

Stretched Thin and Feeling the Squeeze:
**The Harmful Effects of Small Cell
Preemption on Local Governments**

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National Association of Telecommunications Officers and Advisors



EXECUTIVE SUMMARY

State and federal preemption of local authority to regulate small cells is straining local governments at a time when they can ill afford it. This report from the National Association of Telecommunications Officers and Advisors (NATOA), with assistance from the Communications Workers of America (CWA), draws on a survey of local governments and examines the effect of small cell preemption. Findings include:

- Localities are **feeling the financial squeeze**. Over half of all localities report that preemption has caused **increased staffing expenses**, for example, hiring new staff or increased overtime expenses. Larger localities feel the burden even more: 83% of mid-size localities and 63% of large localities report the same.¹ One in two localities said that preemption had **increased costs paid to consultants**. Thirty-eight percent of localities report that preemption has resulted in increased costs for make-ready work.
- Local governments are **stretched thin**. Multiple localities report that preemption means that other work suffers – when wireless facilities have special legal status, other construction permits become second tier. Forty-four percent of localities report that shot clocks have resulted in negative effects.
- Local governments are facing **new legal attacks**, which burden already strained budgets. Multiple localities have faced litigation related to small wireless facilities, from San Francisco, CA to the Village of Lake Success, NY.
- History shows that without accountability, broadband and small cell companies will treat the rights-of-way like the wild west. Forty-four percent of localities report that companies have **installed equipment without a permit**. Fifty-two percent report that companies have damaged public property at least once. Fifty-seven percent of localities report that **providers have failed to restore roads, sidewalks, or other infrastructure to its original condition** following installation at least once, including 38% of localities that report it has happened multiple times. Half of large localities report that providers have failed to restore infrastructure to its original condition on multiple occasions.
- Substandard installations affect the public. Forty percent of localities report that installations have created **accessibility issues** at least once, and a third report that they have had **installations that endanger the public**. Thirty-eight percent of all localities, and 50% of large localities, have dealt with contractors lacking the proper licenses.
- Preemption hurts digital equity efforts. Thirty-five percent of all localities, and over half of large localities, report that if it weren't for preemption, they would be pursuing digital divide initiatives that they currently are not.

Effective deployment that protects the public interest and furthers digital equity requires local government as a partner. NATOA recommends the FCC abandon the approach of the 2018 Small Cell Order; restore the authority of local governments to protect community health and safety; abandon ill-conceived fee caps; and shift the burden of proof back to the provider in disputes.

BACKGROUND AND INTRODUCTION

As wireless companies expand their 4G and 5G cellular capacity, many are installing small wireless facilities, or “small cells”, in our communities. These antennas have a smaller range than traditional “macro” towers and are located in local streets, often on light poles or street furniture. Small cells are connected to fiber and electricity, and are one of many services that seek to operate in the public rights-of-way.

Managing the right-of-way and its tenants has long been a core local government function. In recent years, however, federal and state changes have impeded local governments’ ability to effectively manage telecommunications equipment in our streets. In 2018, the Federal Communications Commission released its Declaratory Ruling and Third Report and Order² (“Small Cell Order” or “Order”) which tied the hands of local governments when it came to small cells: it limited the fees companies pay to use public, taxpayer-funded infrastructure; created strict timelines (“shot clocks”) for processing applications; and made the legal standards more favorable to industry.

Most residents never think of the multiple local government roles that are necessary to maintain safe and functional city streets.

At least 28 states have also enacted industry-backed small cell preemption legislation. Many of these state bills are even more restrictive than the 2018 Order including, for example, aggressive deemed granted remedies that allow work to proceed regardless of whether or not a locality has found it safe to do so.

Most residents never think of the multiple local government roles that are necessary to maintain safe and functional city streets. Like all right-of-way work, deployment of small cells requires local government involvement to ensure safe operation alongside other services. Installations can be complex, often involving excavation or the installation of heavy equipment. Local governments create safeguards to ensure that, for example, heavy vertical infrastructure can safely withstand a car crash and small cells will not interfere with other equipment in the right-of-way.

Preemption of local authority over small cells has put localities in a very challenging position. They are forced to facilitate deployment under strict timelines – which can require substantial staff time and resources – yet are unable to require providers to properly bear the full costs of their use of public property. History shows that without local government involvement, providers and their contractors will treat the rights-of-way like the wild west, and responsible departments are stretched thin as they seek to protect public safety and property in a complex regulatory climate.

PUTTING THE FINANCIAL SQUEEZE ON LOCAL GOVERNMENTS: STRAINING RESOURCES AND LIMITING REVENUES

A survey of forty-eight local governments demonstrates the tough position that preemption has put local officials in across the country. These localities range in population from under 5,000 to over 500,000, and represent regions from the middle of the country to the coasts. It's clear that although small cell deployment is in its early stages, cities, towns, and counties are feeling the strain.

Facilitating small cell deployment burdens localities and strains budgets

Processing applications and ensuring work in the right-of-way happens safely requires careful review and inspection by trained professionals. Over half of local governments surveyed (54%) – and three-quarters of jurisdictions with populations over 50,000 – said that preemption has resulted in **increased staffing expenses**, for example, hiring new staff or increased overtime expenses to handle the influx of applications within the FCC's shot clock. Fifty percent of all localities surveyed said that preemption had increased their **costs paid to consultants**. Preemption has also increased costs related to preparing the right-of-way for installation. Thirty-eight percent of all localities and 56% of large localities – those with populations over 250,000 – report that preemption has resulted in increased **costs for make-ready work**.

Multiple localities report that they need to expend significant time on **training providers** on permitting requirements. One city states that as a result of "huge turnover in this industry," the city spends "a great deal of time training these providers, their design firms, and their contractors... Ironically they are supposed to be the experts." Another city notes that whenever a carrier uses a new architectural or engineering firm, the city needs to "invest energy for new firms to train them on the requirements of their engineered plans." Providers often fail to provide all the necessary information: over three

Has small cell preemption resulted in increased staffing expenses?

For example, new staff, overtime expenses

Large localities:

Yes 63%, No 31%, Unsure 6%

Mid-size localities:

Yes 83%, No 6%, Unsure 11%

Small localities:

Yes 29%, No 21%, Unsure 50%

All localities:

Yes 54%, No 31%, Unsure 15%

Has small cell preemption resulted in increased costs paid to consultants?

All localities:

Yes 50%, No 29%, Unsure 21%

Percentages may not sum to 100 due to rounding.

out of four localities report an instance where providers submitted an incomplete application (79%), and over half report it has happened on multiple occasions (52%). These issues are even more common in large cities and counties, which have experienced greater deployment: four out of five large localities (81%) report multiple instances of providers submitting incomplete applications.

Localities also receive applications that appear to have the purpose of preventing another provider from using the pole – slowing deployment overall and creating burdensome administrative work for the locality. Boston reports that the FCC Order has created a process that looks like a “land grab,” where carriers tie up poles but fail to build.³ Another city in the Midwest notes that providers have repeatedly submitted applications that have issues, seemingly in an attempt to reserve locations.

Forty-four percent of localities report that shot clocks have resulted in negative effects. The intensive resources required to keep up with shot clocks and incoming applications often mean that **other work suffers as a result**. When wireless facilities have special legal privileges, other construction permits or local priorities become second tier. One southern city reports that other plans or permits get delayed because of state shot clock requirements for small cells. A city on the west coast states that with budget restrictions, “our department has been stretched thin,” and “cell sites are one of many responsibilities our department must handle with care.” Another west coast city notes, “other areas of work are neglected because we must prioritize processing small cell applications due to shot clocks. This takes resources and funding away from other works.”

As deployment ramps up, maintenance and **ongoing management requests** will likely increase as well. Seattle, Washington notes that this is becoming “a larger and larger portion of review,” posing a challenge for staff time.

Have you had issues with companies submitting incomplete applications or failing to provide the information required to make a permitting decision?

Large localities:

- 6% Yes, on one occasion
- 81% Yes, on multiple occasions
- 6% No
- 6% Unsure

Mid-size localities:


- 50% Yes, on at least one occasion
- 39% Yes, on multiple occasions
- 6% No
- 6% Unsure

Small localities:

- 21% Yes, on at least one occasion
- 36% Yes, on multiple occasions
- 21% No
- 21% Unsure

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All localities:

- 27% Yes, on at least one occasion
 - 52% Yes, on multiple occasions
 - 10% No
 - 10% Unsure
- 

Localities also face increased legal and compliance costs

The Small Cell Order forces localities to bear increased legal costs, whether to deal with expensive litigation or to spend the resources necessary to mitigate legal risk. In changing the legal standards – for example, forcing local governments to prove that their fees for use of public property in the rights-of-way do not exceed the FCC’s definition of costs – the Small Cell Order made local governments much more vulnerable to legal challenge. Multiple localities have faced litigation related to small wireless facilities, including San Francisco, CA; Cambridge, MA; Everett, MA; Clark County, NV; Rochester, NY; Lake Success, NY; Charleston, SC; City of East Orange, NJ; and Torrance, CA.⁴ Legal costs are not clearly recoverable under the FCC’s fee caps, which means local governments are effectively barred from recovering their full costs.

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The Small Cell Order has also resulted in providers filing complaints regarding wireless facilities and local fees at the FCC itself, despite Congress specifically stating its intent that under Section 253 of the Telecommunications Act of 1996 “local governments control over their public rights of way... be retained locally” and that “the Federal Communications Commission not be able to preempt such actions.”⁵ Opening up the FCC as a forum makes it easier for providers to obstruct local standards. Procedural costs are lower than formal litigation – particularly for companies with a national presence and routine interactions with the FCC – and the audience is often more friendly to providers than local or federal courts, if for no other reason than the FCC’s expertise is communications policy, not local rights-of-way.

... All while compensation goes down

The increased financial strain on localities is compounded by a decreased ability to collect fair compensation from providers, as preemption restricts the amount local governments can charge for use of the right-of-way and even for the use of municipally-owned property, like poles or bus shelters, within the right-of-way. Forty percent of localities report that preemption has resulted in a loss in revenue, including a majority (56%) of large localities. These costs add up – as these restrictions stay in place over years, they translate into huge losses for communities. Multiple localities estimate that small cell preemption will have cost their city hundreds of thousands of dollars that would otherwise have gone to municipal budgets.

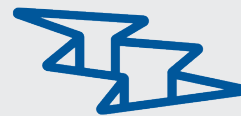
In some localities providers did not immediately renegotiate fee arrangements in existing contracts, meaning that local governments did not face short term losses in income. However, if the Order remains in place and contracts are renegotiated, one can expect that more localities will feel the pinch.

LEAVING A MESS: DAMAGE TO PUBLIC PROPERTY AND THE NEED FOR LOCAL OVERSIGHT

Providers are deploying complex equipment in our communities – although the industry might have one believe that installation is as simple as sticking a lunch box to a pole, this is complex work that often involves excavation and underground work, heavy infrastructure, and interaction with other utilities. When things go wrong, the consequences can be serious. In some localities, contractors laying fiber have hit gas lines and caused explosions, damaging property and even causing injury and death.⁶ Preemption ties the hands of local governments and creates challenges for localities seeking to protect workers and the public. Without proper oversight, it's clear that some broadband and small cell companies will treat the public rights-of-way like the wild west.

Forty-four percent of localities report that broadband and small cell companies have **installed equipment without a permit**. Over one in four (27%) report that this has happened multiple times. This is more than an issue of missing paperwork – when equipment is installed without local oversight, not only is there no check on how a provider is operating with respect to public and worker safety, the provider may also evade proper compensation to the public for use of public assets, a situation analogous to a provider installing an antenna in your backyard without your permission. For example, in one city, a company repeatedly hung equipment on cables without notifying the city – thus avoiding the specific fee that regulations required on that equipment.

When providers **damage public property**, like sidewalks, streets, or underground infrastructure, it requires costly repairs – it also creates needless expense and burden for hard-working local government staff who must spend time remedying the issue. Fifty-two percent of localities report that broadband and small cell companies have damaged public property at least once, including one in three (31%) reporting it has happened multiple times. This can range from potholes – for example, one city reported that companies would take “cores” in pavement and leave them unfilled, or fill them in improperly – to more serious damage involving gas, sewer, or water lines. Fifty-seven percent of localities report that companies have failed to restore roads, sidewalks, or other infrastructure to its original



44% of localities report that companies have installed equipment without a permit

52% of localities report that companies have damaged public property, for example, damage to sewer covers or sidewalks

57% of localities report that companies have failed to restore roads, sidewalks, or other infrastructure to its original condition following installation

36% of localities have had issues with companies failing to use underground service alert services properly

condition following installation at least once, including 38% of localities that report it has happened multiple times.

Half of localities report that companies have **damaged underground infrastructure** at least once, and over a third report it has occurred on multiple occasions. Public records reveal examples across the country. For example, in Sacramento, between May 2018 and January 2019, one provider's contractors caused at least 41 utility hits, costing the city thousands of dollars and hundreds of employee hours.⁷ The City of Tampa is suing two providers, alleging that the companies' fiber deployment caused nearly \$100,000 in damage to underground wastewater lines.⁸

When providers perform **underground work**, they are required to use underground service alert or dig alert services to ensure they don't damage other utility equipment. Thirty-six percent of all localities, and 56% of large jurisdictions, say that they have had issues with companies failing to use underground service alert services properly. Seattle, Washington notes that across providers, damage is often the result of poor locates. Half of the localities have had issues with providers not following excavation requirements at least once, for example, not completing excavation in a timely manner or not following safety requirements around underground work. Twenty-three percent have had the issue on multiple occasions. The problem is more pronounced in large localities, which have higher rates of deployment. A majority of large localities (63%) report that companies have failed to follow excavation requirements at least once, and 44% report that it has happened on multiple occasions. One city notes that contractors fail to perform proper due diligence even when warned of existing obstructions by the city.

Substandard installations affect the public. They can create not only safety hazards but also **accessibility issues**, making it difficult or impossible for individuals in wheelchairs to navigate sidewalks. Forty percent of localities report that installations have created accessibility issues at least once, and 33% report that they have had installations that **endanger the public**. These numbers are even higher for large localities. Fifty-six percent of large localities report that installations have created accessibility issues at least once, including one in four reporting it has happened multiple times. Almost half of large localities (44%) report an installation issue that endangered the public, including one in four large localities reporting that it has occurred multiple times.



56% of large localities report that installations have created accessibility issues at least once.

44% of large localities report an installation issue that has endangered the public, including one in four reporting it has occurred multiple times.

In Louisville, Kentucky, a councilmember described deployment as “a significant mess” and “frankly... horrendous.”

Complaints from residents are one indicator of installation issues. Over one third of all localities (38%), and half of large localities, report receiving complaints from residents about installation issues on multiple occasions. News sources across the country have reported residents' concerns. For example, in Louisville, Kentucky, residents complained that deployment had resulted in blocked and unrepaired sidewalks, with a councilmember describing deployment as "a significant mess" and "frankly... horrendous." In Houston, residents complained after installation crews broke a water main resulting in flooding. And in Miami-Dade County, residents complained of torn up sidewalks that created accessibility issues, with a county commissioner tweeting that poles were being built in the middle of the sidewalk, impeding wheelchairs and accompanied by "horrific sidewalk repairs."⁹

The telecommunications industry is highly subcontracted. Often a provider subcontracts the work to a firm, that then contracts to a second firm, that contracts to yet a third firm. These arrangements create real accountability challenges. For example, in 2018 a provider's subcontractor in Wisconsin hit a gas line and caused an explosion that leveled half a city block, killing a volunteer firefighter and critically injuring another. It was later revealed that the subcontractor company was delinquent in its registrations to work in the state. Similarly, following a San Francisco explosion where a subcontractor hit a gas line, authorities later learned that the subcontractor didn't have a required license.¹⁰

Thirty-eight percent of localities report that they have dealt with **contractors without the proper licenses** at least once. The problem is even greater for large localities, with half reporting the same. One city reports that workers have done installations or maintenance in unmarked vehicles, with out of state licenses, at odd times, which has even prompted residents to call the police stating that strangers were climbing poles. In one instance in that same city, a subcontractor's work was so substandard that the city banned them from working on the project. As one locality states, "providers dump everything on a contractor and contractors are only there to make money, not to do the right thing with regards to the right of way."

"Providers dump everything on a contractor and contractors are only there to make money, not to do the right thing with regards to the right of way."

RF EMISSIONS: LOCAL GOVERNMENTS ARE STUCK IN THE MIDDLE

Local government officials are often faced with residents raising concerns about radio frequency (RF) exposure with the siting of new wireless facilities in the public rights-of-way: seventy-one percent of localities have received complaints from residents about RF emissions. As news coverage has described, in many communities these citizen groups are very vocal.¹¹

Local governments are stuck in the middle when it comes to RF emissions: to avoid costly legal challenges, they are forced to grant applications for small wireless facilities, which are now being built closer to where citizens live and work. However, they are also preempted by the FCC from regulating the placement of wireless facilities based on RF emissions. As such, local governments rely on the FCC's regulations and guidance in responding to residents' concerns. In 2019, the FCC declined to modify its standards regarding RF emissions, maintaining standards that were set in 1996.¹² With rising misinformation, the FCC must provide local governments with appropriate resources to address the RF emission questions and concerns often raised by residents. Local governments should also be supported in enforcing applicable signage and safety protocols to protect workers who come in close proximity to this equipment.

Seventy-one percent of localities have received complaints from residents about RF emissions.

A KEY PARTNER FOR DIGITAL EQUITY

Millions of Americans are still without basic high-speed internet access, and struggling to learn, work, and access services. The pandemic has revealed what advocates have been saying for a long time: internet access is no longer a luxury, it is a necessity. Preemption gives industry a slew of benefits on the taxpayer's dime, with no requirement that deployment benefit those in need.

When local governments have the ability, they negotiate agreements that serve their communities. A longstanding example is cable franchising—locally negotiated agreements that, among other things, have enabled local governments to curb digital redlining by requiring cable companies to build their systems to virtually every resident in the community. In the small cell context, when San José negotiated its small cell agreements prior

Thirty-five percent of localities report that if preemption were not an issue, they would be pursuing digital divide initiatives they currently are not.

to the Small Cell Order, it required providers to contribute to a Digital Inclusion Fund. The \$24-million fund will connect thousands of San José households with devices, internet access, and digital skills training in the coming decade.¹³ San José's approach was held up as a model by FCC Commissioner Rosenworcel, but now the Small Cell Order prevents local governments from pursuing such an approach.¹⁴

Preemption ties the hands of localities to pursue innovative digital inclusion efforts. Thirty-five percent of localities, and over half of large localities (56%), reported that they would be pursuing digital divide initiatives that they currently are not, if preemption were not an issue.

RECOMMENDATIONS

Effective deployment that protects the public interest must respect the role of local government as a partner. Policies should support local oversight and recognize that local governments are important stakeholders in achieving digital equity.

- **The FCC should abandon the approach of the Small Cell Order and support the role of local governments in facilitating safe deployment in the public interest.** Federal overreach into inherently local concerns doesn't benefit the public or facilitate safe and equitable deployment.
- **The FCC should abandon the Small Cell Order's ill-conceived fee caps.** Federal fee caps simply don't make sense – they require local governments to navigate burdensome regulations to recoup costs, create needless litigation, and effectively shift deployment costs onto local governments and taxpayers.
- **The FCC should shift the burden of proof back to the provider when a provider alleges local government actions violate federal law.** The Small Cell Order created a punishing litigation standard for a local government facing an alleged shot clock or fee cap violation. The standard places localities, particularly small municipalities, under substantial litigation pressure, creates needless litigation, and stacks the deck against local governments in court and at the FCC. The burden to show a violation should rest with the provider.
- **The FCC should provide more resources to local governments on RF emissions.** Local governments are largely preempted with respect to RF emissions yet bear the brunt of local concerns about RF issues, including public and worker safety. The FCC should do more to educate the public and provide resources to localities to address residents' questions and concerns.

Endnotes

- 1 In this report, we refer to localities with populations 50,001-250,000 as mid-size localities, and localities with populations over 250,000 as large localities.
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- 4 Mike Dano, Light Reading, "T-Mobile sues San Francisco to make 5G upgrade go faster," November 20, 2020, <https://www.lightreading.com/opticalip/t-mobile-sues-san-francisco-to-make-5g-upgrade-go-faster/d/d-id/765617/>; Inside Towers, "Poles Apart, Judge Throws Out Extenet Small Cell Suit in Cambridge," September 1, 2020, <https://insidetowers.com/cell-tower-news-poles-apart-judge-throws-out-extenet-small-cell-suit-in-cambridge-ma/>; Seth Daniel, Everett Independent, "Verizon Wireless Sues City Council for Denial of Two 5G Cell Nodes," August 5, 2020, <http://everettindependent.com/2020/08/05/verizon-wireless-sues-city-council-for-denial-of-two-5g-cell-nodes/>; Petition for Declaratory Ruling that Clark County, Nevada Ordinance No.4659 Is Unlawful Under Section 253 of the Communications Act as Interpreted by the Federal Communications Commission and Is Preempted, WT Docket No. 19-230, Order, January 14, 2021, <https://docs.fcc.gov/public/attachments/DA-21-59A1.pdf>; Antoinette DelBel, WHAM, "Verizon sues City of Rochester over 5G rollout, calls fees 'discriminatory,'" August 12, 2019, <https://13wham.com/news/local/verizon-sues-city-of-rochester-over-discriminatory-fees-amid-5g-upgrades>; Mike Adams, Great Neck Record, "Communication Breakdown: ExteNet Systems Sues Lake Success," August 9, 2019, <https://greatneckrecord.com/communication-breakdown-extenet-systems-sues-lake-success/>; Crown Castle Fiber LLC v. City of Charleston, No. 2:17-cv-2562-DCN, United States District Court for the District of South Carolina; Extenet Systems, Inc. v. The City of East Orange, Civ. No. 2:19-cv-21291, United States District Court for the District of New Jersey; Bradley Bermont, Daily Breeze, "Crown Castle sues Torrance over 5 permits to install 5G network cell nodes," April 2, 2019, <https://www.dailybreeze.com/torrance-faces-lawsuit-from-telecom-giant-over-new-cell-equipment-that-could-lead-to-5g>.
- 5 141 Cong. Rec. S8213 (daily ed. June 13, 1995).
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- 7 Communications Workers of America, "Verizon's 5G Promise Rings Hollow in Sacramento," https://www.fair5g.org/system/files/cwa_sacramento_verizon_june_2019_1_0.pdf.
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- 9 Chad Mills, WDRB, "Louisville leaders voice concerns as Verizon, AT&T prepare 'massive' 5G upgrades," March 10, 2020, https://www.wdrb.com/news/louisville-leaders-voice-concerns-as-verizon-at-t-prepare-massive/article_d1c8d4ba-6336-11ea-909a-7f4598384661.html; Dwight Silverman, Houston Chronicle, "'It's ugly': Verizon 5G data boxes appear without notice on Houston front lawns," January 22, 2021, <https://www.houstonchronicle.com/business/article/Streamlined-5G-buildout-puts-ground-15889021.php>; Nathan Crooks, Bloomberg, "Miami's Streets Are Awash with 5G Debris Ahead of the Super Bowl," January 30, 2020, https://www.bloomberg.com/news/articles/2020-01-30/miami-streets-are-awash-with-5g-debris-ahead-of-the-super-bowl?utm_source=sendgrid&utm_medium=email&utm_campaign=Newsletters.

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