strategic
networks group

THE 50 STATES OF BROADBAND

A State-by-State Study on the State of Broadband Investment and Activity in Each American State

APRIL 4, 2016

Overview

With a lack of comprehensive research regarding broadband activities currently undertaken by states, Strategic Networks Group (SNG) in partnership with the Rural Telecommunications Congress (RTC) sought to uncover the current state of broadband activity and investment in all fifty states.

Data collection took place during February and March of 2016. The 10-minute survey created was completed by **48 States** (Rhode Island and New Jersey chose not to participate).

SNG's core business is measuring how broadband is used by individual businesses, organizations, and households and that micro-level data developing strategies to advance the economic opportunities at a community, regional, or state level. RTC is a national nonprofit organization comprised of government, university, industry, and private citizens who are committed to addressing crucial broadband issues to ensure that citizens of rural America have access to the enabling information and technology resources they need for greater social and economic development opportunities.

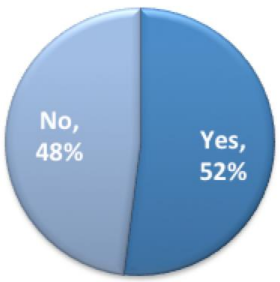
Key contributors to this initiative were:

- Michael Curri, Strategic Networks Group
- Doug Adams, Strategic Networks Group
- Lori Sherwood, Vantage Point Solutions
- Monica Babine, Washington State University
- Maria Alvarez-Stroud, University of Wisconsin-Extension

Key findings include:

- 25 0f 48 States surveyed have a state broadband office
- Only 28% surveyed said there state definitely has annual funding (budget) to support broadband initiatives. 30% were unsure while 42% said that funding definitely did not exist.
- Only 9 States are funding planning and support activities going forward… 5 are funding infrastructure

Does your state have a broadband office?



Does your state have annual funding (budget) to support broadband initiatives?

Availability

The first element used to score the states comes from FCC published availability numbers of 25/3 availability, reported by carriers in each state. The argument could be made that carrier-reported data (the source of the FCC report) could be faulty, we are making the assumption that this potential flaw in carrier-reported availability is, in essence, not markedly different from state to state.

Additionally SNG's survey among state respondents asked about the state's own mapping and availability metrics – giving a slight bump in the score if states were taking initiative themselves.

Overall, availability of broadband counted as **27.5%** of the overall ranking.

1. New Mexico
2. Maine
3. Hawaii
4. North Dakota
5. Oregon
6. California
7. Delaware
8. Utah
9. Washington
10. Idaho
11. Nevada
12. Connecticut
13. West Virginia
14. Minnesota
15. Pennsylvania
16. Michigan
17. Colorado
18. New York
19. Oklahoma
20. Maryland
21. Florida
22. Vermont
23. Ohio
24. Nebraska
25. Alabama
26. South Carolina
27. Tennessee
28. Massachusetts
29. Illinois
30. Georgia
31. New Hampshire
32. North Carolina
33. South Dakota
34. Kansas
35. Indiana
36. Alaska
37. Wyoming
38. Mississippi
39. Louisiana
40. Arkansas
41. Kentucky
42. Missouri
43. Iowa
44. Texas
45. Wisconsin
46. Arizona
47. Virginia
48. Montana

Adoption

To score adoption we turned to the FCC's numbers for Adoption is defined as the percent of households for which service is available and that subscribe to broadband.

State data collected via SNG's survey also measured whether each state were supporting Internet adoption, providing a additional bonus points is a state is undertaking efforts to measure and foster adoption.

Overall, adoption counted as **12.5%** of the overall ranking.

1. New Hampshire
2. Hawaii
3. Oregon
4. Vermont
5. Connecticut
6. Wyoming
7. California
8. Utah
9. Maine
10. Wisconsin
11. Pennsylvania
12. Iowa
13. Delaware
14. Ohio
15. Massachusetts
16. Michigan
17. North Carolina
18. Colorado
19. Virginia
20. West Virginia
21. South Carolina
22. North Dakota
23. Minnesota
24. Nebraska
25. Idaho
26. Montana
27. Kentucky
28. Washington
29. New York
30. Nevada
31. Illinois
32. Alaska
33. Mississippi
34. Kansas
35. Florida
36. New Mexico
37. South Dakota
38. Maryland
39. Texas
40. Tennessee
41. Oklahoma
42. Louisiana
43. Georgia
44. Arizona
45. Missouri
46. Indiana
47. Arkansas
48. Alabama

Driving Meaningful Use

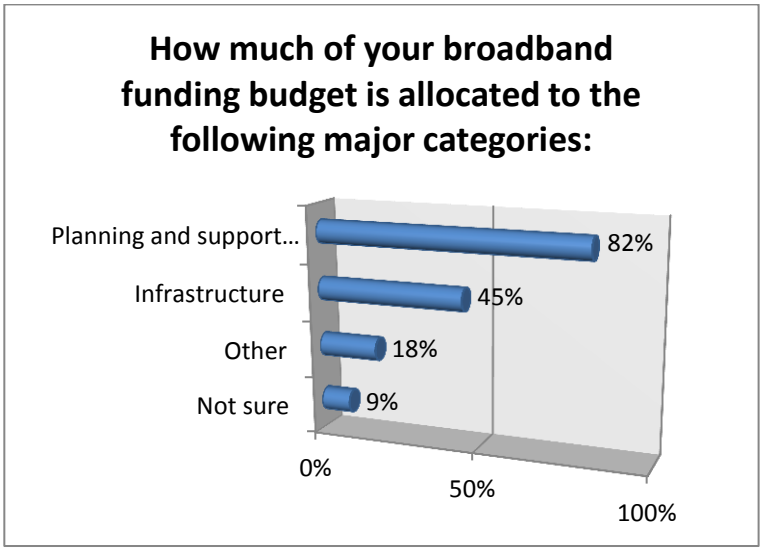
Driving meaningful use is a critical component to delivering on the promise of broadband's potential. Within our state survey, SNG asked state representatives questions regarding training programs that may exist, whether there is training for businesses, small and rural businesses, seniors and households. Additionally, we asked whether states track, measure, or estimate the social and economic benefits of broadband.

States' answers resulted in an overall score for "driving meaningful use," counting as **15%** of the overall ranking.

1. Ohio
2. Vermont
2. West Virginia
4. Iowa
5. Montana
6. Nebraska
7. Michigan
7. Mississippi
9. Illinois
9. Pennsylvania
9. Washington
12. Colorado
13. Minnesota
13. New Mexico
15. New Hampshire
15. Wisconsin
17. Kentucky
18. New York
19. Maine
19. Oklahoma
19. Oregon
19. Virginia
23. Missouri
23. North Carolina
25. Kansas
25. Wyoming
27. Delaware
28. Massachusetts
29. Louisiana
30. Connecticut
30. Hawaii
32. Georgia
33. Arkansas
34. California
34. Florida
34. Nevada
34. North Dakota
34. South Carolina
39. Alabama
39. Alaska
41. Idaho
41. South Dakota
41. Texas
41. Utah
45. Arizona
45. Indiana
45. Maryland
45. Tennessee

Growth Investment

The state survey asked quite a few questions regarding each state's ongoing investment in broadband. A critical component within this area was whether or not a state has a statewide broadband office dedicated to increasing broadband access and use in place. Additional metrics within this category included whether there are funds dedicated to support broadband initiatives, the amount, and the investment dedicated per capita. Additionally, the survey tracked whether there are rural broadband programs in place and whether investment on broadband initiatives is expected to increase, stay the same, or decrease.



States' answers resulted in an overall score for "growth investment," counting as **30%** of the overall ranking.

1. New York
2. Nevada
2. North Carolina
4. New Mexico
4. Virginia
6. Kentucky
7. Maine
7. Wisconsin
9. Minnesota
10. Connecticut
11. Wyoming
12. Utah
13. Massachusetts
14. Vermont
15. Ohio
16. New Hampshire
16. Arkansas
18. Delaware
18. Colorado
20. Alabama
21. Iowa
22. Mississippi
23. Pennsylvania
23. Arizona
25. California
26. Nebraska
27. Tennessee
28. Kansas
29. Oregon
29. Illinois
29. Idaho
32. Montana
33. Hawaii
33. Oklahoma
33. South Carolina
36. Washington
36. North Dakota
36. Louisiana
39. Alaska
40. Maryland
40. South Dakota
40. Michigan
40. Texas
44. West Virginia
44. Georgia
44. Missouri
44. Florida
44. Indiana

Regulation

For this category, SNG looked at the regulatory environment in each State as a factor in the overall ranking. By itself, the presence of laws that place restrictions or conditions on the municipal (or other) ownership or operation of networks does not necessarily indicate a lack of availability, adoption, driving meaningful use or investment. However, it is an important element to consider in evaluating its potential impact to each of these other 4 categories.

There are 2 tiers of metrics within this category and they include:

- Whether a State has restrictions limiting municipal (or other) ownership or operations of a broadband network; and
- If regulations are in place do they:
    - Require a ballot initiative to overcome the limitation; and/or
    - Does the regulation either explicitly or by effect – constitute a total or partial ban on municipal (or other) ownership or operations of a broadband network.

The evaluation does not consider whether one state's laws are more or less restrictive than another other than providing deductions for the categories listed above.
Scores for "regulation" counted as **15%** of the overall ranking.

No regulation in place
Alaska
Arizona
Connecticut
Delaware
Georgia
Hawaii
Idaho
Illinois
Indiana
Iowa
Kansas
Kentucky
Maine
Maryland
Massachusetts
Mississippi
New Hampshire
New Jersey
New Mexico
New York
North Dakota
Ohio
Oklahoma
Oregon
Rhode Island
South Dakota
Vermont
West Virginia
Wyoming

Regulation in Place
Alabama*
Arkansas**
California
Colorado*
Florida
Louisiana*
Michigan**
Minnesota*
Missouri**
Montana**
Nebraska**
Nevada**
North Carolina*
Pennsylvania
South Carolina
Tennessee
Texas**
Utah
Virginia**
Washington
Wisconsin

*Regulation requires a Referendum
** Regulation either explicitly or by effect – constitutes a total or partial ban on municipal (or other) ownership or operations of a broadband network.

Overall Ranking

Folding each one of our five weighted categories into one overall score for each one of the states participating. In summary, these categories were:

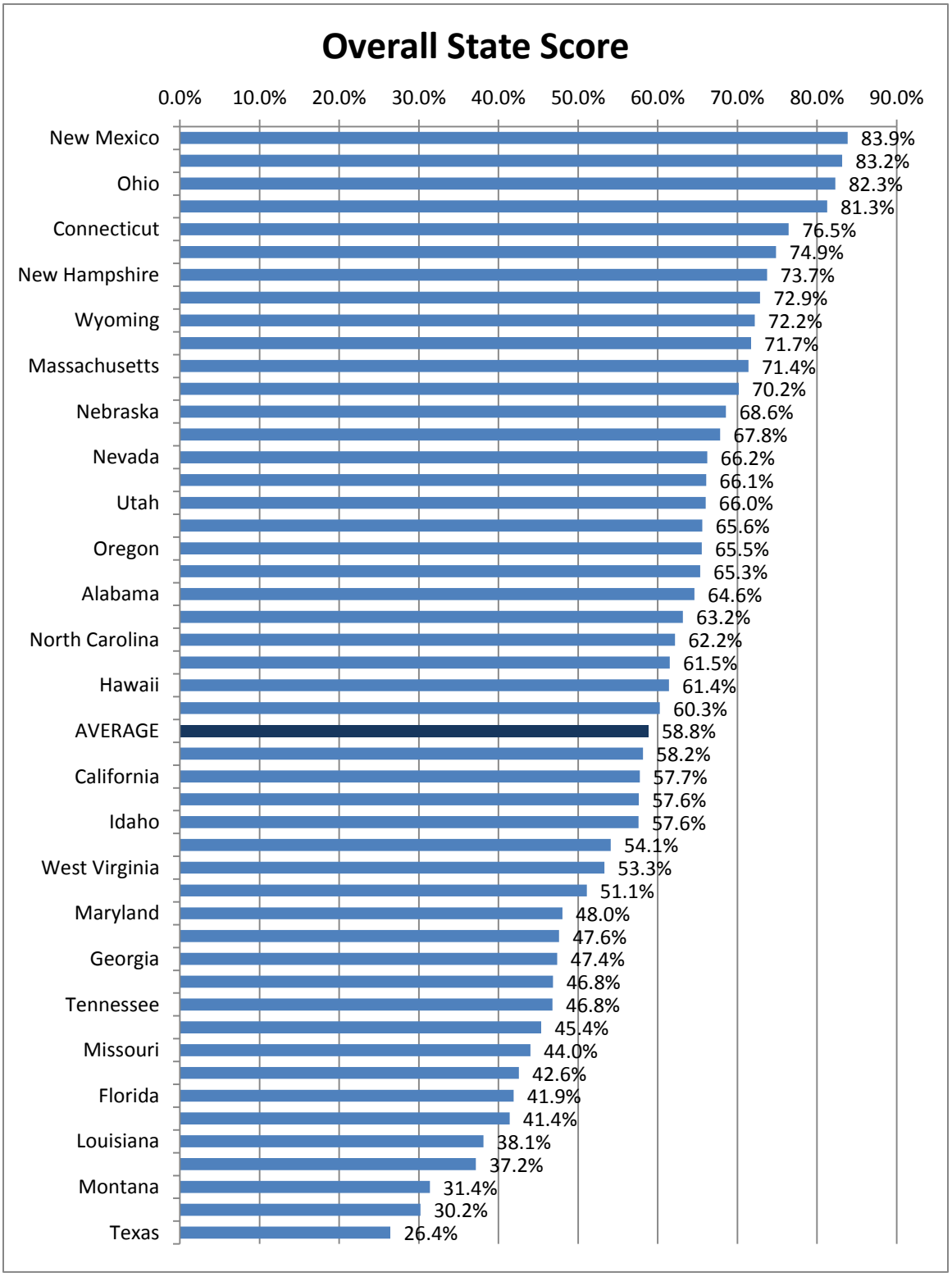
- Availability – 27.5%
- Adoption – 12.5%
- Driving Meaningful Use – 15%
- Growth Investment – 30%
- Regulation – 15%

1. New Mexico*
2. Maine*
3. Ohio*
4. New York*
5. Vermont*
6. Connecticut*
7. Delaware*
8. New Hampshire*
9. Wyoming*
10. Kentucky*
11. Massachusetts*
12. Minnesota*
13. Iowa*
14. North Carolina*
15. Mississippi*
16. Utah*
17. Oregon
18. Wisconsin*
19. Colorado*
20. Pennsylvania*
21. Nevada*
22. Illinois
23. Hawaii
24. West Virginia
25. Oklahoma
26. California
27. Kansas
28. Idaho*
29. North Dakota
30. Alabama*
31. Washington
32. Nebraska
33. Virginia*
34. Maryland
35. Alaska
36. South Carolina
37. Georgia
38. South Dakota
39. Tennessee
40. Michigan
41. Arkansas*
42. Arizona*
43. Florida
44. Indiana
45. Louisiana
46. Montana
47. Missouri
48. Texas

*Have a State Broadband Office

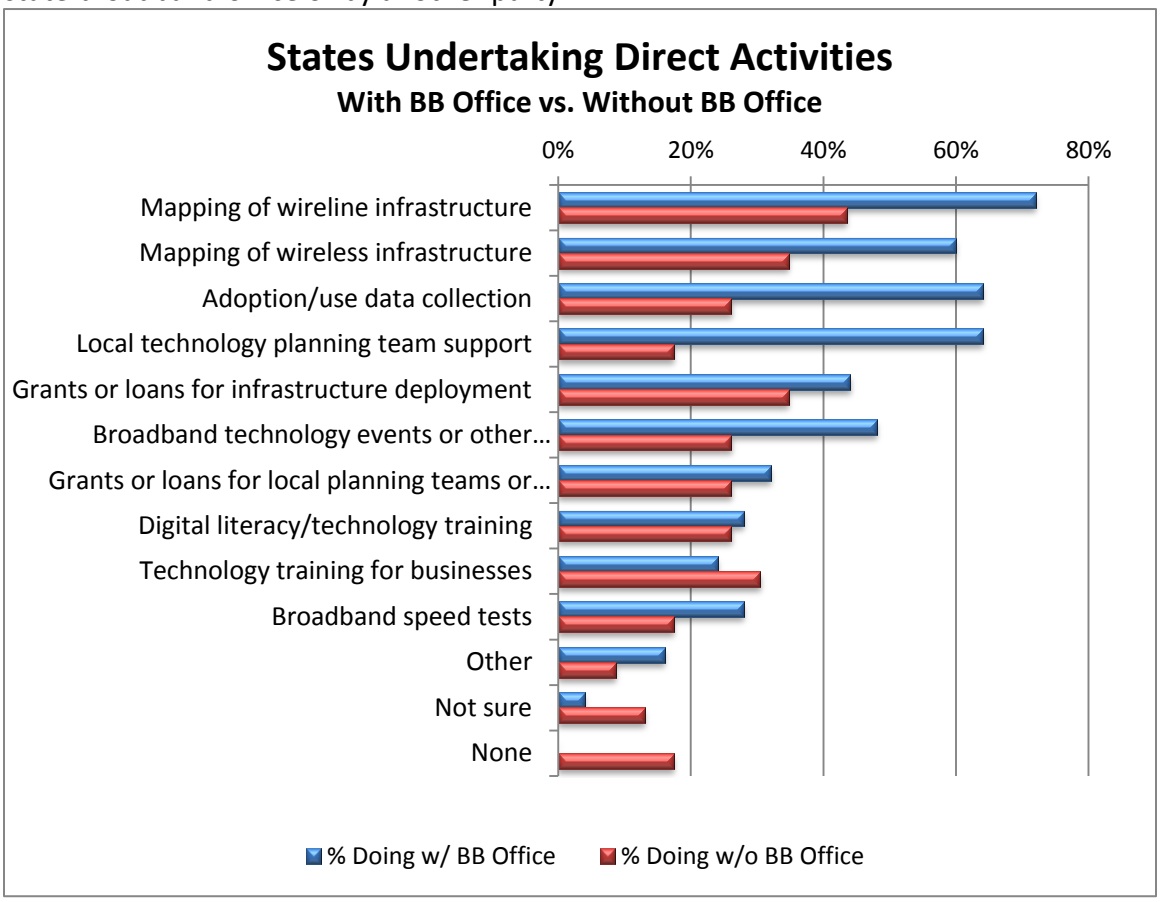
Overall Score

More specifically, each data point was assigned a score to determine ranking. Each state's score is below:



State Activities

Each state was asked whether key broadband activities were taking place either in a state broadband office or by another party.



Open Ended Feedback

As the survey concluded states were asked: "Are there any additional activities, comments or suggestions you would like to share?" Some highlights follow:

New Mexico (#1)

The NTIA funded SBI (State Broadband Initiatives) Grants were incredibly successful and an efficient use of public funds to enhance broadband programs throughout the nation and territories. Totally assisted New Mexico in moving forward. When the grant cycle ended there was a large amount of momentum lost, not to mention viable projects in the important realm of digital literacy, direct relationships with providers, significant engagement of rural communities, and so on. To not continue funding the SBI even on a very limited basis, say 1/4 of the original grant ($250K annually for NM), was a limited vision. Be great to reconsider that support as part of the Broadband USA function.

New York (#4)
As part of Governor Cuomo's New NY Broadband Program, New York State is investing an additional $500 million in funding for high-speed Internet access to unserved and underserved areas across the state. Program criteria for the New NY Broadband program include:

- Access to broadband at speeds of at least 100 Mbps; 25 Mbps in the most remote areas of the state,
- Public-private partnership with a 50 percent match in private sector investment targeted across the program
- High priority for unserved areas, libraries and educational opportunity centers

Pennsylvania (#20)
Pennsylvania leadership recognizes the importance of broadband to Pennsylvania's future economy and is actively seeking ways in which to advance this very important topic through strategic partnerships with various stakeholders.

Virginia (#33)
Connectivity means everything to rural communities in terms of them being able to attract new business and investors, and to help strengthen and grow their communities. New funding sources and programs would be of great assistance as we try to assist those communities.

South Carolina (#36)
We're working hard to get some state funding for broadband initiatives in SC. Since Federal SBI funding concluded in January 2015, it's been very difficult to provide a lot of services of work with communities directly.

Looking Ahead

SNG will be providing a full-report of results. SNG will conduct this survey on a regular basis, no less than once a year, to track results.

For more information you can email states@sngroup.com or visit www.sngroup.com/states.

States and survey participants will receive the full report and a rundown on the results in a special webinar.

As for what states say they want now, according to the survey two-thirds of surveyed states said that new private investment was the most critical component for broadband growth. Training and public investment is also seen as critical components.