year shall equal 20 percent of the qualified expenditures incurred with respect to qualified equipment offering next generation broadband services to all rural subscribers, all underserved subscribers, or any other residential subscribers.

2004 – [HB 1467](#), Requires the Secretary of Technology to monitor the trends in the availability and deployment of and access to broadband communications services, which include, but are not limited to, competitively priced, high-speed data services and Internet access services of general application, throughout the Commonwealth and monitor advancements in communications technology for deployment potential. The Secretary shall report annually by December 1 to the Governor and General Assembly on those trends and advancements.

2006 – [HB 1079](#), Establishes the Office of Broadband Assistance under the Secretary of Technology. The office would support the efforts of both public and quasi-public bodies within the Commonwealth to enhance or facilitate the demand for, deployment of, and access to broadband Internet for underserved areas within the Commonwealth. The office would also serve as a broadband information clearinghouse for the Commonwealth and a coordination point for broadband related services and programs in the Commonwealth. The director of the office would advise the Secretary on trends in broadband deployment and report annually by December 1 to the Governor and General Assembly.

2007 – [HB 2381](#), Specifies that the Virginia Public-Private Education Facilities and Infrastructure Act can be used for projects related to the technology and infrastructure necessary to deploy wireless broadband services to schools, businesses, and residential areas. The bill also authorizes the Virginia Resources Authority to fund wireless broadband projects.

2007 – [HB 2385](#), Items of property set forth below are each declared to be a separate class of property and shall constitute a classification for local taxation separate from other classifications of tangible personal property provided in this chapter. Tangible personal property used to provide, for a fee, wireless broadband Internet service through the use of a frequency unlicensed by the Federal Communications Commission. For purposes of this subdivision, "wireless broadband Internet service" means a service that enables customers to access, through a wireless connection at an upload or download bit rate of more than one megabyte per second,

2007 – [HB 2803](#), Creates an income tax credit and sales and use tax exemption for wireless and broadband equipment purchased by telecommunications providers for use within rural areas of the Commonwealth. The income tax credit is equal to 30% of all expenditures for wireless and broadband equipment used in providing telecommunications services in the rural areas of the Commonwealth. There is a \$1 million cap on the total amount of income tax credits that may be allowed in any tax year. Both preferences are effective in 2007.

2008 – [SB 206](#), relating to the use of communications towers owned by VA for the deployment of wireless broadband service in underserved areas. Same as [HB 1329](#).

2008 – [HB 632](#), Clarifies that the Virginia Resources Authority may be used as a funding mechanism for all projects involving the provision of broadband services, and not just those utilizing wireless broadband technologies.

2008 – [HB 1017](#), Codifies Executive Order 35 (2006) creating the Office of Telework Promotion and Broadband Assistance under the Secretary of Technology. The goals of the Office are to encourage telework as a family-friendly, business-friendly public policy that promotes workplace efficiency and reduces strain on transportation infrastructure. In conjunction with efforts to promote telework, the Office shall work with public and private entities to develop widespread access to broadband services. The provisions of this act expire on July 1, 2018.

2009 – [SB 1336](#), Establishes the Governor's Broadband Advisory Council. The purpose of the Council shall be to advise the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. The council shall be staffed by the Office of Telework Promotion and Broadband Assistance.

2009 – [HB 2423](#), Establishes the Governor's Broadband Advisory Council. The purpose of the Council shall be to advise the Governor on policy and funding priorities to expedite deployment and reduce the cost of broadband access in the Commonwealth. The council shall be staffed by the Office of Telework Promotion and Broadband Assistance. Technical amendments to the bill adjust the membership of the Council.

2009 – [HB 2665](#), Creates the Virginia Broadband Infrastructure Loan Fund. The Fund would be administered by the Virginia Resources Authority. Money in the Fund would be used exclusively for the financing of broadband infrastructure projects undertaken by a local government. Priority for loans would be given to projects that will utilize private industry in operating and maintaining the projects where private involvement will provide cost savings, to projects that serve two or more local governments, and to projects in unserved areas.

2011 – [SB 1461](#), The Universal Broadband Deployment Act. Establishes a process for the State Corporation Commission to certify priority rural broadband suppliers. Applicants for certification are required to identify the rural counties in which they commit to provide universal broadband service. Rural counties are counties with a population of less than 25,000 in which fewer than 90 percent of business locations or 50 percent of homes have access to broadband service. Rates of certificated priority rural broadband suppliers are subject to regulation by the Commission and other obligations imposed on public utilities.

## WEST VIRGINIA

### **Determine both the level of broadband access based on FCC data which identifies both the number of broadband providers and the take-up rates:**

According to FCC data, West Virginia ranked 48<sup>th</sup> in the nation in subscribership ratios, or the level of take-up rates when access to the internet is available. West Virginia also ranked 45<sup>th</sup> in the nation with the number of internet service providers. Measured against high-speed internet access modes, SDSL, Fiber, and Cable Modem, West Virginia ranked 51<sup>st</sup>, 44<sup>th</sup>, and 32<sup>nd</sup> respectively.

Based on a comparison of all seven states included in this analysis, West Virginia ranked last among all states in take-up rates and number of internet service providers.

For residential connections only, West Virginia had a subscriber ratio of 49% in 2009 and 53% in 2010, one of the largest increases in subscribership ratios between the two study periods, a 0.04 percentage points improvement.

West Virginia had the same amount of internet service providers in 2009 than it does now in 2010, 54 across all technologies.

Based on US Census data, West Virginia's broadband adoption rates is 59.1% and 4.7% for dial-up connections. 23.8% of West Virginia's households (737,127) did not have a computer, and 8.7% who had a computer, but didn't have internet service.

In West Virginia, 63.9% of urban households had adopted broadband compared to 52.0% of rural households.

### **Identify state entities that are responsible for administering West Virginia's commitment to broadband development:**

In 2006, under the auspices of the WV Health Care Authority, the WV Health Information Network was formed to design and implement a fully interoperable statewide network to share health care information in the state. During the same year, the Technology Infrastructure Fund was created by SB 653 to develop and maintain information technology for state spending units to improve their telecommunication functions.

In 2008, HB 4637 created the Broadband Deployment Council to extend broadband to unserved areas of the state. It created the Broadband Deployment Fund and was appropriated \$5 million dollars in excess lottery revenues. The Council will develop applications to improve access to Type 2 and Type 3 areas as well as create opportunities to fund outreach and education of broadband services. Originally set to expire December 31, 2011, but now extended to expire December 31, 2014.

**Identify possible suggestions for improving West Virginia’s commitment to broadband development:**

Missed policy and legislative opportunities to improve Kentucky’s commitment to broadband development include, 1.) Create a statewide computer donation program as contemplated by HB 2588; 2.) Create a Joint Legislative Committee on Technology and Advanced Communications; 3.) Provide tax credits to stimulate broadband infrastructure investments and to provide tax exemptions for the purchase of equipment and software necessary to develop telecommunication infrastructure in rural and underserved areas; 4.) Give authority to the Commissioner of Highways to acquire property by eminent domain to facilitate the construction of wireless towers; 5.) Require that infrastructure projects providing broadband services be included in infrastructure projects eligible for funding from the WV Infrastructure Fund; 6.) Provide tax credits to medical providers to help facilitate electronic medical record technology; and 7.) Create a Consumers Bill of Rights to ensure that customers pay reasonable rates and to promote the diversity of telecommunication suppliers by fostering alternative service providers. All of these policy recommendations were legislative proposals that did not pass in Kentucky.

**Scan federal funding opportunities provided by BTOP or NTIA for West Virginia:**

<b>Public Purpose</b>	<b>West Virginia</b>
Public Computer Centers	\$1,901,600
Infrastructure	\$129,525,056
Broadband Data & Development	\$4,749,181
Sustainable Adoption	\$4,461,874
State Specific Totals:	\$140,637,711
Share of Nationwide Grants:	\$77,528,819

West Virginia will receive a total of \$140,637,711 in federal funding opportunities from the BTOP and NTIA sources. West Virginia will receive \$129,525,056 in federal funding to advance Infrastructure in the state, \$4,749,181 for Broadband Data and Development, \$4,461,874 for Sustainable Adoption. West Virginia will receive only \$1,901,600 in dedicated federal funding for Public Computer Centers.

West Virginia will also receive a portion of \$77,528,819 in federal funding opportunities in conjunction with other states.

West Virginia received the single largest NTIA investment in the country with \$126 million dollar investment, Maryland’s \$115 million dollar investment was the second largest NTIA grant followed by Pennsylvania’s \$99.6 million dollar award.

## West Virginia Broadband Legislative and Policy Adoptions

1999 – [HB 2453](#), delegating to the public service commission the responsibilities formerly held by the WV cable television advisory board. Provides tenants right to cable service and establishes standards for cable service.

1999 – [HB 2919](#), establishing the computer donation program from the State Auditor's Office to provide to public schools, juvenile detention centers, and municipal and county public safety offices.

2002 – [SB 289](#), relate to state computer donation program. Bill allows the State Auditor's Office to provide to public schools, juvenile detention centers, and municipal and county public safety offices.

2003 – [HB 3199](#), provides for reduced telephone service rates for qualified low-income residential consumers.

2004 – [HB 4501](#), creates exemptions from the consumer sales and services tax for e-commerce vendors and other high technology businesses. From software and equipment purchases to high technology services have been exempted from taxes.

2006 – [SB 170](#), creates the WV Health Information Network. Under the auspices of the HCA, the HIN will design and implement a fully interoperable statewide network to facilitate public and private use of health care information in the state.

2006 – [SB 653](#), establishing Technology Infrastructure Fund and requires four year strategic plan. CTO would formulate policies for the development and maintenance of information technology and technical infrastructure. Provides training to state spending units for developing and improving telecommunication functions.

2006 – [SB 781](#), relating to long term leases for wireless communication towers on public lands. Secretary of Department of Administration has sole authority to enter agreements to lease wireless communication towers on public lands.

2007 – [HB 3048](#), providing credit for specified high technology manufacturers. Provides for an Economic Opportunity Tax Credit for high technology manufacturing businesses.

2008 – [HB 4637](#), creation of the Broadband Deployment Council to extend broadband to unserved areas of the state. Creates the Broadband Deployment Fund. Was funded with \$5 million dollar excess lottery revenues. Funds projects in Type 2 or Type 3 areas. Promotes the outreach and education of broadband services. Expires at end of 2011.

2008 – [HB 4418](#), establishing a statewide reporting system for hospitals to report their infection rates. Creates an Infection Control Advisory Panel under the auspices of the HCA to require hospitals to collect and report standards of care for public analysis.

2010 – [SB 345](#), requiring telecommunications tax study to account for the changes in modern business models. Bill would require a study of telecommunications services relative to telecommunication taxes.

2011 – [SB 507](#), extending the Broadband Deployment Council for a period of three years until December 31, 2012.

## West Virginia Broadband Legislation and Policies that Didn't Get Adopted

1998 – [SB 214](#), regulates cable television service and provides consumer protections to avoid high cost of cable access. Passed the legislature and vetoed by the Governor.

2000 – [SB 414](#), establish a statewide computer donation program. Allows all state agencies to donate their used computer equipment to public schools, juvenile detention centers, and public safety offices.

2000 – [HB 4549](#), creates a joint committee on technology.

2001 – [HB 2977](#), create a joint committee on advanced communications and information technology and report to the Governor's Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2002 – [HB 2250](#), creating a joint legislative committee on technology.

2002 – [HB 2386](#), providing a tax credit for new high technology products and manufacturing.

2003 – [HB 2417](#), creates a joint committee on technology.

2003 – [HB 2860](#), creates a joint committee on technology and security.

2003 – [HB 3034](#), exempting internet technology from the consumer sales and service tax.

2003 – [HB 3192](#), abolishing the existing science and technology council and establishing a new academy of science and technology.

2004 – [SB 422](#), creating joint commission on technology and advanced communications.

2004 – [SB 644](#), exempting sales and service tax for certain high-technology companies.

2004 – [HB 4502](#), creates sales tax exemption to encourage high technology companies to locate and expand their businesses in West Virginia and provide sales exemptions for internet businesses. Provides exemptions to businesses who sale computer hardware and software used in communications.

2004 – [HB 2055](#), providing a tax credit for new high technology products and manufacturing.

2004 – [HB 2417](#), creating a joint legislative committee on technology.

2004 – [HB 2860](#), creating a joint legislative committee on technology.

2004 – [HB 3034](#), exempting internet technology from the consumer sales and service tax.

2004 – [HB 4334](#), creating the joint commission on technology and advanced communications.

2004 – [HB 4628](#), establishing the wireless infrastructure council to ensure that needed wireless infrastructure is in place in the state. Creates a wireless infrastructure assistance fund and deposits are

made from all the long term leases of state owned real property including interest and fees into the revolving loan fund.

2004 – [HB 4719](#), creating the joint commission on technology and advanced communications.

2005 – [SB 164](#), creating tax exemptions for certain high-technology companies.

2005 – [SB 689](#), providing sales tax exemption for high-technology services.

2005 – [SB 740](#), relating to conducting inventory of technology infrastructure in state. Creates the Joint Legislative Oversight Commission on Transportation and Infrastructure, creates Innovation Center. Creates Electronic Telecommunication Open Infrastructure Act.

2005 – [HB 2107](#), create a joint committee on advanced communications and information technology and report to the Governor's Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2005 – [HB 2116](#), creating a joint legislative committee on technology and security.

2005 – [HB 2294](#), establishing a seven-member Wireless Infrastructure Council to ensure that needed wireless infrastructure is in place. Recognizes the public safety and economic development potential of wireless infrastructure. Requires state agencies to enter into long term contracts for the construction and operation of wireless infrastructure and creates a revolving loan fund to provide financial assistance in underserved rural areas of the state. No funding commitment on the part of the legislature.

2005 – [HB 2540](#), providing a tax credit for new high technology products and manufacturing.

2006 – [SB 154](#), provides for the tax exemption of consumer sales and service taxes for certain e-commerce and high technology companies.

2006 – [SB 261](#), authorizes county commissions to regulate the siting of wireless telecommunications facilities.

2006 – [SB 580](#), providing tax credit for electronic medical records technology investments.

2006 – [SB 694](#), providing consumers sales and service tax exemption for certain high-technology services.

2006 – [HB 2107](#), creating a joint committee on advanced communications and information technology and report to the Governor's Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2006 – [HB 2540](#), providing a tax credit for new high technology products and manufacturing.

2006 – [HB 4038](#), relating to donation and transfer of surplus personal computers and other information systems, technology and equipment for educational purposes.

2007 – [SB 514](#), relating to information technology donations.

2007 – [HB 2174](#), creating a joint committee on advanced communications and information technology and report to the Governor’s Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2007 – [HB 2558](#) which provides for the donation and transfer of computers and other information systems to county boards of education. Allows Chief Technology Officer to write rules to determine which equipment can be transfers and to determine financial need and eligibility of children. Governor Manchin vetoed the bill because it violated the “single object rule.” The fiscal note on the bill was \$100,000.

2007 – [HB 2746](#), establishing the Connectivity Advisory Commission. Commission would develop a statewide broadband plan for the expansion of broadband in the state. Creates a broadband funding program to establish or identify sources of funds, including grants or loans to expand broadband deployment in rural parts of the state. Expires in 2012.

2007 – [HB 3007](#), relating to expanding wireless infrastructure within the state. Provides that Commissioner of Highways has the power by eminent domain to acquire property to facilitate the construction of wireless infrastructure facilities. Creates a Wireless Infrastructure Council and a Wireless Infrastructure Assistance Fund.

2008 – [SB 85](#), relating to information technology donations.

2008 – [SB 544](#), establishing electronic health information data-sharing pilot program.

2008 – [SB 701](#), creating the Broadband Deployment Council in order to develop a strategy and mechanism to extend broadband to every person in the state by stimulating demand and constructing infrastructure.

2008 – [SB 733](#), expanding technology infrastructure to provide broadband internet access throughout the state, creates the Electronic telecommunication Open Infrastructure Act (ETOPIA). Require an inventory and mapping of the current availability of broadband.

2008 – [HB 4343](#), expanding technology infrastructure to provide broadband and internet access through the states. Creates the ETOPIA program, authorizes the Chief Technology Officer to create a donation program.

2008 – [HB 2174](#), creating a joint committee on advanced communications and information technology and report to the Governor’s Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2008 – [HB 3007](#), relating to expanding wireless infrastructure in the state.

2008 – [HB 4620](#), specifying that infrastructure projects providing broadband services be included in infrastructure projects eligible for funding from the WV Infrastructure Fund.

2009 – [SB 691](#), relating to telecommunications regulations. Bill would modernize and streamline antiquated telecommunications regulation. Confirms that the Public Service Commission should have not jurisdiction over internet and broadband service. Suggests that it be regulated at the federal level.

2009 – [HB 2243](#), creating a joint committee on advanced communications and information technology and report to the Governor’s Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2009 – [HB 3123](#), relating to donation and transfer of surplus personal computers and other information systems, technology and equipment for educational purposes.

2010 – [HB 3123](#), relating to donation and transfer of surplus personal computers and other information systems, technology and equipment for educational purposes.

2010 – [HB 2679](#), provides for a tax credit to medical providers equal to their investment in electronic medical record technology.

2010 – [HB 4002](#), provides that infrastructure projects providing broadband services facilities be included in infrastructure projects eligible for funding. The WV Infrastructure Fund could be used to construct transmission lines alongside construction of new roads.

2010 – [HB 2243](#), creating a joint committee on advanced communications and information technology and report to the Governor’s Office of Technology. Committee would study all aspects of technology and work to stimulate development of technology and related public policies in the state.

2011 – [SB 561](#), providing alternative mechanisms to supplement strategies to expand broadband in the state. Ensures that customers pay reasonable rates and promotes diversity in the supply of telecommunication services and products. Seeks to reduce regulatory obligations on incumbent local exchange telecommunication companies with levels consistent with competing alternative service providers.

2011 – [HB 2501](#), relating to donation and transfer of surplus state own personal computers for educational purposes.

2011 – [HB 2788](#), provides that infrastructure projects providing broadband services facilities be included in infrastructure projects eligible for funding. The WV Infrastructure Fund could be used to construct transmission lines alongside construction of new roads.

2011 – [HB 3012](#), clarifying that the Office of Technology is responsible for the retirement and transfer of information technology equipment.

2011 – [HB 3013](#), extending the Broadband Deployment Council.

