BROADBAND SCORECARD REPORT



ABOUT R STREET

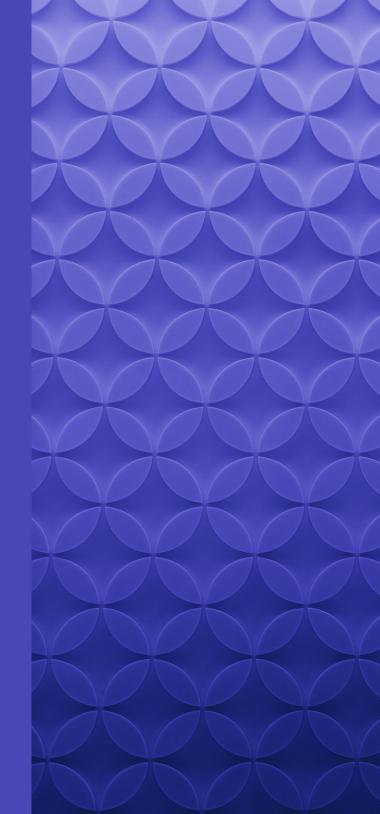
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We work extensively on both state and national policy, focusing on issues that other groups tend to neglect. Our specialty is tackling issues that are complex, but do not necessarily grab major headlines. These are the areas where we think we can have a real impact. We believe free markets work better than the alternatives. At the same time, we recognize the legislative process calls out for practical responses to current problems. Toward that end, our motto is "Free markets. Real solutions."

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Applications and devices that utilize broadband Internet access services are now integral parts of American life. Yet this unprecedented connectivity we're experiencing would be impossible without the trillions of dollars that have been spent deploying the underlying broadband infrastructure, including wires, cables, antennas and support structures. Still, high-speed broadband service has yet to reach many Americans, and users' needs will continue to evolve as new technologies and services become available. Policymakers should therefore do everything within their power to lower barriers to infrastructure deployment, thereby ensuring that the broadband service of the future will be faster, more widely available and more competitive than ever before.

Deploying and operating broadband infrastructure is difficult and expensive. But in addition to the technological and economic barriers to updating and expanding broadband service, those wishing to deploy new broadband infrastructure must also navigate multiple regulatory barriers imposed by government. Much of broadband deployment is regulated by the Federal Communications Commission (FCC), but state and local governments play a major role as well. From right-of-way access and zoning to construction permits and franchising, state and local barriers to infrastructure deployment can have a major impact on Americans' access to broadband.

In 2018, the R Street Institute released its first Broadband Scorecard, which ranked every state according to how well their laws govern the various aspects of broadband deployment. When state laws provide a uniform and streamlined process for deployment, deployment becomes easier and those states earn a higher grade. While some states did very well, no state received a perfect score.

This report updates the 2018 Broadband Scorecard data to incorporate legislative changes made across the country in 2019.¹ Most notably, states continued to pass small cell legislation, opening up public rights of way to deployment of new wireless facilities. Because 5G broadband service requires a dense network of small cells in addition to traditional large wireless towers, these bills look to alleviate the burden by updating the permitting and zoning requirements that were designed for an earlier era. But small cells and the structures that support them are only a part of the process. Wireline deployment of coaxial and fiber-optic cables remains vital for both providing home internet service and backhaul for wireless networks, and states can help expedite that process, too. For example, in 2019 Texas passed a dig-once law that requires governmental bodies to notify broadband providers of any joint-trenching opportunities, which reduces both the cost and timeline for construction by limiting the number of times the ground must be disturbed in order to deploy new infrastructure.

Most every state that passed a broadband law in 2019 improved their score, but not all new broadband laws are actually good policy. For example, giving electric utilities or municipal cooperatives permission to deploy broadband infrastructure can be good, but if that permission allows them to exclude competitors and deny access to public rights of way, that will hurt competition and diminish broadband service over the long run. Therefore, while most states received at least the same base score as they did in the 2018 scorecard, some states actually lost points in certain categories. These changes are all included in the provided data sheet, and our scoring methodology can be found below.

1 This scorecard includes legislative data through December 2019. Subsequent law changes will be incorporated in the 2020 edition.

METHODOLOGY

This scorecard examines laws that govern broadband infrastructure deployment in all 50 states and compiles these data into categories. In some categories, states were given points based on whether they had a law governing a specific aspect of broadband deployment. In categories that included costs or timelines, states were given points based on whether the cost or timeline provided in their law met a certain threshold. For example, a state may get one point for imposing a fee cap on permit applications, and a second point if the cap is \$100 or less.

In the absence of a law in a category we considered, no points were awarded for that category. While regulators at the federal, state and local levels all work hard to promote broadband deployment, the broadband future should not rely solely on the discretion of bureaucrats. Good rules should be codified into law, because only laws can provide the long-term certainty needed to incentivize widescale deployment of broadband infrastructure. As such, we did not include any regulations in our analysis, including federal regulations issued by the FCC.

Although conflicting state or local regulations are preempted under the U.S. Constitution's Supremacy Clause, states should strive to do better by going above and beyond what federal regulations require. For example, fees on video franchises and some construction permits are capped by FCC regulations, but these are just a baseline. To be true leaders in broadband deployment, states should make their approval processes as efficient and streamlined as possible while still covering their costs and protecting their local citizens.

ACCESS TO PUBLIC RIGHTS OF WAY

To deploy or upgrade broadband infrastructure, providers need access to public rights of way, like streets, sidewalks and railways. Access to these rights of way should be non-exclusive in order to prevent one or more incumbent broadband providers from unfairly excluding competition. Access to public rights of way should also be non-discriminatory in order to avoid warping the broadband market in favor of one provider or type of provider and interfering with consumer choice.

Fees for access to public rights of way should be low, predictable and ideally limited to the actual costs incurred from upkeep and access administration. Also, permission to access rights of way and construct broadband infrastructure in them should be granted quickly and subject to firm timelines or shot clocks. Ideally, if a public authority fails to act on an application before the shot clock expires, the broadband provider should be allowed to gain the requested access without needing to file suit to compel action from the authority.

FRANCHISE AGREEMENTS

To provide video services, broadband providers must obtain franchises from either state or local authorities. Such franchises were originally given exclusively to cable companies, but advances in both wireline and wireless broadband technologies have enabled broadband providers to venture into cable video services, too.

Federal law now prohibits exclusive franchise agreements and limits the fees and conditions that can be imposed on franchises, but state and local authorities can improve upon this baseline. For example, while franchise agreements can come with large upfront or annual fees, the costs of which are at least partially passed on to consumers, they could be issued at cost or for no charge at all. Unreasonable delays or moratoria in processing new franchise applications are already prohibited, but states should be encouraged to further streamline and expedite the franchising process.

CONSTRUCTION PERMITS

Along with general approval to operate in public rights of way, broadband providers must seek approval individually for all construction they want to undertake in these areas. Such construction includes digging trenches, stringing wires along the ground or on utility poles, collocating wireless antennas on existing structures and deploying new structures to support broadband equipment. All this construction requires permission, and that means more applications, fees and delays.

As with other permits, fees for obtaining construction permits should be limited to the actual costs incurred by processing the permit applications and should be subject to a cap. Likewise, timelines for processing construction permits should be quick and subject to firm shot clocks, though legislators should keep in mind that the nature and degree of construction needed to deploy broadband infrastructure vary considerably.

For example, attaching new equipment to existing support structures, a practice known as "collocation," is much easier than building entirely new infrastructure, and the fees and timelines associated with these construction projects should reflect that. Deploying a single 200-foot cell tower is vastly different than deploying a fleet of 100 small cells, so permission processes should be updated to reflect changes in technology and network architecture by shortening timelines or allowing multiple small cell installations to be included in the same permit application.

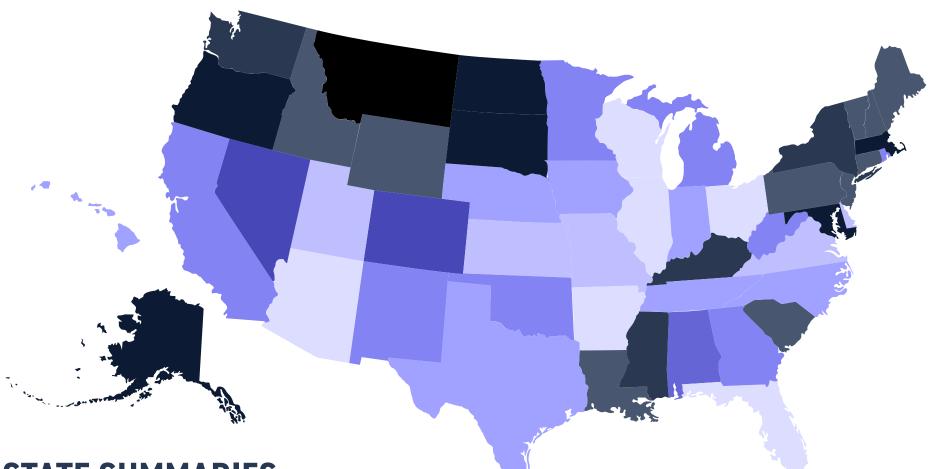
On the other hand, governments still need adequate time and resources to ensure new construction does not threaten public health and safety by causing electrical outages or disrupting traffic flows. Additionally, states should allow cities to review permit applications for reasonable design and concealment concerns to preserve the aesthetic character of their public areas. Broadband providers have begun designing new devices to blend in seamlessly with their surroundings, and cities should work hand-in-hand with these providers to address siting concerns when they arise.

MISCELLANEOUS

We also evaluated several measures that hinder broadband deployment but do not fall neatly into any categories. For example, some cities have tried enacting moratoria on all future broadband deployment, which is prohibited under federal regulations, but state law should prohibit these, too. Meanwhile, federal regulations restrict cities' ability to extract "in-kind" contributions (i.e., non-monetary contributions such as free services for government buildings) from broadband providers, and states should move to restrict these contributions as well.

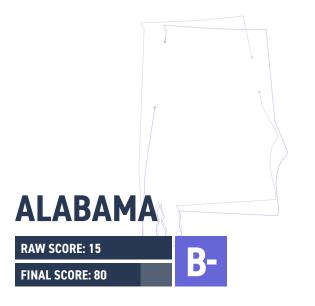
Cities often require broadband providers to undergo zoning reviews prior to new construction in public rights of way, which adds another regulatory barrier to the process. States can streamline this by exempting routine or minor construction work from such reviews.

Finally, states can further streamline deployment by adopting so-called "dig-once," or "joint-trenching" laws, which require that all broadband providers receive public notice prior to any excavation in public rights of way. This allows multiple providers to access an excavated right of way during a single dig, increasing the efficiency of deployment and minimizing disruption to traffic flows.



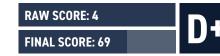
STATE SUMMARIES

| Α | A - | B+ | В | B- | C+ | C | C- | D+ | D |
|---|--|---|---|-----------|--------------------|---|------------------------------------|---|---------|
| ARIZONA ARKANSAS FLORIDA ILLINOIS OHIO WISCONSIN | DELAWARE KANSAS MISSOURI UTAH VIRGINIA | HAWAII INDIANA IOWA NEBRASKA NORTH CAROLINA TENNESSEE TEXAS | CALIFORNIA GEORGIA MICHIGAN MINNESOTA NEW MEXICO OKLAHOMA RHODE ISLAND WEST VIRGINIA | ALABAMA | COLORADO NEVADA | CONNECTICUT IDAHO LOUISIANA MAINE MISSISSIPPI NEW HAMPSIRE NEW JERSEY PENNSYLVANIA SOUTH CAROLINA VERMONT WYOMING | KENTUCKY NEW YORK WASHINGTON | ALASKA MARYLAND MASSACHUSETTS NORTH DAKOTA OREGON SOUTH DAKOTA | MONTANA |



In 2019, Alabama passed a law granting electric co-ops the right to provide broadband service to their electric customers. Unfortunately, the law gives electric coops the authority to grant exclusive access to their utility poles and rights of way for broadband, and on rates and terms that unfairly discriminate against competing broadband providers. This ends up losing points on the scorecard for right-of-way exclusivity, non-discrimination and access to municipal poles. But despite losing points on this year's scorecard, Alabama still receives a B-, primarily due to excellent laws governing shot clocks on construction permits. Alabama also does well on franchising, though there is still much room for improvement on that front.

ALASKA



With no new laws governing local oversight of broadband deployment, Alaska remains near the bottom of the rankings. Alaska does prohibit right-of-way exclusivity, and also requires that localities limit fees for right-of-way access to the costs incurred by the municipality in question. However, construction permitting and franchising remain huge issues for the state.

ARIZONA

RAW SCORE: 32

FINAL SCORE: 97

After passing small cell legislation in 2018, Arizona ranks at the top of the Broadband Scorecard yet again. Arizona actually lost one point by extending its timeline for reviewing franchise applications from 30 days to 45 days, while other states have timelines as short as 14 days. Still, Arizona currently tops the scorecard alongside Wisconsin. Moving forward, Arizona should look to improve the permitting process for wireline broadband construction projects and institute uniform statewide video franchising.

ARKANSAS

RAW SCORE: 29

Arkansas jumps significantly in the rankings due to the passage of a small cell bill, improving the permitting scores for collocations and new poles. Along with very strong scores on the state's franchising laws, Arkansas now ranks only two points behind the current leaders (Arizona and Wisconsin). Despite the strong score, Arkansas can still improve in some key areas. Right-of-way access in the state has a hard cap, but the fees are not limited to costs nor must they be applied in a nondiscriminatory manner. This means that some providers could be excluded due to disparate fees charged by a locality, reducing competition and limiting the deployment of broadband infrastructure. The legislature could also facilitate the deployment of wireline infrastructure by passing a dig-once law.

CALIFORNIA

RAW SCORE: 19 FINAL SCORE: 84

California did not pass any new laws in 2019 that would improve the state's score. As with last year, California should look to improve access to public rights of way. The state requires fees to be non-discriminatory, but does not establish a cap nor limit fees to the costs incurred by a given municipality. California could also improve by exempting utility pole replacements from zoning review, prohibiting localities from establishing moratoria on new applications for construction permits and placing restrictions on in-kind contributions.

P

COLORADO

RAW SCORE: 14 FINAL SCORE: 79

Colorado's score did not change from last year's broadband scorecard. The small cell legislation passed in 2018 helped in many respects, but fees are still a big issue. There are no limits on the cost of right-ofway access, or on the costs of obtaining construction permits for collocations, new poles or wireline broadband infrastructure, which ultimately prevents Colorado from scoring above a C+. Colorado also received zero points for its franchising laws, an area the state legislature could look to in 2020 to improve deployment of broadband infrastructure.

CONNECTICUT

RAW SCORE: 11 FINAL SCORE: 76

In 2019, Connecticut passed small cell legislation with the goal of reducing barriers to broadband deployment, but the new law receives only a handful of points on the scorecard. The legislature created a Council of 5G Technology to oversee construction applications and included some shot clocks on construction permitting, but these shot clocks are too long to earn any points and there are no limits on the fees the council can charge. To improve, Connecticut could pass a new law that simply builds on the 5G council, streamlining the shot clocks for review and limiting the fees that can be charged.

DELAWARE



Delaware saw no changes from the 2018 scorecard. While Delaware does very well on right-of-way access and construction permitting, there is still room for improvement. First, state law doesn't place fee caps on review of new poles or wireline broadband infrastructure. Second, there are no limits on the cost of filing a franchise application nor the time it takes for a franchising authority to approve the application. Finally, there are no zoning exemptions for small wireless facilities or replacement utility poles.

FLORIDA

RAW SCORE: 31

After passing small cell legislation in 2018, the state legislature took steps in 2019 to clarify some of the ambiguities in the law. While this did not provide additional points on the scorecard, it is good governance generally, as ambiguities can create uncertainty among broadband providers and stifle deployment. However, given the progress made by other states in 2019, Florida fell from first to third place in the rankings. Moving forward, Florida should look to exempt small wireless facilities and new poles from local zoning review, as well as pass a dig-once policy to help deployment of wireline infrastructure while trenching occurs.

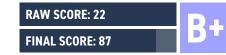
GEORGIA

RAW SCORE: 21 FINAL SCORE: 86

In 2019, Georgia passed the "Streamlining Wireless Facilities and Antennas Act" to help facilitate the deployment of small wireless facilities by limiting the costs that localities can charge wireless providers for the collocation of small wireless facilities and associated support structures. The law also put a shot clock on local governments for the review of these applications. Despite the great work on wireless deployment, Georgia only received a B due to the lack of improvement on wireline infrastructure, which provides not only home broadband internet but also backhaul for wireless facilities. Most notably, Georgia still lacks non-discriminatory, cost-based review of wireline construction permits. A hard cap on application fees for wireline infrastructure deployment would grant additional points. Outside of permitting, a major way to help facilitate deployment of wireline infrastructure in Georgia would be to move forward with a dig-once law. Finally, franchising law in Georgia could see improvements as their franchise fees are tethered to federal standards rather than a statewide cap, with no limitation on in-kind contributions.

B

HAWAII



Hawaii saw no improvement in 2019. The small cell legislation passed in 2018 covered construction permitting, but right-of-way access fees remain a potential area for improvement. Furthermore, Hawaii does not place restrictions on fees for construction permit review, nor does it impose any limits on franchise fees.

IDAHO RAW SCORE: 11 FINAL SCORE: 76

Idaho saw no improvement in 2019. The state's laws on franchising and access to public rights of way are both commendable. However, placing limits on what localities can charge for this access, as well as strong timelines and fee caps for construction permitting, should be a major focus for 2020.



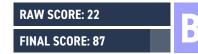
ILLINOIS

RAW SCORE: 28

FINAL SCORE: 93

Illinois received another strong score in the 2019 Broadband Scorecard. In 2020, the state should place fee caps on franchise applications and construction of new poles, as well as lower the fee cap on right-of-way access and collocation permits. Illinois should also prohibit localities from establishing moratoria on new filings.

INDIANA



While the legislature did establish a rural broadband grant program, Indiana did little in 2019 to improve any of the governmental reviews included in our scorecard. Fees for right-of-way access and construction permits for new poles remain uncapped, and the shot clocks for collocations of small wireless facilities and the installation of their associated support structures do not include deemed-granted provisions. Indiana should also place restrictions on in-kind contributions and prohibit moratoria on new applications.

IOWA RAW SCORE: 23 FINAL SCORE: 88

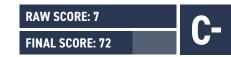
Apart from clarifying a few provisions that govern right-of-way access, lowa's score remains unchanged. To improve its score, lowa should pass laws exempting pole replacements and collocations from zoning review, and put shot clocks and fee caps on permitting review for wireline broadband deployment.

KANSAS RAW SCORE: 26

FINAL SCORE: 91

In 2019, the Kansas legislature passed SB 68 to limit fees and impose shot clocks on the deployment of small wireless facilities and support structures, improving the state's grade to an A-. Moving forward, Kansas should impose a hard cap on the fees for access to public rights of way and limit aesthetic review of wireless facilities to reasonable design standards. Moreover, the shot clocks and fees for construction permit reviews are higher than what other states have adopted, so lowering these categories could also earn Kansas more points in 2020.

KENTUCKY



While Kentucky earns points for capping fees and establishing shot clocks for pole replacements, it earns very few points elsewhere. Franchising laws remain a key issue, with no cap on fees, no uniform statewide franchising and no timeline for application reviews. Furthermore, while there are some restrictions on right-of-way exclusivity, there are basically no limitations on the fees that providers must pay for rightof-way access.



LOUISIANA

RAW SCORE: 10 FINAL SCORE: 75

Louisiana has several good laws on the books already. But the state misses out on a few points in franchising because it lacks fee caps for franchise applications. And while there are no hard caps on right-of-way access, fees are required to be non-discriminatory and cost-based. However, Louisiana received no points in the construction permitting category, the largest on the scorecard. Moving into 2020, Louisiana should pass laws that limit how much a locality can charge to review a construction permit for wireline broadband infrastructure and impose shot clocks on the review process.

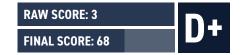


MAINE

RAW SCORE: 10 FINAL SCORE: 75

In 2019, Maine exempted small wireless facilities from zoning review, a key feature that will help speed up the deployment of next generation wireless service. Maine's low score is due to the lack of cost control on right-of-way access and construction permitting. There are limitations on franchise fees, but there is no uniform statewide franchising. This, paired with application fee caps and shot clocks, would drastically help with deployment throughout the state.

MARYLAND



Maryland prohibits right-of-way exclusivity for broadband providers and places some fee caps on franchising, but the state receives no other points on the scorecard. The good news is that there is plenty of room for improvement.



MASSACHUSETTS

| RAW SCORE: 3 | Пт | |
|-----------------|----|---|
| FINAL SCORE: 68 | | υ |

Massachusetts receives points for prohibiting right-of-way exclusivity and extending these access rights to all utility poles. Furthermore, collocation aesthetic reviews are limited to reasonable design standards. However, Massachusetts earns no other points and therefore has a lot of work left to do in promoting broadband deployment.

MICHIGAN

RAW SCORE: 21

Michigan did nothing to improve the respectable score it received on the 2018 Broadband Scorecard. Good laws governing franchising and small cell deployment give Michigan a well-balanced regime, but there is still room for improvement. The state places no limitations on in-kind contributions, has no dig-once law and fees for accessing rights of way are neither limited to costs nor capped outright.

B

MINNESOTA

RAW SCORE: 21 FINAL SCORE: 86

Minnesota scored similarly to Michigan, but for different reasons. With restrictions on in-kind contributions, a dig-once law and a ban on moratoria, Minnesota received a perfect score in the miscellaneous category. However, there is no uniform statewide franchising nor a limitation on the fees that a franchising authority can charge a provider. Improvements can also be made to the length of the shot clocks, but the fact that shot clocks exist at all are a positive for the state.

B

MISSISSIPPI

RAW SCORE: 6 FINAL SCORE: 71

Apart from fee caps on franchises and construction applications, as well as shot clocks for franchise reviews, Mississippi's infrastructure laws need significant improvement. Like Alabama, Mississippi passed a law that allows electric co-ops to grant exclusive access to their rights of way, and there are no caps or nondiscrimination protections on the fees that can be charged for access to these rights of way. Furthermore, Mississippi received only one point for construction permitting, owing to a limit on aesthetic review to reasonable design standards.

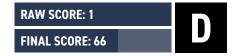
MISSOURI

RAW SCORE: 27 FINAL SCORE: 92



Missouri receives another high score this year. The state still lacks a dig-once law, and localities have no caps on fees or timeframes for approving wireline construction permits. Furthermore, the fee cap for right-of-way access is \$50 higher than the \$100 baseline in the scorecard. However, Missouri receives strong scores on almost everything else.

MONTANA



Montana once again finishes in last place on the broadband scorecard. The state does prohibit right-of-way exclusivity, but receives no other points. The Montana legislature should provide greater clarity, guidance and protections for all aspects of broadband deployment throughout the state.

NEBRASKA

RAW SCORE: 23 FINAL SCORE: 88

Nebraska passed the Small Wireless Facility Deployment Act in 2019, significantly improving the state's scores for wireless deployment. However, Nebraska still lacks strong laws to govern wireline infrastructure. The state has no uniform statewide franchising, no limitations on franchise fees or the application process, and only a soft cap on fees for right-of-way access. In 2020, Nebraska should focus on improving these areas to promote infrastructure deployment for all types of broadband services.

NEVADA

RAW SCORE: 13 FINAL SCORE: 78

Nevada received most of its points from franchising laws, with non-discriminatory franchise fees and a 5 percent gross revenue fee cap, as well as uniform statewide franchising. Furthermore, the application fees for a construction permit for either a collocation or support structure are limited to the costs incurred by the approving authority. However, there are no shot clocks on this review process, nor a hard fee cap. Similarly, while right-of-way access fees must be nondiscriminatory, the fees are neither capped nor limited to the costs of the locality. Paired with no zoning exemption for collocations or new support structures, no restrictions on in-kind contributions and no prohibition on localities establishing moratoria on filing for new applications, Nevada comes in slightly below average on the 2020 scorecard.

NEW HAMPSHIRE

RAW SCORE: 11 FINAL SCORE: 76

While New Hampshire does place shot clocks on construction review and exempts collocations from zoning review, there are few limitations on the costs that localities can charge broadband providers. New Hampshire law doesn't cap fees for franchises, construction permits or right-of-way access, nor does it limit these fees to the costs incurred by the regulator. Moreover, there is no uniform statewide franchising, meaning companies wishing to offer video service must individually negotiate all franchise terms with each locality. High costs can stifle deployment, so New Hampshire should work to limit costs at every stage of deployment.

NEW JERSEY

| RAW SCORE: 9 | |
|-----------------|--|
| FINAL SCORE: 74 | |

New Jersey receives points mainly in the franchising categories with a hard cap on franchise fees and a shot clock on application review. However, construction permitting remains a major problem. There are no shot clocks on application review for any type of construction permit, and the fees are neither capped nor limited to costs. Similarly, there are no limits to the fees charged for access to public rights of way. New Jersey should focus primarily on these issues in 2020 to supplement its solid franchising laws.

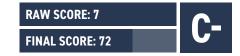
NEW MEXICO

RAW SCORE: 19

FINAL SCORE: 84

New Mexico passed a small cell bill in 2018 that helped the state rank fairly highly on the first scorecard, but no changes were made in 2019 to build on that success. Wireline infrastructure deployment remains a significant challenge, as there are no limits on franchise fees, no uniform statewide franchising and no dig-once law. Furthermore, there are neither shot clocks nor fee caps for wireline construction permits. Improving the laws governing wireline infrastructure will be a key challenge for New Mexico in 2020.

NEW YORK

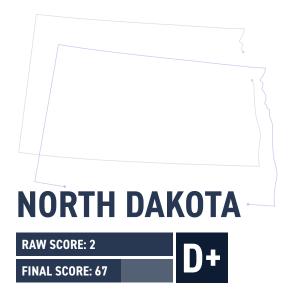


New York again scores below average on the Broadband Scorecard. The state does place a cap on fees for right-of-way access and franchising, but receives zero points on construction permitting. Lengthy and costly reviews for construction permits delay deployment of broadband infrastructure to those communities that need connectivity the most, so New York should look to make these processes faster and cheaper moving forward.

NORTH CAROLINA

| RAW SCORE: 22 | Ът |
|-----------------|----|
| FINAL SCORE: 87 | DT |

Going into 2020, North Carolina should focus on wireline broadband construction and establish a fee cap for franchises. These steps will help with the deployment of wireline infrastructure to balance out the great work the state has done on wireless.



North Dakota only receives points for a restriction on in-kind contributions and non-discriminatory right-of-way access fees. That's still better than Montana, but North Dakota has a lot of work left to do if it wants to improve its ranking.

OHIO RAW SCORE: 29 FINAL SCORE: 94

Ohio receives another high score after passing a small cell bill in 2018. Franchise fees are neither non-discriminatory nor costbased, but they are capped and imposed uniformly statewide. Ohio should also pass a dig-once law to help facilitate the deployment of wireline broadband infrastructure.

OKLAHOMA

RAW SCORE: 21 FINAL SCORE: 86

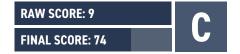
Oklahoma scores well on all things wireless, but wireline deployment remains a problem. There are no shot clocks or limitations on fees for wireline construction permits, and the state earned no points in the franchising category. Passing a dig-once law would also help balance out Oklahoma's laws to promote all types of broadband service.

OREGON

RAW SCORE: 3 FINAL SCORE: 68

Oregon has a cap on fees for right-of-way access and an excellent cap on franchise fees, but receives no other points on the scorecard. Construction fees and timelines are the biggest areas where Oregon can improve, but progress can be made on all fronts.

PENNSYLVANIA



Pennsylvania receives several points in multiple categories. Fees for wireline construction permits are limited to costs incurred by the regulator and must be nondiscriminatory, franchise fees are capped and there are shot clocks for collocations. But while these measures are all good, right-ofway access remains a major issue. Moving forward, Pennsylvania should work to ensure that access remains non-exclusive, costbased and capped to no more than \$100 per year.

RHODE ISLAND

RAW SCORE: 18

FINAL SCORE: 83

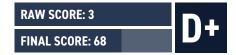
Rhode Island has a well-balanced approach to broadband infrastructure, but each area has room for improvement. Right-of-way fees should be capped and cost-based, permit fees should be capped, new-pole review should be subject to a shot clock and exempt from zoning review, and franchise application review should be subject to a shot clock. The state has done great work so far, but needs to build upon its past successes.

SOUTH CAROLINA

RAW SCORE: 11 FINAL SCORE: 76

South Carolina does well on franchising and right-of-way access, but receives no points in the construction permits and miscellaneous categories. Therefore, South Carolina should focus on exempting collocations and pole replacements from zoning review, establish a dig-once policy, restrict in-kind contributions, prohibit localities from establishing moratoria, and impose shot clocks and fee caps on construction permit reviews.

SOUTH DAKOTA



South Dakota received points for nondiscriminatory franchise fees, a shot clock on the franchise review process and a prohibition on right-of-way exclusivity. No new laws were passed in 2019 to help South Dakota earn more points, but they're still one point ahead of their neighbors to the North.



TENNESSEE

RAW SCORE: 23

Tennessee again scores well on the broadband scorecard by limiting costs for access to rights of way and capping franchise fees. Furthermore, application fees for collocations are capped and localities are subject to shot clocks for approval with a deemed-granted remedy in place. However, this doesn't extend to pole replacements or wireline broadband construction. While collocations are vital to deploying nextgeneration networks, utility poles and other support structures must not be overlooked.

TEXAS

RAW SCORE: 24 FINAL SCORE: 89

Texas was arguably the most active state in broadband infrastructure deployment in 2019. After passing a small cell bill in 2018, Texas recently passed a dig-once law and reworked its franchise fees. To keep this momentum going, Texas should explore subjecting wireline broadband deployment to similar shot clocks and fee caps to those which currently apply to collocations and utility poles.

UTAH

FINAL SCORE: 90

RAW SCORE: 25

Despite receiving zero points in the franchising category, Utah's strong laws on construction permitting and right-of-way access carry the state to a commendable A- grade. To truly stand out, Utah should provide uniform franchising statewide, with caps on the fees enshrined into law. This could also be paired with shot clocks and fee caps on the application review process, spurring competition in video services.

VERMONT

RAW SCORE: 11 FINAL SCORE: 76

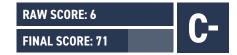
Vermont struggles primarily in right-of-way access, with no limits on what a municipality can charge a provider for access to public rights of way. Franchising also remains a problem. While video franchising is uniform statewide, there is no limit on the fees that can be charged for holding or obtaining that franchise. Improving in these areas will help supplement the state's good construction permitting laws that are already on the books.

VIRGINIA

RAW SCORE: 26 FINAL SCORE: 91

Virginia scores highly on the scorecard with good laws in all three of the major categories. However, there is no uniform statewide franchising, no zoning exemption for small wireless facilities or pole replacements and no dig-once law. Improvements in these areas, as well as in wireline broadband construction, could push Virginia to the top of the scorecard in 2020.

WASHINGTON



Washington's low score comes from having almost no laws governing access to public rights of way or construction permitting. However, the state does have a dig-once law, and it bans local governments from establishing moratoria on new deployments, preventing the state from falling into the D+ range. Moving forward, Washington should focus primarily on right-of-way access and construction permitting.



WEST VIRGINIA

RAW SCORE: 21

West Virginia passed a small cell bill in 2019 that drastically improved the state's score. However, the legislation leaves significant room for improvement. For example, while localities are subject to shot clocks for collocations and new support structures, they are lengthy and do not provide a deemed-granted remedy. Furthermore, while franchise fees are capped and nondiscriminatory, the fees are not limited to the costs incurred by the regulator. West Virginia should look to improve in these areas moving forward.

WISCONSIN

RAW SCORE: 32

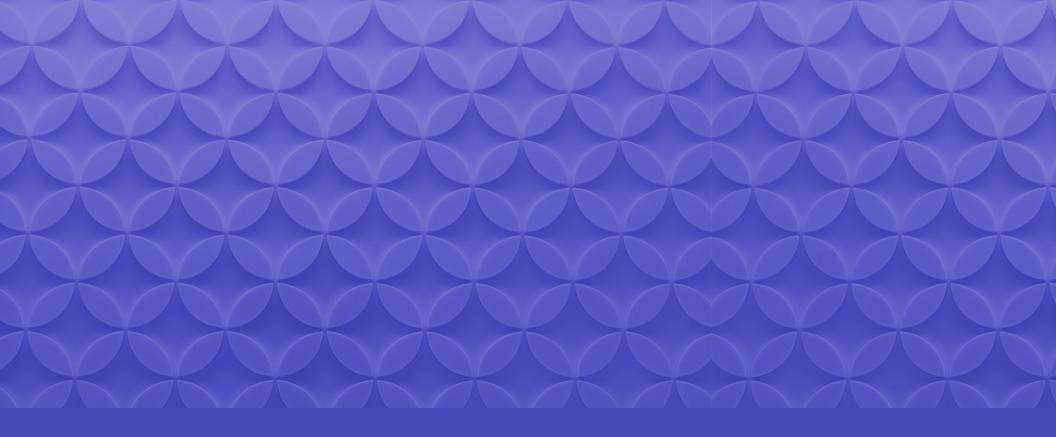
FINAL SCORE: 97

After passing small cell legislation in 2019, Wisconsin now ranks at the top of the broadband scorecard alongside Arizona. But there is still room for improvement. Most notably absent are exemptions from zoning review for new poles and a statewide digonce policy.

WYOMING

RAW SCORE: 8 FINAL SCORE: 73

Wyoming scores well on state franchising, but construction permits remain a major issue. In 2020, Wyoming should focus on ensuring that the permitting review process is governed by firm shot clocks and the fees localities can charge to review construction permits are subject to firm caps.



ABOUT THE AUTHORS

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