

# Fifty States of Broadband

A state-by-state study of broadband investment and activity reveals enormous variation in state broadband policies and outcomes.

By Doug Adams and Michael Curri / *Strategic Networks Group*

**S**trategic Networks Group (SNG), in partnership with the Rural Telecommunications Congress (RTC) and with support from the National Telecommunications and Information Administration (NTIA), surveyed the current state of broadband activity and investment in all 50 U.S. states.

During February and March, 2016, 48 states responded to an online survey about broadband availability, adoption, meaningful use, investment and regulation. Rhode Island and New Jersey chose not to participate. Responses were used to rank states on these dimensions and develop a composite overall ranking.

## STATE BROADBAND OFFICES

Twenty-five states reported that they had a broadband office. State broadband offices averaged 3.8 employees with a median of 3 employees. These offices have often been located in state information technology departments, but more and more often, they are located in economic development departments or governors' offices.

However, only 28 percent said their states definitely had a budget to support broadband initiatives. Thirty percent were unsure, and 42 percent said funding definitely did not exist. Thirteen states reported their budgets; with the exception of California (\$330 million) and New York (\$500 million), these budgets were modest. The average funding for the 11 other states was \$596,000 a year.

When there was funding, broadband activities most often funded were planning and support (82 percent). Infrastructure was funded by 45 percent of states that had broadband budgets. For states that had broadband budgets, SNG asked the three main funding sources. Answers are shown in Table 1.

Some states undertake broadband initiatives through agencies other than a broadband office. When SNG asked whether *any* state entity was handling specific broadband activities, states reported activities centered on increasing broadband supply through mapping, infrastructure planning and construction. These activities far surpassed demand-side undertakings, such as raising awareness, training and driving end-user utilization.

Every state surveyed mapped broadband availability in either 2014 or 2015, using data from service providers and/or the FCC. However, only about half the states measured broadband utilization (that is, how internet applications are being used by individual businesses, organizations and households to drive economic growth and improve quality of life).

States tended to fund activities that increased the supply of broadband rather than activities that increased the demand for or use of broadband.

PRIMARY SOURCES	SECONDARY SOURCES	TERTIARY SOURCES
Broadband outreach and aggregation fund	Advertising/promotion fee	Dedicated and federal funds
Department of Information Services budget	Educational Technology Fund (E-Fund)	Government operations (support staff)
E-Rate	Department enterprise funds	Grants (two states)
Multiyear capital budget allocation from the state	Department of Services Agency	State Industrial Development and Export Authority Loan Program
Public purpose program (CASF)	E-Rate	
Special funds	FirstNet grants	
State admin	Grants	
State budget (five states)	Liquor sales tax revenue	
State general fund (eight states)	Program revenue	
Surcharge on in-state retail telco services (two states)	Public/private partnership with local telcos	
Universal Service Fund (three states)	State budget category	
Utility gross receipts	State general funds	
	State staff time	
	Universal Service Fund	

Table 1: Sources of funding for state broadband budgets

Training and education to help drive meaningful use of internet applications, when it does occur, is targeted at helping businesses better utilize the internet and revenue-generating online applications.

Finally, and surprisingly, only eight states reported measuring the economic and social benefits of broadband.

### AVAILABILITY

SNG measured broadband availability based on 25 Mbps download / 3 Mbps upload service, as reported by carriers in each state and published by the FCC. Though carrier-reported data has inaccuracies, this potential shortcoming does not differ markedly from state to state.

SNG's survey also asked about the states' mapping and availability metrics and awarded a slight bonus to states undertaking mapping initiatives.

The top states (in order) in availability were Hawaii, Nevada, California, Oregon, Delaware and New York.

### ADOPTION

To measure broadband adoption, defined as households that subscribe to

broadband as a percentage of households for which service is available, SNG used the FCC's numbers. SNG also collected state-specific data on support for internet adoption, providing bonus

points to states that undertook efforts to measure and foster adoption.

States scoring highest in adoption were New Hampshire, Hawaii, Oregon, Vermont and Connecticut.

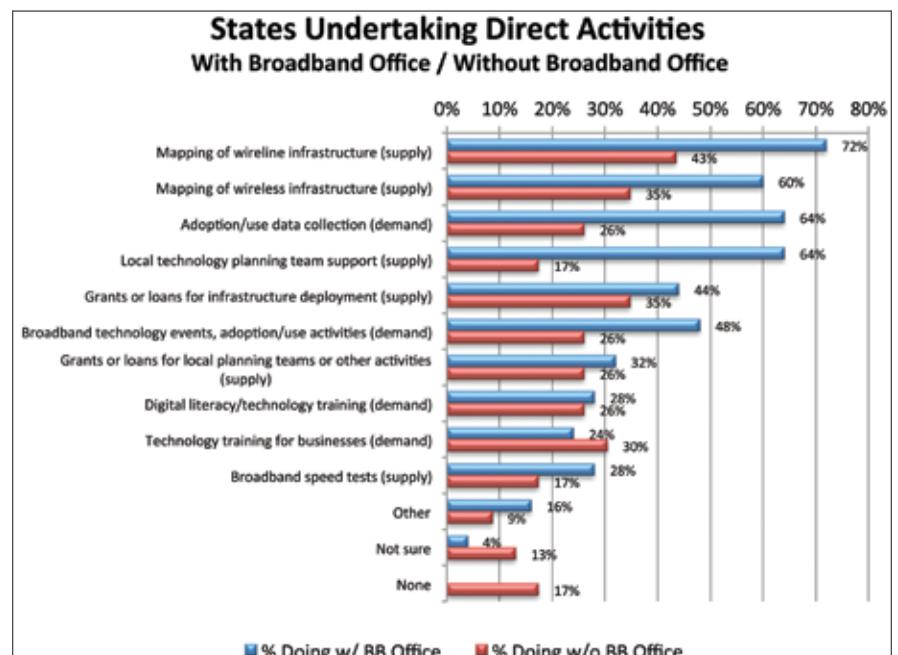


Table 2: States that have broadband offices are more likely to invest in broadband-related activities.

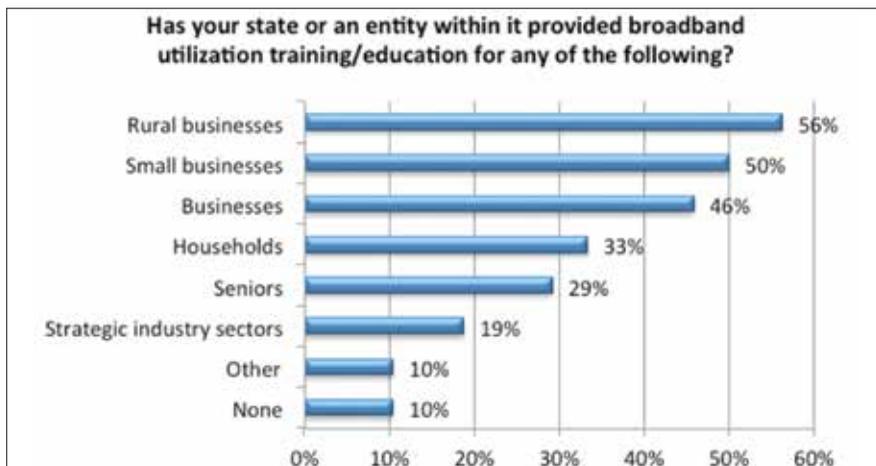


Table 3: Allocation of state funds for broadband utilization training and education

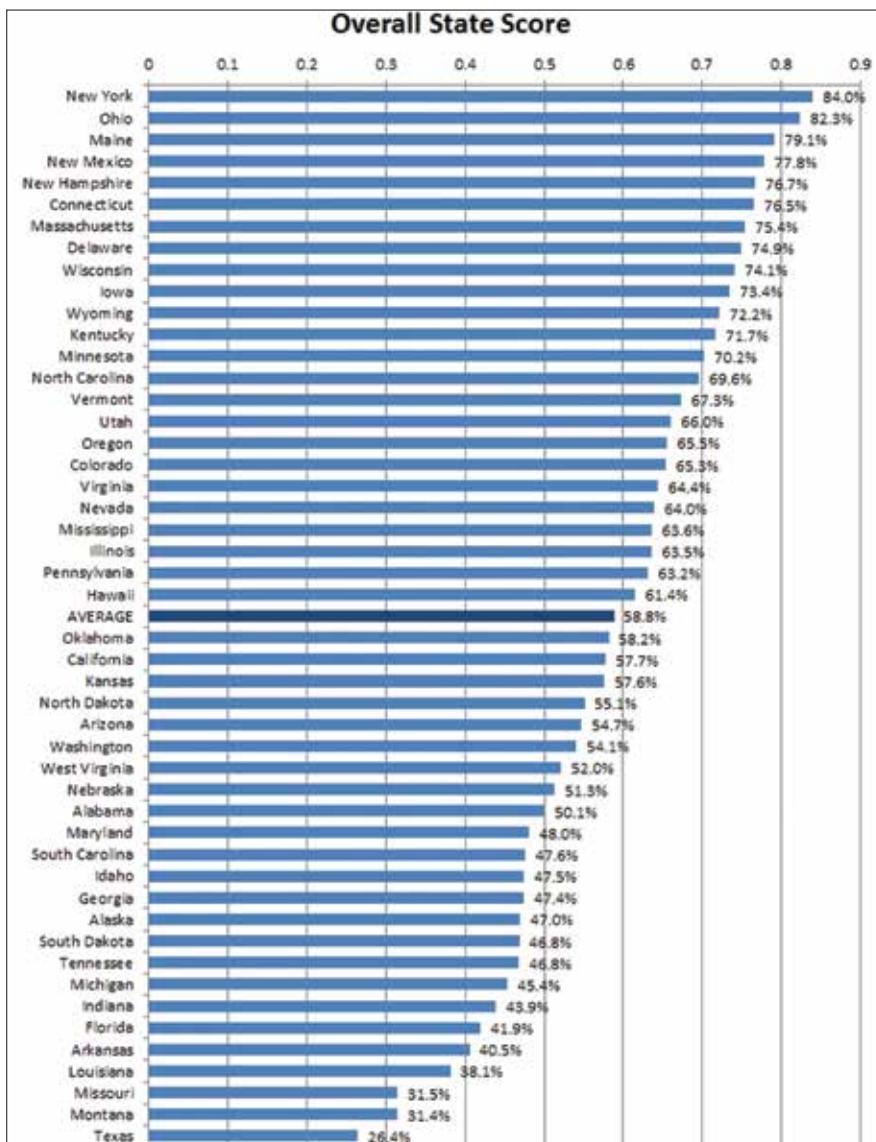


Table 4: States varied widely in their support for broadband.

## MEANINGFUL USE

Often people understand that broadband is “good,” but they don’t know how to apply it to their specific needs. Driving meaningful use by individual businesses, organizations and households through raising awareness and training is critical to realizing broadband’s potential to enable economic development and improve quality of life.

In the state survey, SNG asked state representatives questions regarding training and education programs, such as whether training was available for businesses, small and rural businesses, seniors and households. In addition, we asked whether states tracked, measured or estimated the social and economic benefits of broadband.

Ohio, Vermont, West Virginia, Iowa and Montana scored highest in this category.

## INVESTMENT

The survey asked states about their ongoing investments in broadband. A critical component was the existence of a statewide broadband office dedicated to increasing broadband access and use. Additional metrics included the existence of funds to support broadband initiatives, the total amount of such funds and the investment per capita.

The survey also tracked whether rural broadband programs were in place and whether investment in broadband initiatives was expected to increase, stay the same or decrease.

One popular mechanism to drive investment toward broadband infrastructure is through public/private partnerships – which were permitted by two-thirds of states surveyed.

Within the investment dimension, the top five states were New York,

Many states fund broadband training for small and rural businesses.

Nevada, North Carolina, New Mexico and Virginia.

### REGULATION

The presence of laws that place restrictions or conditions on municipal (or other) ownership or operation of networks does not necessarily indicate a lack of availability, adoption, meaningful use or investment. However, restrictions and regulations can impact each of the other four dimensions of broadband that SNG measured.

Regulation metrics included whether state restrictions limited municipal (or other) ownership or operation of a broadband network, whether such restrictions explicitly or by effect constituted a total or partial ban on municipal (or other) broadband ownership or operation, and whether regulations required a ballot initiative to overcome the limitation.

The evaluation of regulations did not consider whether one state's laws were more or less restrictive than another's, other than providing deductions for the categories listed above.

### OVERALL RANKING

SNG consolidated and weighted these five dimensions of broadband

States that had dedicated broadband offices were more likely than others to excel at broadband availability, adoption, meaningful use and investment in broadband expansion.

to arrive at one overall score for each participating state. The dimensions and weighting are as follows:

- Availability – 27.5 percent
- Adoption – 12.5 percent
- Meaningful use – 15 percent
- Investment – 30 percent
- Regulation – 15 percent

The research team discussed the weighting of dimensions at length. Availability was given a great deal of consideration, as it is the foundation for all broadband activity. Adoption and meaningful use are related, and the team thought these two dimensions together should equal availability in weight. Investment in broadband growth was originally considered at a slightly higher level relative to regulation. Ultimately, the team decided that the ability of regulation to stop broadband progress needed to be

recognized and appropriately weighted. In addition, ranking investment too high could unfairly downgrade states that made significant investments in the past but are not currently investing. Table 4 shows the overall state scores and rankings. All except one of the top 21 states on the list have state broadband offices.

### GOING FORWARD

As shown in Table 5, two-thirds of surveyed states reported that new private investment was the most critical component for broadband growth. They also viewed training and public investment as critical components.

Over the next 12 to 18 months, nearly a third (31 percent) of states surveyed expected to see more state investment in broadband, and only 6 percent expected to see less investment. Three in five states planned to at least maintain current broadband spending.

Visit [sngroup.com/states](http://sngroup.com/states) to see the full report, including rankings for each state along all five dimensions. ❖

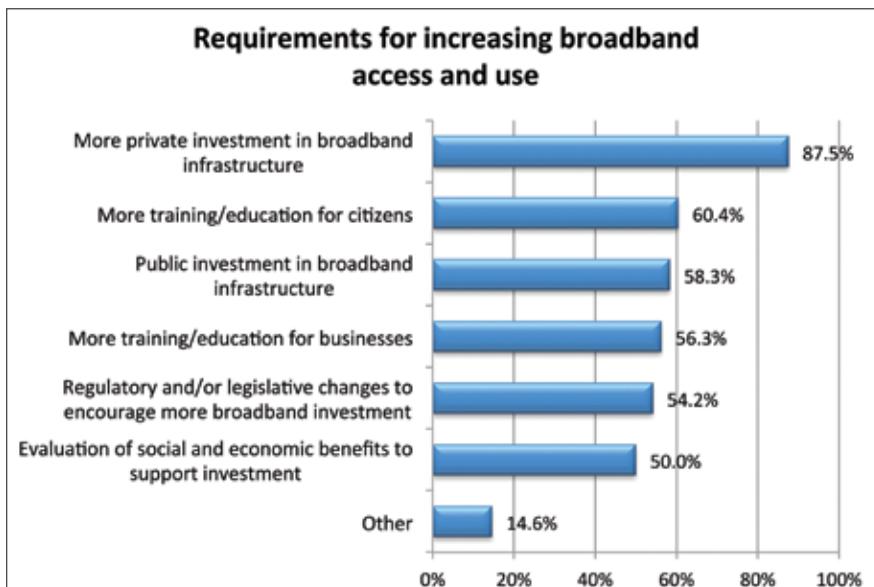


Table 5: State officials saw private investment as a critical requirement for improving broadband.

*Doug Adams is vice president for communications of Strategic Networks Group. Michael Curri is founder and president of Strategic Networks Group. Additional participants in this research study included Lori Sherwood, director of broadband development, Vantage Point Solutions; Gary Dunmore, vice president of client services, Strategic Networks Group; Monica Babine, senior associate, Washington State University; and Maria Alvarez-Stroud, director, Broadband & E-Commerce Education Center, University of Wisconsin Extension. For more information about this study, email [states@sngroup.com](mailto:states@sngroup.com) or visit [sngroup.com/states](http://sngroup.com/states).*