



Tips for Regulating Telecommunications Facilities

A Division of New York Department of State

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Course Outline

1. Introduction
2. Telecommunications Act of 1996
3. Safety
4. Aesthetics
5. Middle Class Tax Relief and Job Creation Act of 2012
6. Litigation
7. 5G



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Background

- Utility
- Mostly unregulated by federal or state government
- Local governments limited in extent they can regulate
- Redundant, not singular, infrastructure
- Lucrative for site developers





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Telecommunications Act of 1996 Section 332(c)(7)(b)

1. Government may not *unreasonably* discriminate among providers
2. May not prohibit wireless facilities
3. Must act in "reasonable time"
4. Decision supported by substantial evidence
5. May not regulate based on radio frequency emissions if emissions comply with FCC regs.






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1. Unreasonable discrimination

- Any discrimination must be *reasonable*
- Preservation of neighborhood character reasonable and permissible.
- Increase in number of towers can justify differential treatment of providers.
- Rarely a problem for local governments






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2. Prohibiting Wireless Service

- Local governments may not prohibit or have the effect of prohibiting wireless service
- "Significant gap" not defined in Telecommunications Act
- US District Court defined in New York SMSA Limited Partnership v. Town of Oyster Bay ZBA, 2010
- Nextel Partners, Inc. v. Town of Amherst

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Tips

- Drive survey
- ~20 people make ~20 calls in various locations in the "significant gap" area
- Record locations, if calls were possible, how many were dropped.
- Collect data into a report and determine if the number of calls not able to be placed or dropped is "significant"



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3. Reasonable Time

The "shot clock" – November 1999, FCC imposed time frames of

- 90 days for co-location application
- 150 days for siting of new facilities

If local gov fails to act, applicant can file a complaint with the federal court for a court order of approval.

If application is incomplete, review board must notify applicant within 30 days of receipt



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4. Substantial Evidence in Record

- Local governments must provide their decision on wireless facilities in writing.
- Decision must be based on "substantial evidence" and contain sufficient explanation for reasons for denial to allow courts to evaluate evidence in the record supporting the decision
- Substantial evidence relevant and reasonable to support conclusion



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5. Preclusion of Regulation for RF Emissions

- Local governments may not regulate construction or placement of wireless facilities on health effects of radio frequency emissions if those emissions comply with FCC emissions regulations
- If facilities comply with emissions regulations, local governments can't deny on their health effects
- Protection determined by facility's compliance with FCC emissions standards



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Tips

- Some local governments enact requirements for random testing at facility owners' expense for excessive radio frequency emissions
- If found to exceed those maximums, facility must be dismantled by owner
- Towns of Huntington and Hempstead (Nassau County)



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Safety

- Freestanding towers are exempt from Uniform Fire Prevention and Building Code and occasionally collapse
- Ice from a 150 foot tower, when it melts, can reach speeds of 70 mph by the time it reaches the ground
- Tips: Setbacks 100 – 200% the height of tower. Measure from base, not property line to prevent "postage stamp" construction.



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Safety

- Radio frequency levels should be low and not hazardous except for prolonged exposure
- Towers far from residences results in least harmful exposure
- Face of building and small cells can be most problematic for their proximity to people



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Safety

- Tip: Be diligent in review about distance people will be from radiation.
- Example from Hempstead in which RF engineer tested a proposed facility that complied, based on claim that general public would be 80 feet from tower. But it was discovered towers were being mounted only a few feet from inhabitants of a top floor apartment



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Aesthetics

- Facilities towering over nearby residences can lower value of those nearby homes by 5 – 20%
- If towers are too close, potential buyers are unable to secure FHA federally guaranteed loans
- Tips: Local governments should identify ideal locations, including municipal-owned property



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Facilities in the Adirondacks

- Very few applications between 2000 and 2010
- Lots of recent general permit applications to Adirondack Park Agency.
- Providers know rules (tall structures must be substantially invisible). Most are uncontroversial.



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Section 6409

Middle Class Tax Relief & Job Creation Act of 2012

- Applies to support structures and transmission equipment used with any Commission-licensed or authorized wireless transmission
- Limits local control of co-location and replacement of equipment on existing towers

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Tips

1. Look at base design
2. Ask independent engineer if tower could be 25 feet taller than proposed, based on design of tower base
3. Ask applicant to agree to a restrictive covenant that tower will never be taller than initial application
4. If not, lower height with initial application



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Lower risks of litigation

- Wireless companies can't recover monetary damages or attorneys fees
- Federal court orders permit be granted
- Cases are generally resolved through initial motion for summary judgement



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What is 5G?

- 5G is the fifth-generation cellular wireless network
- Three new aspects:
 - Greater speed
 - Lower latency
 - Ability to connect more devices
- Uses higher frequency waves to transmit data
- Relies on small cell, low power transmitters placed throughout the landscape



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5G, Small Cell

- September 2018, Federal Communications Commission (FCC) Declaratory Ruling to "remove regulatory barriers that inhibit the deployment of infrastructure necessary for 5G and other advanced wireless devices services".
- WT Docket No. 17-79 and WC Docket No. 17-84 at <https://docs.fcc.gov/public/attachments/DOC-353962A1.pdf>.



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New FCC Rules for 5G: Shot Clock

- Co-Location on Preexisting Structures: 60 days
- New Poles: 90 days
 - Delays could be argued by providers as effective prohibition of service. Carriers arguing so successfully in court would result in court order to permit.
- Shot clocks are the same for "batched" applications; can agree to different time periods by mutual agreement between municipality and carrier
- Shot clock commencement can't be delayed by a pre-application meeting
- Applies to all permits required for deployment, including zoning, electrical, engineering, architectural, road closure permits, etc.



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New FCC Rules for 5G: Shot Clock

- What happens if an application is incomplete?
- Local governments may re-set or pause the shot clock when it determines that an application is incomplete
 - 10 days: Municipality should make a determination that an application is materially incomplete
 - Municipality must notify the applicant of the deficiencies
 - The shot clock resets when the completed application is filed
- An incompleteness determination must be made by the 30th day after an application is filed, and within 10 days after resubmission if a re-submitted application is still incomplete



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New FCC Rules for 5G: Fees

- "Safe Harbor" fees:
- \$500 per application for up to 5 small cells; \$100 for each additional node.
 - \$270 annual fee per small cell facility; it covers right-of-way access, attachments, and reoccurring fees
 - \$1000 for non recurring fees for a new pole
- If carrier files lawsuit challenging fees above safe harbor amounts, local government has burden of demonstrating amounts are reasonable



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Aesthetic Concerns

- Permissible for location, screening and color, but should not be more restrictive than local government requires for other infrastructure
- April 15, 2019: Deadline for municipalities with pending applications to adopt aesthetic criteria
- Examples of prescriptive and predictable regulations: Denver, CO and Montgomery County, MD



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Right-of-Way Concerns

- Municipality should adopt standards for wireless installations on:
 - Traffic lights
 - Street lighting
 - Utility poles
- Establish rules for turning off wireless facilities when utility workers are present



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Tips

Do not:

- Adopt a moratorium (forbidden in the order)
- Deny applications based on environmental effects of RF waves
- Impose spacing requirements (can be construed as effective prohibition)



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Tips

- Be sure instructions and application materials required are clear to wireless companies
- Quickly determine if application is complete
- If fees exceed "safe" levels, the local government might be challenged in court to demonstrate how higher fees are reflected in higher administrative and permitting costs by municipality.



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**New York Department of State
Division of Local Government**

(518) 473-3355
localgov@doh.ny.gov

www.doh.ny.gov/lg/index.html



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CELL TOWERS - Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012

In February, 2012, the **Middle Class Tax Relief and Job Creation Act** of 2012 was enacted. This legislation, as the name implies, primarily extends the payroll tax exemption. You may ask, what does this have to do with land use? Oddly, this legislation also contains numerous unrelated provisions. The one of concern to us is **SECTION 6409(a) which states that states and local governments "shall approve" "modifications" of wireless facilities which do not "substantially change" their physical dimensions.** Advocates believe this is a step forward for meeting consumers' insatiable demand for wireless data. It was intended to spur investment, and create jobs while expanding broadband capacity.

SECTION 6409(a) – aka: Spectrum Act of 2012

This legislation, **provides that a state or local government “may not deny and shall approve” any request for collocation, removal, or replacement of transmission equipment on an existing wireless tower or base station, provided this action does not substantially change the physical dimensions of the tower or base station.**

ISSUES OVER SECTION 6409(A) ARE:

1. Questions about Section 6409(a) LANGUAGE:
 - a. What does **“substantially change the physical dimensions”** of a tower or base station mean?
 - b. What is a **“wireless tower or base station”**?
 - c. Eligible Facilities Request – does this include any request for modification of an existing tower or base station involving collocation, removal or replacement of transmission equipment
2. **May a state or local government require an application** for an action under 6409(a)
 - a. It does not say that loc gov cannot require an application
 - b. It does not say what a local government may require for documentation
 - c. Loc gov may require application but must approve and may not deny a request for an action covered under law
3. Is there a time limit within which an application must be approved?
4. Is it subject to NEPA and Historic Preservation Act

FCC’S “REPORT AND ORDER” WEBINAR in Dec., 2014

<http://www.fcc.gov/events/state-and-local-government-webinar-0>

FCC hosted a webinar for State and Local Governments in December, 2014 to review details of FCC’s “Wireless Infrastructure Report and Order” issued in Oct. 2014. The Order clarifies the rules and enforces the requirements of Sec 6409, among others.

Section 6409(a) - What is “Substantial”

The goal of Sec 6409(a) is to expedite the deployment of wireless services and capacity consistent with the law and public interest. The Order addresses 5 areas of regulation regarding the siting of wireless infrastructure. Do modifications changes reach the level of “substantial”? The Report issued **6 Criteria** that local governments can use to determine if modifications in physical dimensions meet this standard.

6 CRITERIA TO DETERMINE IF CHANGE IS “SUBSTANTIAL”.

1. Outside public ROW - tower increase in height by 10% or 20 ft., whichever is greater
In public ROW- tower or base station height increases by 10% or 10 ft., whichever is greater.
2. Outside public ROW – added equipment to the base of the tower cannot protrudes from the edge of the base by 20 ft., or more or by the width of the tower
In public ROW - if it protrudes from the edge of the base by 6 ft., or width of the tower
3. If it Includes installation of new cabinets, it cannot exceed 4 cabinets.
4. Cannot include excavation outside of current site.

5. Cannot deter current concealment measures.
6. Cannot violate condition of past approvals unless non-compliance is in areas of height, width, or number of cabinets allowed in Sec 6409(a).

PLEASE NOTE - There is a substantial change if the modification meets ANY of these criteria.

TERMS

Tower – build for sole or primary purpose of supporting antenna and related equipment associated with wireless facilities. This can include any tech configuration, including distributed antenna systems (das) or small cells.

Base station – any structure other than a tower, that supports or houses equipment that enables wireless services. It does not encompass utility poles or buildings unless on utility ROW and already there at time of application.

DOCUMENTATION

Localities may require documentation reasonably related to determining if Sec 6409(a) applies. This is a procedural clarification and it state that requirements are limited to documentation that is reasonably related to the review.

TIME FRAME AND “DEEMED GRANTED” REMEDY

60 day period of review is adequate, unless clock is tooled by agreement

If time is exceeded, there is a “deemed granted” remedy. In order for this to be effective, the applicant must notify the government. This is in effect for sec 6409(a). Please note: It is not in effect for the Shot Clock Order.

DISPUTES

Disputes will be resolved in local court, not at the Commission.

TEMPORARY TOWERS

- Codifies the public notice waiver for temporary towers
- Exemption applies to towers that:
 - In place for 60 days or less
 - Do not require marking or lighting
 - Less than 200 feet in height
 - Minimal or no ground excavation
 - Do not require environmental assessment

SHOT CLOCK

Communications Act Sec 332(c)(7), provides, in part, that review of a wireless facility must act on applications for the construction or modification of personal wireless facilities of new or collocations within a reasonable period of time. The Commission issued a “declaratory ruling” in 2009 called the “SHOT CLOCK ORDER”, for local review of personal wireless service facility siting applications. The purpose was to establish reasonable timeframe for reviewing applications for these facilities. The result was the establishment of a presumptively reasonable period of time of 90 days for collocations and 150 days for new applications. The state or local government can toll the clock within 30 days by issuing a notice of incompleteness.

The 2014 Report and Order has clarifications of shot clock order. It provides the ability to toll the clock if the application is incomplete by notifying the applicant within 30 days and adds that you **must delineate all missing information and specify where this requirement is stated** in code provisions, ordinance, application instructions or procedures. The clock runs again when information is received. If the application is still incomplete the clock can be tolled again within 10 days, if gov gives notice and details what is missing again. The Order does not specify what may be required locally. This clock runs regardless of any moratoria on the issue.

NEPA REVIEW PROCESSES

- Exclusions from environmental review
 - Collocations on existing structures, including associated equipment and interior collocations
 - New deployments in utility rights-of-way that are in active use
- These exclusions do not exempt deployments from review for effects on historic properties

NHPA REVIEW PROCESSES

- Exclusion of deployments on utility poles and transmission towers outside of historic districts
 - Subject to size limit and no new disturbance
- Exclusion of deployments on other non-historic structures outside of historic districts
 - Must be near pre-existing antenna
 - Visibility restrictions, other conditions

National Register Summary:

In this document, the Federal Communications Commission (Commission) adopts rules to update and tailor the manner in which it evaluates the impact of proposed deployments of wireless infrastructure on the environment and historic properties. The Commission also adopts rules to clarify and implement statutory requirements applicable to State and local governments in their review of wireless infrastructure siting applications, and it adopts an exemption from its environmental public notification process for towers that are in place for only short periods of time. Taken together, these steps will reduce the cost and delays associated with facility siting and construction, and thereby facilitate the delivery of more wireless capacity in more locations to consumers throughout the United States.

EFFECTIVE DATE for new Rules

The Wireless Infrastructure Report and Order was released in Oct., 2014.

Publication Date in National Register: Thursday, January 08, 2015

Agency: Federal Communications Commission

Effective Date: 02/09/2015

Entry Type: Rule

Action: Final rule.

Shorter URL: <https://federalregister.gov/a/2014-28897>

BACKGROUND:

Telecommunications Act (TCA) of 1996 –

Passed by Bill Clinton, this expansive legislation was designed to increase competition in the telecommunications industry. It was designed to accelerate rapidly private sector deployment of advance telecommunications and information technologies and services to all Americans.

Section 704 of the Act: Provisions afforded the provider in the telecommunications facility siting context to find a site for a communication facility, such as a cellular transmission tower, a service provider typically has to apply for a permit or ask for a rezoning of the land at issue. Sec. 704 provides certain protections to an applicant, in addition to the standard protections afforded by equal protection, due process, and applicable state statutes.

The Act provided **5 separate and substantial protections**. These stated that the State or local government:

1. Shall not discriminate against providers
2. Shall not prohibit provisions for wireless services
3. Shall act in a reasonable period of time
4. Cannot regulate based on environmental effects of radio frequency emissions
5. If deny, it must be in writing with evidence in record

These requirements set forth in the Act gave a telecommunications providers protection from the sometimes mercurial temperaments of local governments as they relate to zoning and planning.

The *BellSouth decision* provides additional protection because it indicates that the courts should be aggressive in carrying out the intent to reduce barriers to entry and increase competition in telecommunications growth.

CHANGES OVER TIME:

1. Today 30-40% of all households have no wired phones.
2. The vast majority of 911 calls come from wireless sources.
3. Short Messaging Services (SMS) (texts) and an explosion of wireless services are services that were not imaged in 1968 or 1996 (Telecommunications Act of 1996).
4. There has been an evolution from large antennae-based systems. The market went from 1G services in 1980 to 4G systems in the early 2000s.
5. 4G Platforms now run major networks.
6. TCA still largely controls the scope of local controls.
7. The current system creates unnecessary litigation, and the FCC now acts as a legislative authority over these issues.

New technology is emerging and changing at a faster pace.

Distributed Antenna Systems (DAS) are smaller cell stations. DAS can be deployed indoors or outdoors to augment mobile broadband and wireless services. They are often placed in in/on buildings, hospitals, historic districts or in transit systems. Benefits include:

- smaller visual profile- Node Installations are Compact
- Can boost signals in shadow areas
- Low power in-building solutions for strategic location coverage inside of buildings
- High-power outdoor-rated nodes to provide coverage near-building, between buildings, or in parking garages.
- Economic and efficient approach –system can be scaled as needed to cover new development
- All digital transport simplifies network planning & design
- Targeted, broad coverage results in happy customers

SHOT CLOCK

FCC clarified that Section 6409(a) "does not preclude state and local jurisdictions' compliance with the 'shot clock,' which regulates the time frames in which those jurisdictions must take action on wireless facilities siting and collocation applications."

In November 2009, the commission voted to give states and localities a so-called "shot clock" for tower siting applications. The rules specify a deadline of 90 days to process applications for co-located facilities, where two or more providers share the tower, and 150 days for new towers. However, if the applications are not approved, operators must still take the issue into court.

The U.S. Supreme Court heard arguments in *City of Arlington v. Federal Communications Commission*, a case that sought to determine whether the FCC had jurisdiction to set the shot clock. The Supreme Court found it did have jurisdiction to define what a reasonable time was. Second, it said 90 or 150 days were generally appropriate deadlines, depending on the circumstances.

FCC Sets Rules for 5G Infrastructure, Limiting State and Local Control

BY: [Mike Maciag](#) | September 26, 2018

The Federal Communications Commission (FCC) approved sweeping regulations on Wednesday for 5G wireless infrastructure, significantly curtailing the authority of states and localities.

The industry-backed [declaratory ruling](#) includes several preemption provisions aimed at accelerating deployment of 5G networks that are expected to offer higher internet speeds. It prompted immediate pushback from a wide-range of public-sector association groups and is expected to face legal challenges.

"The ultimate result from this is going to significantly and negatively impact local governments' ability to protect and serve public property, safety and welfare," said the National Association of Counties' (NACo) Arthur Scott.

The federal regulations carry major ramifications, particularly given the buildout of 5G networks that's ramping up or is already underway in many larger cities.

Underpinning the networks is wireline fiber supporting "small cell" nodes, typically antennas mounted on street poles or other public infrastructure. Small cells are akin to WiFi-networks in that their coverage is limited, typically [300 to 500 feet](#), requiring providers to deploy hundreds of the devices to cover relatively small areas.

Time Limits

One of the more controversial provisions of the order establishes "shot clock" time limits for jurisdictions to process applications for mounting small cells on public infrastructure. Installations on existing infrastructure must be processed within 60 days, while requests to build new poles need to be processed within 90 days.

The shot clock resets if a company submits an incomplete application and a government notifies them of the issue within 10 days. Under the new order, failing to act within the specified time limits constitutes a presumptive prohibition of services, giving companies further ammunition to take governments to court.

According to NACo, applications were generally taking about 120 days to process. Scott is concerned that many local governments lack the resources to process them within the new, tighter deadlines and would need to hire additional staff.

"[The ruling] forces local governments to make a decision between rubber stamping applications or facing crippling litigation with these providers in court," he says.

Under the FCC ruling, batch applications of multiple requests for the same type of facilities filed simultaneously are subject to the same deadlines. Greg Wilkinson, the city administrator for Yuma, Ariz., says his city would have no problem processing a few applications quickly but receiving a hundred or more at once could pose challenges. For instance, some companies seek to affix old, bulky equipment to poles, potentially leading to safety concerns or violations of the Americans with Disabilities Act if they obstruct sidewalks.

“You have to look at location by location,” he says. “You can’t just give them blanket approval to deploy everywhere.”

Fee Guidelines

The FCC order also effectively limits what local governments can charge -- \$500 for an initial application fee covering up to five small cells and \$270 for an annual right-of-way access fee per small cell -- both considerably lower than what cities have typically charged. Localities could still levy higher fees, but if a wireless provider sued, local officials would need to demonstrate the fees are a “reasonable approximation” of costs incurred. In larger jurisdictions where fees are higher, the FCC ruling could amount to seven-figure losses in unrealized revenues.

Part of the FCC’s motivation for the lower fees is to enable providers to bring high-speed internet to rural and unserved areas of the country.

Commissioner Brendan Carr recounted at Wednesday’s meeting that he heard from officials in unserved communities who worried delays and higher small cell fees levied in big cities would effectively hinder deployment to their jurisdictions.

“Cutting these costs changes the prospects for communities that might otherwise get left behind,” he said.

But state and local officials argue that lower fees will make little difference in bridging the digital divide unless there is adequate market demand making it economically feasible for companies to deploy. Furthermore, the ruling lacks any requirements for telecommunication companies to provide service to unserved and underserved areas.

Some cities fear that the fee recommendations wouldn’t cover their costs. Philadelphia, for instance, provided estimates to *Governing* tallying labor costs for all approvals and field inspections that amounted to \$800 per small cell node.

“The city will have incurred disproportionate, unrecoverable costs and lost all its leverage to incentivize deployment in a manner that ensures a complete citywide deployment and reduces the digital divide,” said Michael Carroll, deputy managing director of the Office of Transportation and Infrastructure Systems, of the ruling.

Some telecoms complain that cities use aesthetic concerns about the small cells as a way to delay wireless infrastructure projects. The FCC order doesn’t prohibit localities from outlining their own aesthetic requirements, provided they are “reasonable” and “no more burdensome than those applied to other types of infrastructure deployments.”

The vast majority of state and local officials filing comments opposed the FCC rules. One of the few expressing support was Chairman Jeffrey Bohm of the St. Clair County (Mich.) Board of Commissioners.

“By making small cell deployments less expensive, the FCC will send a clear message that all communities, regardless of size, should share in the benefits of this crucial new technology,” wrote Bohm.

The order was modeled largely after similar laws passed in [20 states](#) that preempt local authority to varying degrees. They’ve been mostly adopted in Republican-controlled states, usually passing by wide margins.

Although the FCC’s fee levels and regulatory guidelines mirror those passed by states, the ruling would preempt any existing legislation not meeting its requirements. In response, the National

Conference of State Legislatures and the National Governors Association filed a joint statement opposing the ruling.

"Not only will these 20 states be affected, but it also ties the hands of any other state that is looking to ensure inclusive and equitable access to high-speed internet services to residents," the groups wrote.

What Happens Next?

Many larger localities, such as Austin, Boston and San Jose, have already entered into agreements with telecoms in states where they're permitted to do so. Attorneys for the municipal advocacy group Next Century Cities believe it is unlikely that telecom providers will pursue litigation seeking to void existing agreements. While the ruling doesn't explicitly exempt preexisting agreements or prohibit local governments from negotiating future agreements, it does significantly reduce their leverage in these deals.

The ruling is expected to face multiple legal challenges over the FCC's regulatory authority.

One group likely to lead litigation on the matter is the Smart Communities and Special Districts Coalition, which is made up of localities and association groups in 11 states and the District of Columbia. Gerard Lavery Lederer, an attorney with Best Best & Krieger representing the group, told *Governing* prior to the meeting that they were considering litigation.

"We're committed to defending local governments rights wherever we have to do it, including the courts," he said.

Blair Levin, a former FCC official, said that if the rules aren't overturned, a second wave of litigation will ensue over the meaning of several phrases used to define different provisions, such as fees that are a "reasonable approximation" of localities' costs.

Next Century Cities has issued [guidance](#) for localities, recommending they quickly move to enact zoning, installation requirements and any other regulations. Developing pre-approved design and aesthetic requirements, it also noted, could be particularly beneficial in processing applications faster and defending legal challenges.

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