

From: David Adams [mailto:ctrarcht@nccn.net]
Sent: Friday, June 10, 2016 10:13 AM
To: Amy Wolfson <Amy.Wolfson@nevadacityca.gov>
Subject: Corrected Submission to Nevada City Planning Commission

Dear Amy Wolfson,

If it is not too late, please include this email (this time with the attachment!) in the packet for the Planning Commission meeting on June 16. Thank you,

David Adams

TO; NEVADA CITY PLANNING COMMISSION, HAL DEGRAW, AND/OR OTHER CITY
LEGAL COUNSEL
FROM: DAVID ADAMS, RICHARD CRISTDAHL, AND A GROUP OF CONCERNED
CITIZENS, BUSINESSES, AND PROPERTY OWNERS
DATE: JUNE 10, 2016
RE: VERIZON USE PERMIT APPLICATION TO INSTALL 8 NEW ROOFTOP CELLULAR
ANTENNAS ON THE BUILDING AT 109 N. PINE ST.

We hope you will find helpful the attached excellent legal overview and analysis by two very experienced Washington D.C. lawyers in this area regarding the rights and authority of local government entities responding to applications for use permits for installation of new cellular antennas or towers on local government owned buildings and property, "Federal Law Issues Relating to Wireless Facilities Leases on Municipal Property." Its analysis covers a variety of legal precedents that have established a broad range of authority for local governments. We especially draw your attention to the discussion that begins on page 7 regarding Regulatory and Proprietary Rights. It is our understanding that Nevada City possesses both of these rights of rejection of the current Verizon use permit application for 8 new cellular antennas on the building at 109 North Pine Street – proprietary simply as a municipal government and regulatory especially due to its historic district preservation ordinance. The reason(s) for any such rejection must only be contemporaneously stated in writing. In this and our other document submissions we are suggesting a number of compelling reasons to reject this application.

Here is also a link to the helpful website of The Center for Municipal Solutions, an municipal telecommunications consulting agency experienced in these issues that offers a variety of FREE services to cities (including written legal analyses of wireless equipment applications, providing of expert witnesses, etc. at no cost) as well as many informational resources on their site (especially recommended is the Q & A sections)<http://www.telecomsol.com/www2/>

TO: The Nevada City Planning Commission

FROM: David Adams and Richard Cristdahl for a Group of Concerned Citizens and Property Owners

DATE: June 9, 2016

We request that, in compliance with the California Environmental Quality Act (CEQA), Nevada City (and its Planning Commission), as lead agency, request the applicant to address in an Environmental Impact Report (EIR) the potential effects of the new exposure to radiofrequency radiation (RFR) within the greater Nevada City environment as a result of the 8 new rooftop-mounted cellular antennas project proposed by Verizon for the 109 North Pine Street building.

The following information and evidence is submitted in preliminary and partial support of finding a positive CEQA impact declaration for this project, involving at least a CEQA Initial Study and, more responsibly, an Environmental Impact Report, either full version or focused version. Within such a study the effects of the antennas and of increased RFR in various areas (including impacts on wildlife, on the 1913 building's and the town's historical character and architecture, on likely devaluation of nearby property values, and economic/business) should be addressed as areas of controversy and public concern.

There is precedence in California for including this factor in CEQA documents. For example, RFR emissions from new wireless mobile-phone infrastructure was specifically addressed in a (draft) EIR prepared in January as the *Los Angeles Regional Interoperable Communications System (LA-RICS) Joint Power Authority's Environmental Impact Report for the Land Mobile Radio (LMR) Project* there: <http://www.la-rics.org/wp-content/uploads/2016/01/LA-RICS-LMR-DEIR-January-2016.pdf> (see especially ES-4, 1-11, Section 5.0 "Other CEQA Considerations," p. 5-8).

This document (and attachment) provides supporting evidence for the impact on wildlife, including urban trees. Additional supporting documents on other aspects should be submitted shortly.

Radio-Frequency Radiation (RFR) Effects on Wildlife

All plants and animals, as well as humans, have adapted to the earth's electromagnetic fields, which include a direct current (DC) magnetic field, a DC electrical field, and low-frequency Schumann Resonances (natural fields that are both electric and magnetic, caused by the geometry of the earth's surface and the ionosphere near the top of the atmosphere).

To navigate in relation to these fields and to control their immune systems, birds and bees use magnetically sensitive substances called cryptochromes. These are protein pigments found in virtually all animals, plants, and many bacteria. Cryptochromes measure light to control and reset animals' and plants' biological clocks. Some animals also use cryptochromes to sense (or "see") the direction of the earth's magnetic field. Cryptochromes are badly impaired by human-made oscillating electro-magnetic fields, disrupting insects' and animals' solar and magnetic navigation abilities, likely leading to results such as bee colony collapse, loss of migratory birds and butterflies, and a weakening of the immune system. For example, radio-frequency radiation (RFR) can blot out a bird's perception of the earth's field, causing the bird (or insect) to fly in the wrong direction, and also disrupt a bird's internal clock based on the sun's changing position. Birds often leave the areas for many hundreds of feet around cell towers and antennas.

Daily Circadian metabolic rhythms of numerous animals are also driven by cryptochrome-containing internal clocks, especially in relation to dawn and dusk. Circadian rhythms control the production of melatonin (a sleep hormone); at night, they divert metabolic resources to bodily repair and immune-system strengthening. In humans reduced melatonin production would result in tiredness during the day and poor sleep at night, among other effects. Because it is supported by melatonin, the immune system may never be able to summon the great energy sometimes required to overcome pathogens or destroy developing cancer cells before they get out of control, leading to various diseases.

The following published research studies support the above with brief summary comments followed by documentation of verifying research studies:

GENERAL

- RFR fields emitted by cellular antennas cause the decline of animal populations and deterioration of plant health: Animal effects include reduction in natural defenses, reproduction problems, adverse behavior.

A Balmori, "Electromagnetic pollution from phone masts. Effects on wildlife," *Pathophysiology* (2009).

BIRDS

Typical effects of radiation from cellular communication antennas on resident, breeding, and migratory birds: site abandonment, feather deformation, locomotion problems, weight loss, weakness, reduced survivorship and death.

The U.S. Fish and Wildlife Service continues to suggest to the Federal Communications Commission (FCC) and to Congress the pressing need for studies based on cumulative negative effects of RFR exposure on migratory birds under the National Environmental Policy Act.

Manville, A.M., II. 2007a. Comments of the U.S. Fish and Wildlife Service submitted electronically to the FCC on 47 CFR Parts 1 and 17, WT Docket No. 03-187, FCC 06-164, Notice of Proposed Rulemaking, "Effects of Communication Towers on Migratory Birds." February 2, 2007. 32 pp.

Manville, A.M., II. 2007b. U.S. Fish and Wildlife concerns over potential radiation impacts from cellular communication towers on migratory birds and other wildlife- research opportunities. Invited Presentation to "Congressional Staff Briefing on the Environmental and Human Health Effects of Radiofrequency (RF) Radiation," House Capitol 5, Washington, DC. 16 page PowerPoint presentation. May 10, 2007.

Citing a variety of scientific research, the U.S. Department of the Interior in February of 2014 called on the National Telecommunications and Information Administration of the U.S. Department of Commerce to formulate or modify policies and procedures for cellular communications towers so that they are in conformity with Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds and do not threaten from the towers' emissions of RFR the 241 species of endangered or threatened U.S. birds (see attached copy).

In 2003 three conservation organizations filed a lawsuit against the Federal Communications Commission ("FCC"). The groups, Forest Conservation Council, American Bird Conservancy, and Friends of the Earth sought to enjoin the FCC from issuing any new licenses for the building of communication towers in the Gulf Coast region until their impact on migratory birds has been fully assessed and mitigated.

The suit cited violations by the FCC of the Migratory Bird Treaty Act, National Environmental Policy Act ("NEPA"), and Endangered Species Act ("ESA") in the deaths of thousands of migrating birds at towers along the Gulf Coast. <http://electromagnetichealth.org/pdf/CommTowerResearchNeedsPublicBriefing-2-409.pdf>

- Among 15 species of wild birds, breeding failures and population declines were significantly more common within 200 meters (656 feet) of a cell tower and in areas where measured levels of microwave radiation were high. A. Blamori Martinez, "Birds and mobile telephony. Preliminary results of the effects of electromagnetic waves on urban fauna," *El Ecologista* vol. 36 (2003): 40-42. Available online at www.buergerwelle.de.

- Experimenting on chickens, pigeons, and seagulls, Canada's National Research Council found that most birds collapsed in distress within seconds of being exposed to microwave radiation of moderate intensity – but not if they were defeathered, since feathers act as receiving aerials for microwave radiation. J.A. Tanner, C. Romero-Sierra, S. JK. Davie, "Non-thermal effects of microwave radiation on birds," *Nature* vol. 216 (1967): 1139; and J. Bigu del Blanco and C. Romero-Sierra, "Bird feathers as dielectric receptors of microwave radiation," National Research Council, *DME Control Systems LTR-CS-89*, January 1973.

- 40% of established white stork nests within 200 meters (656 feet) of cellular antennas had no chicks, while only 3.3% of nests beyond 300 meters (984 feet) had no chicks. The storks within 200 meters often failed to build nests, fought for sticks, and had chicks who frequently died.

A. Balmori Martinez, "Possible effects of electromagnetic fields from phone masts on a population of white stork (*Ciconia ciconia*)," *Electromagnetic Biology and Medicine*, v. 24 (2005): 109-119.

* There are strong negative correlations between the amount of radiation presence (both in the 900 and 1800 MHz frequency bands) and the presence of male house sparrows. In areas with high electric field strength values, fewer house sparrow males were observed. Long-term exposure to higher RFR levels affected bird abundance or bird behavior in this species.

Everaert, J., and D. Bauwens. "A possible effect of electromagnetic radiation from mobile phone base stations on the number of breeding House Sparrows (*Passer domesticus*)," *Electromagnetic Biology and Medicine* 26 (2007):63-72; and Balmori, A., and O. Hallberg, "The urban decline of the House Sparrow (*Passer domesticus*): a possible link with electromagnetic radiation," *Electromagnetic Biology and Medicine* 26 (2007):141-151.

* Daily RFR exposure of chicken embryos for 4 days resulted in a decrease in production of stress-response proteins (HSPs) that protect cells in the body against lack of oxygen and decreased protection against ultraviolet radiation – both of which could increase the probability of cancer and other diseases.

A. N. DiCarlo, F. White, P. Guo, P. Garrett, and T. Litovitz, "Chronic electromagnetic field exposure decreases HSP70 levels and lowers cytoprotection," *Journal of Cellular Biochemistry* 84 (2002): 447-454.

• Robins can navigate in the earth's magnetic field if they receive light from wavelengths absorbed by cryptochromes. This study explored how the human-made frequencies between 01 and 10 MHz at field strengths as little as 0.085 mT (about 500 times weaker than the earth's magnetic field) made the birds unable to respond to the earth's magnetic field. T. Ritz et al. "Resonance effects indicate radical pair mechanism for avian magnetic compass," *Nature*, vol. 429 (5/13/2004): 177-180.

• Documentation of lethal effects of RFR on chicken embryos:

A. Di Carlo, et al. "Chronic electromagnetic field exposure decreases HSP70 levels and lowers cytoprotection," *Journal of Cellular Biochemistry*, v. 84 (2001): 447-454.

* Longcore, T., C. Rich, P. Mineau, B. MacDonald, D.G. Bert, L.M. Sullivan, E. Mutrie, S.A. Gauthreaux, Jr., M.L. Avery, R.C. Crawford, A.M. Manville, II, E.R. Travis, and D. Drake, "Avian mortality at communication towers in the United States and Canada: which species, how many, and where?" *Biological Conservation* vol. 158 (2013): 410-419.

INSECTS

In a May 2009 report the U.S. Fish and Wildlife Service urged Congress to investigate the potential relationship between wireless devices and honeybee colony collapse.

* Bees are positively charged, flowers negatively charged (2 studies). RFR exposure disturbs the natural orientation and navigation mechanisms of bees and other insects, who use the earth's magnetic field and light energy to orient and navigate. It makes them restless, develop an urge to swarm, increasingly aggressive, and colony collapse in 62.5% of apiaries. Ulrich Warnke, *Bees, Birds and Mankind: Effects of Wireless Communication Technologies* (Kentum, 2009) ; and F. Ruzicka, "Schäden durch elektrosmog," *Bienenwelt* 10 (2003): 34-35; and 2 additional published studies.

Studies performed in Europe have documented navigational disorientation, lower honey production, and decreased bee survivorship in honeybees due to exposure to RFR from a cell tower within 500 meters (1,635 ft) and 800 meters (2,616 feet).

Harst, W., J. Kuhn, and H. Stever. "Can electromagnetic exposure cause a change in behaviour? Studying possible non-thermal influences on honey bees – an approach within the framework of educational informatics," *Acta Systemica-IIAS International Journal* vol. 6, no. 1 (2006):1-6l; U. Warnke, "Effects of Electric Charges on Honeybees," *Bee World* vol. 57, no. 2 (1976): 50-56; and Kimmel, S., J. Kuhn, W. Harst, and H. Stever, "Electromagnetic radiation: influences on honeybees (*Apis mellifera*)," *Institute Environmental Sciences, Institute Science and Science Education, and Institute Educational Informatics*, Univ. Koblenz-Landau/Campus Landau, Germany (2006): 6 pp.

* Exposure to electromagnetic radiation from DECT phone towers (similar to cell phone towers) had deleterious effects on the rate of honeybee egg laying, return to hive, and honey production

Harst, Wolfgang, et al., "Can Electromagnetic Exposure Cause a Change in Behaviour? Studying possible non-thermal influences on honey bees." Institute of Science and Science Education (ISSE), Department of Physics, University of Koblenz-Landau/Campus, Landau, Germany. *ACTA SYSTEMICA - IIAS International Journal* (2006) 6(1): 1-6.

* RFR induces ants to abandon nests and relocate, change speed and foraging behavior, become disoriented, have difficulty moving their legs, or die.

Marie-Claire Cammaerts and Olie Johansson, "Ants can be used as bio-indicator to reveal biological effects of electromagnetic waves from some wireless apparatus," *Electromagnetic Biology and Medicine*, 8/30/2013.

- The construction of combs and the homing capability of bees change for the worse if the bees are subjected to magnetic fields.

C. Hsu, F. Ko, C. Li, J. Lue, "Magnetoreception System in Honeybees (*Apis mellifera*)," *PLoS ONE*, vol. 2, no. 4 (2007): e395.

FROGS

* Frogs within 140 meters from a cellular antenna had a mortality rate of 90%, compared to 4.2% for shielded frogs.

A. Balmori and C. Navarra, "Mobile phone mast effects on common frog (*Rana temporaria*) tadpoles; the city turned into a laboratory," *Electromagnetic Biology and Medicine*, v. 29 no. 1-2 (2010): 31-35, 59.

* Radio-frequency radiation can alter a frog's heart rhythm – and even stop it at only 0.6 microwatts per square centimeter, 1600 times less than the current FCC guideline for public exposure to microwave radiation.

A. H. Frey et al., "Neural function and behavior: Defining the relationship," *Annals of New York Academy of Science*, v. 247 (1975): 433.

URBAN TREES AND OTHER PLANTS

- Exposure of urban trees to RFR causes leakage of materials from vacuoles, which contain toxic materials and digestive enzymes normally used to digest and recycle waste. These enzymes include DNase, which destroys DNA, which can lead to mutations, loss of cellular function, and possible cell death. Other results are cancer-like growths under tree bark (phloem nodules), split bark, and premature shedding of leaves and fruit.

Andrew Goldsworthy, "Why Our Urban Trees are Dying" (2011):

<http://www.mastsanity.org/health/research/299-why-our-urban-trees-are-dying-by-andrew-goldsworthy-2011.html>

- A 2010 study at Wageningen University in the Netherlands investigating increasingly common urban tree symptoms such as bleeding bark fissures, death of parts of leaves, and abnormal growth, found a 60% increase in signs of radiation sickness (including a "lead-like shine" on leaves as a sign of near death) from 2005 to 2010.

www.antennebureau.nl/actueel/nieuws/2010/eerste-indruk-kennisplatform-onderzoek-naar-bomen-en-wifi-zendesignalen; reported in Dan Nosowitz, "Wi-Fi Radiation Is Killing Trees, New Study Finds," *Popular Science*, posted November 22, 2010: <http://www.popsci.com/technology/article/2010-11/wi-fi-radiation-killing-trees>.

* Growth rates of plants can be increased or decreased by RFR exposure:

I.Y. Petrov et al., "Possibility of correction of vital processes in plant cell with microwave radiation," in *Proceedings of IEEE International Symposium on Electromagnetic Compatibility*, pp. 234-235, Dec. 1991.

* Growth rates of fungi can be increased or decreased by RFR exposure:

A. Berg and H. Berg, "Influence of ELF sinusoidal electromagnetic fields on proliferation and metabolic yield of fungi," *Electromagnetic Biology and Medicine*, v. 25, no. 1 (2006): 71-77.

RFR exposure can cause plants to produce more meristems (growing points of young stems, leaves, and roots), affect root cell structure, and induce stress response, causing biochemical changes.

M. Tafforeau et al., "Plant sensitivity to low intensity 105 GHz electromagnetic radiation," *Bioelectromagnetics*, vol. 5, no. 6 (2004): 403-407; M. B. Bitonti et al., "Magnetic field affects meristem cell activity and cell differentiation in

Zea mays roots," *Plant Biosystems*, vol. 140, no. 1 (2006): 87-93; W. Wawrecki, et al., "Influence of a weak DC electric field on root meristem architecture," *Annals of Botany*, vol. 100, no. 4 (2007): 791-796.

- RFR exposure causes necrotic lesions and abnormal coloring in leaves of trembling aspen.

Katie Haggerty, "Adverse influence of radio frequency background on trembling aspen seedlings: Preliminary observations," *International Journal of Forestry Research* (2010).

Federal Law Issues Relating to Wireless Facilities Leases on Municipal Property

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March 27, 2014

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Tillman L. Lay is a partner in the Washington, D.C., law firm of Spiegel & McDiarmid LLP. He specializes in representing local governments and other clients on telecommunications, cable television, franchising, public safety, municipal broadband, rights-of-way, tax, property law, land use, constitutional law, antitrust and other federal law matters before the courts, the Federal Communications Commission (FCC) and Congress. His clients include scores of local governments across the nation. He has represented local government clients before the FCC, the courts and Congress on wireless siting issues. He also testified before a House Subcommittee on behalf of National Association of Counties, the U.S. Conference of Mayors, the National League of Cities and the Government Finance Officers Association against legislation that would impose a moratorium on state and local cell phone taxes. He received his undergraduate degree with highest honors from the University of Tennessee, and he is a *magna cum laude* graduate of the University of Michigan Law School. After law school, he clerked for the Honorable John C. Godbold, Chief Judge of the United States Court of Appeals for the Fifth Circuit.

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I. INTRODUCTION

Demand for wireless services and the development and deployment of new technologies are increasing. The siting of wireless facilities is governed by federal, state, and local laws. In 1996 Congress enacted the Telecommunications Act of 1996 (“TCA”) that preserved most state and local zoning authority in the siting of personal wireless service facilities while preempting certain exercises of that authority in order to balance local concerns with a growing need for wireless deployment. The Federal Communications Commission (“FCC” or “the Commission”) is charged with interpreting and implementing the TCA. Notably, though, “the TCA does not federalize telecommunications law[,]”¹ and state and local governments have a significant role to play.

As part of the Middle Class Tax Relief and Job Creation Act of 2012, Congress enacted another provision, Section 6409(a), to advance wireless siting. The scope of the preemption of

¹ *Sw. Bell Mobile Sys., Inc. v. Todd*, 244 F.3d 51, 57 (1st Cir. 2001).

state and local authority by the TCA and Section 6409(a), as well as the overall implementation of Section 6409(a), is the subject of a current Commission rulemaking. This paper discusses how the two statutory provisions affect the siting of wireless facilities on municipal property.²

II. SECTION 332(c)(7)

A) *Statutory Background*

Section 704(a) of the TCA added Section 332(c)(7) to the Communications Act of 1934, as amended.³ Section 332(c)(7) provides for limited preemption of state and local zoning authority in the siting of personal wireless service facilities. As part of an overall goal of promoting competition and encouraging rapid deployment of new wireless telecommunications technologies, Section 332(c)(7) aimed to reduce what were perceived to be local zoning impediments to the installation of facilities for wireless communications.⁴ The provision “prevents Commission preemption of local and State land use decisions and preserves the authority of State and local governments over zoning and land use matters except in the limited circumstances set forth in the conference agreement.”⁵ The provision “is a deliberate

² An additional issue may be raised by the interaction between 47 U.S.C. §§ 253(a) and 332(c)(7). *See, e.g., Sprint Telephony PCS, L.P. v. Cnty. of San Diego*, 543 F.3d 571, 579 (9th Cir. 2008) (en banc) (discussing meaning of prohibition under two statutory provisions). Section 253(a) provides: “No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.” 47 U.S.C. § 253(a). Section 332(c)(7)(A), however, preserves general local zoning authority, stating “[e]xcept as provided in this paragraph, nothing in this chapter shall limit or affect the authority” of local governments over the “placement, construction, and modification of personal wireless service facilities.” 47 U.S.C. § 332(c)(7)(A). Arguably, this provision precludes the application of Section 253(a) to an exercise of local zoning authority covered by Section 332(c)(7). The Section 253 issue will not be addressed in further detail in this paper, but it is an issue that municipal attorneys should keep in mind in dealing with wireless siting issues.

³ Telecommunications Act of 1996, Pub. L. No. 104-104, § 704(a), 110 Stat. 56 (1996) (codified at 47 U.S.C. § 332(c)(7)). Section 332(c)(7) was the first provision of the federal Communications Act to explicitly address local land use and zoning authority over wireless facilities.

⁴ *See Rancho Palos Verdes v. Abrams*, 544 U.S. 113, 115 (2005).

⁵ H.R. Conf. Rep. No. 104-458, at 207-08 (1996), U.S. Code Cong. & Admin. News 1996, pp. 207-208 (“Conference Report”).

compromise between two competing aims—to facilitate nationally the growth of wireless telephone service and to maintain substantial local control over siting of towers.”⁶

The provisions of Section 332(c)(7)(B) set limits on the general principle of the preservation of local authority established in Section 332(c)(7)(A).⁷ The statute disallows unreasonable discrimination “among providers of functionally equivalent services”⁸ and local government actions that “prohibit or have the effect of prohibiting the provision of personal wireless services.”⁹ State or local governments may not regulate wireless facilities on the basis of the environmental effects of radio frequency emissions to the extent that a facility complies with FCC regulations on such emissions.¹⁰ State or local governments are also required to act on “any request for authorization to place, construct, or modify personal wireless service facilities within a *reasonable period of time*.”¹¹ The statute requires denials to be in writing and supported by substantial evidence¹² and provides for expedited judicial review.¹³

⁶ *Town of Amherst, N.H. v. Omnipoint Commc 'ns Enters., Inc.*, 173 F.3d 9, 13 & n.3 (1st Cir. 1999) (discussing initial House version of provision that would have charged the FCC with developing a uniform national policy for the deployment of wireless communication towers that was rejected in favor of a bill that “rejected such a blanket preemption of local land use authority”).

⁷ *See Omnipoint Commc 'ns, Inc. v. City of Huntington Beach*, 738 F.3d 192, 196 (9th Cir. 2013) (concluding that the preemptive scope of Section 332(c)(7) is that “(1) it preempts local land use authorities’ regulations if they violate the requirements of § 332(c)(7)(B)(i) and (iv); and (2) it preempts local land use authorities’ adjudicative decisions if the procedures for making such decisions do not meet the minimum requirements of § 332(c)(7)(B)(ii) and (iii).”).

⁸ 47 U.S.C. § 332(c)(7)(B)(i)(I). *See AT&T Wireless PCS, Inc. v. City Council of Va. Beach*, 155 F.3d 423, 426-28 (4th Cir. 1998) (finding no unreasonable discrimination).

⁹ 47 U.S.C. § 332(c)(7)(B)(i)(II). *See New Cingular Wireless PCS, LLC v. Fairfax Cnty. Bd. Of Supervisors*, 674 F.3d 270, 275-77 (4th Cir. 2012) (discussing what constitutes a prohibition under Section 332(c)(7)(B)(i)(II)); *APT Pittsburgh Ltd. v. Penn Twp. Butler Cnty.*, 196 F.3d 469, 480 (3d Cir. 1999).

¹⁰ 47 U.S.C. § 332(c)(7)(B)(iv). *But see Sprint Spectrum L.P. v. Mills*, 283 F.3d 404, 420-21 (2d Cir. 2002) (upholding governmental entity’s lease provision addressing radiofrequency emissions).

¹¹ 47 U.S.C. § 332(c)(7)(B)(ii) (emphasis added). *See* Section II(B), *infra*.

¹² 47 U.S.C. § 332(c)(7)(B)(iii). *See* Conference Report at p. 208 (“The phrase ‘substantial evidence contained in a written record’ is the traditional standard used for judicial review of agency actions.”). *See also MetroPCS, Inc. v. City and Cnty. of San Francisco*, 400 F.3d 715, 721-23 (9th Cir. 2005) (discussing how different Courts of Appeal have interpreted the “in writing” requirement); *Sw. Bell Mobile Sys., Inc.*, 24 F.3d at 58-59 (describing substantial evidence standard).

¹³ 47 U.S.C. § 332(c)(7)(B)(v). *See* Conference Report at p. 209 (noting that the party making the appeal may choose to seek judicial review in the appropriate Federal district court or a State court of competent jurisdiction).

B) FCC Implementation of Section 332(c)(7)

For more than a decade after its 1996 enactment, interpretation and application of Section 332(c)(7) was the province of the courts, just as Congress envisioned by including a specific court remedy in Section 332(c)(7)(B)(v). In 2008, however, CTIA – The Wireless Association filed a petition requesting the Commission to address, among other things, what constitutes a “reasonable period of time” for the purpose of Section 332(c)(7)(B)(ii).¹⁴ In response to the petition, the Commission defined what constitutes a “presumptively ‘reasonable period to time’ beyond which inaction on a personal wireless service facility siting application will be deemed a ‘failure to act’” as 90 days for collocation applications, and 150 days for applications other than collocations.¹⁵ These timeframes take into account whether applications are complete, and the local government must notify the applicant within 30 days if it finds an application to be incomplete.¹⁶

Several cities sought review of the *Shot Clock Ruling*.¹⁷ The Fifth Circuit granted the Commission deference with respect to its exercise of authority to implement Section 332(c)(7).¹⁸ The Fifth Circuit then rejected the cities’ argument that the FCC’s timeframes improperly place the burden on a state or local government, creating a “presumption *for* preemption,” finding

Courts have held that the appropriate remedy is an injunction ordering the local government to issue the permit. *See, e.g., Omnipoint Corp. v. Zoning Hearing Bd.*, 181 F.3d 403, 409-10 (3d Cir. 1999); *Cellular Tel. Co. v. Town of Oyster Bay*, 166 F.3d 490, 497 (2d Cir. 1999). In a recent rulemaking that remains ongoing, however, the Commission solicited comment on whether to adopt additional remedies. Notice of Proposed Rulemaking ¶ 162, WT 13-238, WC 11-59, RM 11688 (terminated), WT 13-32, FCC 13-122 (Sept. 26, 2013) (“*NPRM*”).

¹⁴ Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, WT Docket No. 08-165, Declaratory Ruling, 24 FCC Rcd 13994 ¶ 2 (2009) (“*Shot Clock Ruling*”), *recon. denied*, 25 FCC Rcd 11157, *aff’d sub nom., City of Arlington, Tex. v. FCC*, 668 F.3d 229 (5th Cir. 2012), *aff’d*, 133 S.Ct. 1863 (2013).

¹⁵ *Shot Clock Ruling* ¶ 19. The Commission found that defining timeframes would lend clarity to Section 332(c)(7) and “ensur[e] that the point at which a State or local authority ‘fails to act’ is not left so ambiguous that it risks depriving a wireless siting applicant of its right to redress.” *Id.* ¶ 41.

¹⁶ *Id.* ¶ 53.

¹⁷ *City of Arlington, Tex. v. FCC*, 668 F.3d 229, 236-36 (5th Cir. 2012), *aff’d*, 133 S.Ct. 1863, 1873 (2013) (considering whether “a court should apply *Chevron* to review an agency’s determination of its own jurisdiction”).

¹⁸ *City of Arlington*, 668 F.3d at 254.

instead that this was not the effect of the presumptively reasonable time periods.¹⁹ The court explained that a presumption in a civil proceeding operates according to a “bursting-bubble” theory of presumption, and “the *only* effect of a presumption is to shift the burden of producing evidence with regard to the presumed fact.”²⁰ Applying this theory to the *Shot Clock Ruling*, the court stated:

True, the wireless provider would likely be entitled to relief if it showed a state or local government’s failure to comply with the time frames and the state or local government failed to introduce evidence demonstrating that its delay was reasonable despite its failure to comply. But, if the state or local government introduced evidence demonstrating that its delay was reasonable, a court would need to weigh that evidence against the length of the government’s delay—as well as any other evidence of the unreasonable delay that the wireless provider might submit—and determine whether the state or local government’s actions were unreasonable under the circumstances.²¹

The state or local government must produce evidence challenging the presumed reasonableness of the FCC’s “shot clock” period in a particular case, and then the presumption disappears, leaving the reviewing court to judge competing evidence.

C) Application to Municipal Property

Preemption doctrines generally apply only to state regulation and not when a state owns and manages property.²² Accordingly, courts have generally ruled that Section 332(c)(7) does not apply to local government actions or decisions relating to the siting of wireless facilities on municipal property. A related issue is whether ordinances or practices that incentivize in some way wireless facility siting on municipal property (as opposed to neighboring private property) run afoul of Section 332(c)(7).

¹⁹ *Id.* at 256.

²⁰ *Id.* (emphasis in original) (internal quotation marks and citation omitted).

²¹ *Id.* at 257.

²² See *Bldg. & Constr. Trades Council v. Associated Builders & Contractors*, 507 U.S. 218, 226-27 (1993) (“When a State owns and manages property ... it must interact with private participants in the marketplace. In doing so, the State is not subject to pre-emption by the [federal statute], because pre-emption doctrines apply only to state *regulation.*” (emphasis in original)).

1. Distinguishing Between Regulatory and Proprietary Action

The Ninth Circuit recently addressed the application of Section 332(c)(7) to municipal property. In this case, T-Mobile and the City of Huntington Beach entered into lease agreements for the siting of wireless facilities in City parks.²³ The City Council then determined that notwithstanding T-Mobile's lease agreement with the City and valid land use and building permits, T-Mobile also had to obtain voter approval under a city charter measure that gave voters authority over construction on public lands.²⁴ T-Mobile sought relief in federal court, arguing that Section 332(c)(7) barred the application of the voter approval measure to the proposed project; the district court found that the measure, as applied to T-Mobile's wireless siting application, ran afoul of Section 332(c)(7), and remanded to the City, at which point the City followed Section 332(c)(7) procedures to revoke the permits.²⁵

On appeal, the Ninth Circuit reversed. It determined that the city charter measure at issue "is not the sort of local land use regulation or decision that is subject to the limitations of § 332(c)(7), but rather is a voter-enacted rule that the City may not lease or sell city-owned property for certain types of construction unless authorized by a majority of the electors."²⁶ Because the charter provision "simply provides a mechanism for the City, through voters, to decide whether to allow construction on its own land,"²⁷ it is not a form of local zoning or land use regulation to which Section 332(c)(7)(B) applies. The court held: "By its terms, the TCA applies only to local zoning and land use decisions and does not address a municipality's property rights as a landowner."²⁸ As a rule dealing with the City's management of its own property, the measure was therefore outside the scope of Section 332(c)(7) preemption.

²³ *Omnipoint Commc'ns, Inc.*, 738 F.3d at 198.

²⁴ *Id.* at 196, 198.

²⁵ *Id.* at 198-99.

²⁶ *Id.* at 199.

²⁷ *Id.*

²⁸ *Id.* at 201.

The Second Circuit has similarly found that Section 332(c)(7) does not limit proprietary actions of a municipality and concluded that Congress intended Section 332(c)(7)'s preemption to be narrow and its preservation of local governmental authority to be broad.²⁹ Examining the language of the statute, the court observed that the preservation of local governmental “authority” in Section 332(c)(7)(A) refers to “decisions,” whereas the limitations on local authority in Section 332(c)(7)(B) language refer to “regulation.”³⁰ These contrasting terms highlight that the limitations of Section 332(c)(7)(B) apply to a different, and more limited, set of local government actions than what is covered, and preserved, in Section 332(c)(7)(A). The court also noted that a municipality or an instrumentality thereof—in this case a school district—has “the same right in its proprietary capacity as [a private] property owner to refuse to lease” its property, and Section 332(c)(7) does not preempt a governmental body’s right to refuse to lease its property.³¹ Further, a public entity, just like a private party, is permitted to decline to lease its property except subject to agreed-upon conditions, and the party seeking a lease may look for other eligible sites if it does not accept those conditions.³²

It is also worth noting that compelling local governments to allow applicants access to municipal property to site wireless facilities would run afoul of the Fifth Amendment as a taking of municipal property with no mechanism for determining or awarding just compensation.³³ This is an additional argument against wireless providers that seek access, or unconditional access, to municipal property.

²⁹ *Sprint Spectrum L.P. v. Mills*, 283 F.3d at 420.

³⁰ *Id.*

³¹ *Id.* at 421. *Accord Omnipoint Commc’ns Enters., L.P. v. Twp. of Nether Providence*, 232 F.Supp.2d 430, 435 (E.D. Pa. 2002) (“[T]he Township had no duty under the TCA to negotiate or ultimately to lease portions of municipal property to Omnipoint for the purpose of installing an antenna.”).

³² *Sprint Spectrum L.P. v. Mills*, 283 F.3d at 421 (“We see no indication that Congress meant the TCA to apply any different set of principles to a telecommunications company’s negotiated agreement with a public property owner.”).

³³ See *Ark. Game & Fish Comm’n v. United States*, 133 S.Ct. 511, 518 (2012); *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982); *Gulf Power Co. v. United States*, 187 F.3d 1324, 1328-29 (11th Cir. 1999). The law is clear that local governments, no less than private landowners, are entitled to the protection of the Takings Clause of the Fifth Amendment. See, e.g., *United States v. 50 Acres of Land*, 469 U.S. 24, 31 & n.15 (1984).

2. Municipal Property Siting “Preferences”

Some wireless providers have expressed concern over municipal ordinances or practices that create a so-called “preference” for siting on municipal property rather than private property and have questioned whether such ordinances or practices rise to the level of unreasonable discrimination prohibited by Section 332(c)(7)(B)(i)(I).³⁴ These preferences may arise in at least two ways. First, local land use and zoning ordinances may not apply, or apply to a lesser extent, to municipal property, creating a natural incentive to site there.³⁵ Second, the wireless industry has alleged that some local governments may have ordinances that more directly favor siting facilities on municipal property.

At the wireless industry’s behest, the issue of whether so-called “preferences” for siting on municipal property violate the anti-discrimination provision of Section 332(c)(7)(B)(i)(I) has been raised in the pending FCC rulemaking discussed in Section III(B) below. Local governments have responded in the rulemaking, arguing that industry’s municipal “preference” discrimination argument is wrong as a matter of policy and law.

As a practical matter, allowing wireless facilities to be sited on municipal property in areas (such as residential zones) where they are not allowed on private property promotes the deployment of wireless facilities. For example, in many municipalities, wireless towers are generally not permitted in areas zoned residential. Fire or police stations in these residential areas, which already typically contain public safety wireless facilities, may be the only eligible property on which wireless facilities are permitted. If this municipal property had to be treated the same as the surrounding residential properties in the area, then either no wireless deployment would be permitted in the area (including the fire or police station), or every home in the area would become a potential site for a wireless tower. The absurdity of this result reveals the fallacy of industry’s position and makes clear the positive effects of encouraging facilities to be sited on municipal property.

³⁴ See, e.g., Comments of PCIA and DAS Forum at 43-44, WC Docket No. 11-59 (filed July 18, 2011).

³⁵ Local land use law is typically directed at placing limits on private property owners’ use of their property. The control and use of public property, in contrast, is subject to direct public oversight by voters—who essentially own public property indirectly through their municipal government.

Moreover, legislative history and subsequent case law interpreting Section 332(c)(7) do not support the argument that a preference for siting on municipal property would be unreasonable discrimination. The Conference Report used “functionally equivalent services” to refer only to personal wireless service providers that directly compete against one another.³⁶ A preference for siting on municipal property, as long as it is applied equally to all wireless providers, is thus not even “discrimination,” much less “unreasonable discrimination,” within the meaning of Section 332(c)(7)(B)(i)(I).³⁷

Further, the Conference Report sets forth Congress’ intent that local governments must have “the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services.”³⁸ As an example, the conferees stated that they did “not intend that if a State or local government grants a permit in a commercial district, it must also grant a permit for a competitor’s 50-foot tower in a residential district.”³⁹ This recognizes the legitimate goals of zoning and that a local government can distinguish between types of property.⁴⁰

Put simply, Section 332(c)(7)(B)(i)(I) prohibits unreasonable discrimination among wireless providers. It does *not* prohibit discrimination among the different kinds of property on which a wireless provider may seek to place its facilities. A provider that challenges the application of a municipal preference cannot show that it has been “treated differently from other providers whose facilities are *similarly situated* in terms of the *structure, placement or*

³⁶ Conference Report at p. 208.

³⁷ *But see New Cingular Wireless PCS, LLC v. City of W. Haven, Conn.*, No. 3-11-cv-1967, 2013 U.S. Dist. LEXIS 95321 at * 17 (D. Conn. July 9, 2013) (finding that although new zoning regulations apply equally to all carriers, they have the effect of discriminating in favor of wireless providers that have existing facilities and against providers that do not).

³⁸ Conference Report at p. 208.

³⁹ *Id.*

⁴⁰ *See, e.g., T-Mobile Ne. v. Fairfax County Bd. Of Supervisors*, 672 F.3d 259, 272 (4th Cir. 2012) (finding no unreasonable discrimination where local government’s denial was based on “legitimate, traditional zoning principles” and facilities that had been approved for other providers “can be distinguished on several grounds”).

cumulative impact as the facilities in question.”⁴¹ A local government may distinguish among different kinds of property without being unreasonably discriminatory.⁴² A municipality’s decision to encourage wireless siting on municipal property is therefore not unreasonable discrimination within the meaning of Section 332(c)(7)(B)(i)(I).

As mentioned above, however, the Commission is currently considering this issue in a Notice of Proposed Rulemaking issued September 26, 2013 (“*NPRM*”).⁴³ The *NPRM* requested comment on whether “ordinances establishing preferences for the placement of wireless facilities on municipal property are unreasonably discriminatory under Section 332(c)(7).”⁴⁴ Initial industry comments advocated a “deployment at all costs” position where anything that makes siting on municipal property more attractive is permissible, but to the extent that any such preference makes siting on private property less attractive, a municipal preference is an impermissible impediment.⁴⁵ Local governments argued that having different processes for siting on municipal property versus private property, applying equally to all functionally equivalent providers, is not “unreasonable discrimination.”⁴⁶ To the extent a municipal preference might raise an issue, commenters urged the Commission that a rule was unnecessary due to the fact-specific inquiry that would be necessary in those instances.⁴⁷

⁴¹ *MetroPCS, Inc.*, 400 F.3d at 727 (internal quotation marks omitted) (emphasis in original). *See also Omnipoint Commc’n Enters., L.P. v. Zoning Hearing Bd. of Easttown Twp.*, 331 F.3d 386, 395 (3d Cir. 2003) (stating that plaintiff must first show that the relevant providers are functionally equivalent and must then show that the government body unreasonably discriminated).

⁴² *See, e.g., id.; Sprint Spectrum L.P. v. Willoth*, 176 F.3d 630, 639 (2d Cir. 1999) (“[L]ocal governments may reasonably take the location of the telecommunications tower into consideration when deciding whether: (1) to require a more probing inquiry, and (2) to approve an application for construction of wireless telecommunications facilities, even though this may result in discrimination between providers of functionally equivalent services.”); *Sprint Spectrum L.P. v. Bd. of Zoning Appeals of Brookhaven*, 244 F.Supp.2d 108, 117 (E.D.N.Y. 2003).

⁴³ Notice of Proposed Rulemaking, WT 13-238, WC 11-59, RM 11688 (terminated), WT 13-32, FCC 13-122 (Sept. 26, 2013) (“*NPRM*”).

⁴⁴ *NPRM* ¶ 160.

⁴⁵ Comments of PCIA – The Wireless Infrastructure Ass’n and the HetNet Forum at 5 n.21, WT Docket No. 13-238 (filed Feb. 3, 2014).

⁴⁶ Comments of Fairfax County, Virginia at 26, WT Docket No. 13-238 (filed Feb. 3, 2014).

⁴⁷ *See, e.g.,* Comments of the City of Alexandria, Virginia *et al.* at 57, WT Docket No. 13-238 (filed Feb. 3, 2014); Reply Comments of the City of San Antonio, Texas at 25, WT Docket No. 13-238 (filed March 5, 2014).

While we believe local governments have the better of the arguments before the FCC, this does not necessarily mean they will prevail on this issue. The *NPRM* therefore warrants local governments' attention and continued participation.

III. SECTION 6409(a)

A) *The Spectrum Act*

The Spectrum Act was enacted as part of the Middle Class Tax Relief and Job Creation Act of 2012. The Spectrum Act, generally, was intended to “advance wireless broadband service” for public safety and commercial purposes and provided for the creation of a broadband communications network (known as “FirstNet”) for first responders per the recommendation of the 9/11 Commission.⁴⁸ Section 6409(a) of the Spectrum Act provides, in pertinent part, that “a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.”⁴⁹

Section 6409(a) applied to all local governments upon its enactment in 2012. However, there has been little precedent construing Section 6409(a) to date, and the ambiguity of the statute's language has resulted in differing interpretation by industry and local governments. For example, the statute does not define what constitutes a “substantial[] change.” It is unclear exactly what Section 6409(a) requires, or if it is even constitutional.⁵⁰ One district court treated Section 6409(a) as “further evidence of a clear congressional policy demanding the prompt

⁴⁸ H.R. Rep. 112-399 at 136 (2012), U.S. Code Cong. & Admin. News 2012, p. 220.

⁴⁹ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6409(a), 126 Stat. 156 (2012) (“Spectrum Act”) (codified at 47 U.S.C. § 1445(a)).

⁵⁰ A federal law that compels a state or local government to approve an application or take other specific action may impermissibly commandeer state and local government in violation of the Tenth Amendment. *See Nat'l Fed'n of Indep. Bus. v. Sebelius*, 132 S.Ct. 2566, 2602 (2012); *Printz v. United States*, 521 U.S. 898, 933 (1997).

removal of locally imposed, unreasonably discriminatory obstacles to modifications of existing facilities that would further the rapid deployment of wireless technology[.]”⁵¹

B) Rulemaking to Implement Section 6409(a)

In the September 26, 2013, *NPRM*, the Commission issued multiple proposals to interpret and implement Section 6409(a).⁵² As an initial note, local governments and industry disagree on the need for a rulemaking to implement Section 6409(a) at this point. The FCC tentatively found that it would serve the public interest to establish “rules clarifying the requirements of Section 6409(a) to ensure that the benefits of a streamlined review process for collocations and other minor facility modifications are not unnecessarily delayed.”⁵³

The *NPRM* proposes to clarify and implement Section 6409 in a variety of ways. Recognizing that the scope of Section 6409(a) depends on what its terms mean, the *NPRM* seeks comment on, among other things, how to interpret the terms “transmission equipment,” “existing wireless tower or base station,” “substantially change the physical dimensions,” and “collocation” as they apply to an “eligible facilities request.”⁵⁴ If these terms are defined broadly, that would greatly extend the preemptive reach of Section 6409(a).

The scope of Section 6409(a) will also affect whether and how it applies to different sorts of property. In particular, wireless industry commenters in the proceeding argue that Section 6409(a) should apply to access to utility or light poles or to municipal rights-of-way (“ROW”). Utility and light poles are often municipally owned, and local ROW is almost always public property. Industry argues that ROW and poles in the ROW are desirable locations to deploy distributed antenna systems (“DAS”) and small cell facilities. This leads to the question of whether Section 6409(a) applies to wireless providers’ requests for access to municipal property.

⁵¹ *New Cingular Wireless PCS*, 2013 U.S. Dist. LEXIS 95321 at * 27.

⁵² *See note 43, supra*. Opening comments were due February 3, 2014, and reply comments were due March 5, 2014.

⁵³ *NPRM* ¶ 95.

⁵⁴ *Id.* ¶ 102.

The Commission's *NPRM* proposes to interpret Section 6409(a) to apply only to state and local governments acting as land use regulators and *not* as property owners.⁵⁵ This is in accordance with the suggestion of the FCC's Intergovernmental Advisory Committee ("IAC").⁵⁶ This interpretation would be consistent with court decisions holding that Section 332(c)(7) does not apply to a municipality's decisions as a property owner rather than as a zoning authority,⁵⁷ as well as the broader principle that "pre-emption doctrines apply only to state *regulation*."⁵⁸

This market participant doctrine is well-established and distinguishes between actions that a municipality takes as a regulator and actions it takes as a market participant.⁵⁹ In the case of Section 6409(a), there is no indication that Congress intended to impose restrictions on a state or local government managing its own property that are not imposed on analogous private conduct.⁶⁰ In examining a municipal action to determine if it is proprietary rather than an attempt to regulate, the Fifth Circuit focused on two questions:

First, does the challenged action essentially reflect the entity's own interest in its efficient procurement of needed goods and services, as measured by comparison with the typical behavior of private parties in similar circumstance? Second, does the narrow scope of

⁵⁵ *Id.* ¶ 129.

⁵⁶ Intergovernmental Advisory Committee to the FCC: Advisory Recommendation Number 2013-9, "Response to Wireless Telecommunications Bureau's Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012" at 3-4, dated July 31, 2013, available at <http://transition.fcc.gov/statelocal/recommendation2013-09.pdf>.

⁵⁷ *See, e.g., Omnipoint Commc'ns, Inc.*, 738 F.3d at 200 (holding that a decision whether or not to allow construction on a municipality's own land "does not regulate or impose generally applicable rules on the placement, construction, and modification of personal wireless service facilities ... and so the substantive limitations imposed by [Sections 332(c)(7)(B)(i) and (iv)] are inapplicable" (quotation marks omitted)).

⁵⁸ *Bldg. & Constr. Trades Council*, 507 U.S. at 227 (emphasis in original).

⁵⁹ *See Engine Mfrs. Ass'n v. S. Coast Air Quality Mgmt. Dist.*, 498 F.3d 1031, 1040-42 (9th Cir. 2007) (discussing market participant doctrine and its application to proprietary action by states' political subdivisions). *See also Cardinal Towing & Auto Repair v. City of Bedford, Tex.*, 180 F.3d 686, 693 (5th Cir. 1999) ("Courts have similarly shielded contract specifications from preemption when they applied to a single discreet contract and were designed to insure efficient performance rather than advance abstract policy goals.").

⁶⁰ *See Engine Mfrs. Ass'n*, 498 F.3d at 1041 ("In the absence of any express or implied indication by Congress that a State may not manage its own property when it pursues its purely proprietary interests, and where analogous private conduct would be permitted, this Court will not infer such a restriction." (quoting *Bldg. & Constr. Trades Council*, 507 U.S. at 231-32)).

the challenged action defeat an inference that its primary goal was to encourage a general policy rather than address a specific proprietary problem?⁶¹

Local government leases of municipal property for wireless facility siting fall squarely within the first question.⁶²

Several municipal commenters in the *NPRM* discussed the practical, and inappropriate, consequences if Section 6409(a) were to apply to wireless providers' requests to locate their facilities on municipal property. Several water districts described the control they must exercise over their facilities for safety, operational, and other reasons, stressing that they can only allow wireless facilities to be placed at a location on a case-by-case basis, which would be defeated by an FCC rule requiring mandatory collocation.⁶³ Another water district similarly described the efforts it undertakes to strictly control and secure its facilities that would be incompatible with mandatory collocation under Section 6409(a).⁶⁴

In addition to highlighting the distinction between regulatory actions and proprietary actions, local governments commenting on the *NPRM* argued that construing Section 6409(a) to apply to municipal property—essentially requiring local governments to grant access to municipal property—would be a taking within the meaning of the Fifth Amendment.⁶⁵ By restricting what sorts of activity a local government may allow or prohibit on its property, Section 6409(a) would rise to the level of a taking, and lacking a provision for determining or awarding just compensation, would be unconstitutional.

⁶¹ *Cardinal Towing & Auto Repair*, 180 F.3d at 693.

⁶² See *Chamber of Commerce of U.S. v. Lockyer*, 463 F.3d 1076, 1084 (9th Cir. 2006), *rev'd sub nom on other grounds Chamber of Commerce of U.S. v. Brown*, 554 U.S. 60 (2008) (“Each question constitutes a separate method of determining whether the state action at issue actually constitutes regulation, and a state need not satisfy both questions to be deemed to act as a market participant.”).

⁶³ Comments of the Valley Center Municipal Water District at 4, WT Docket No. 13-238 (filed Feb. 3, 2014); Comments of the Sweetwater Authority at 4, WT Docket No. 13-238 (filed Feb. 3, 2014).

⁶⁴ Comments of the Padre Dam Municipal Water District at 2-3, WT Docket No. 13-238 (filed Feb. 3, 2014).

⁶⁵ Comments of the City of San Antonio, Texas at 8, in WT Docket No. 13-238 (filed Feb. 3, 2014); Comments of the City of Eugene, Oregon at 6, in WT Docket No. 13-238 (filed Feb. 3, 2014).

Industry commenters largely agreed with the IAC's recommendation that Section 6409(a) does not apply to municipalities acting as property owners. However, several wireless industry commenters sought to distinguish between the ROW and other public property on the ground that the ROW is held in trust for the public rather than in a proprietary capacity.⁶⁶ These arguments are vulnerable to rebuttal on state property law grounds.

But the issue of whether Section 6409(a) can, or should, be applied to municipal property—and especially to ROW access—remains open in the pending Commission *NPRM* proceeding. Local governments would be well-advised both to monitor and participate in that proceeding.

IV. CONCLUSION

Properly read, neither Section 332(c)(7) nor Section 6409(a) evidences any congressional intent to restrict the decisions that local governments make regarding the siting of wireless facilities on public property. The FCC, however, is considering these issues in a pending rulemaking. Although many local governments and governmental entities have argued in that proceeding against any attempt at applying these federal wireless siting provisions to municipal property, local government lawyers should be alert to the issue and keep a sharp eye on Section 332(c)(7) and Section 6409(a) case law and the FCC's pending *NPRM*.

⁶⁶ Reply Comments of PCIA – The Wireless Infrastructure Ass'n and the HetNet Forum at 22, in WT Docket No. 13-238 (filed March 5, 2014); Reply Comments of T-Mobile USA, Inc. at 20, in WT Docket No. 13-238 (filed March 5, 2014).

V. APPENDIX

A) *Text of Section 332(c)(7)*

Sec. 332. Mobile Services.⁶⁷

...

(7) Preservation of local zoning authority

(A) General authority

Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

(B) Limitations

(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof—

(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

(iii) Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this

⁶⁷ Telecommunications Act of 1996, Pub. L. No. 104-104, § 704(a), 110 Stat. 56 (1996) (codified at 47 U.S.C. § 332(c)(7)).

subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions

For purposes of this paragraph—

(i) the term “personal wireless services” means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term “personal wireless service facilities” means facilities for the provision of personal wireless services; and

(iii) the term “unlicensed wireless service” means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) of this title).

B) Text of Section 6409(a)

Sec. 6409. Wireless Facilities Deployment.⁶⁸

(a) Facility modifications.--

(1) In General.-- Notwithstanding section 704 of the Telecommunications Act of 1996 (Public Law 104–104) or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station.

(2) Eligible Facilities Request.-- For purposes of this subsection, the term “eligible facilities request” means any request for modification of an existing wireless tower or base station that involves—

(A) collocation of new transmission equipment;

(B) removal of transmission equipment; or

(C) replacement of transmission equipment.

⁶⁸ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6409(a), 126 Stat. 156 (2012) (codified at 47 U.S.C. § 1445(a)).

(3) Applicability of Environmental Laws.-- Nothing in paragraph (1) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969.



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

FEB - 7 2014



In Reply Refer To: (ER 14/0001) (ER 14/0004).

Mr. Eli Veenendaal
National Telecommunications and Information
Administration
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Dear Mr. Veenendaal:

The Department of the Interior (Department) has reviewed the above referenced proposal and submits the following comments and attachment for consideration. Because the First Responder Network Authority (FirstNet) is a newly created entity, we commend the U.S. Department of Commerce for its timely proposals for NEPA implementing procedures.

The Department believes that some of the proposed procedures are not consistent with Executive Order 13186 Responsibilities of Federal Agencies to Protect Migratory Birds, which specifically requires federal agencies to develop and use principles, standards, and practices that will lessen the amount of unintentional take reasonably attributed to agency actions. The Department, through the Fish and Wildlife Service (FWS), finds that the proposals lack provisions necessary to conserve migratory bird resources, including eagles. The proposals also do not reflect current information regarding the effects of communication towers to birds. Our comments are intended to further clarify specific issues and address provisions in the proposals.

The Department recommends revisions to the proposed procedures to better reflect the impacts to resources under our jurisdiction from communication towers. The placement and operation of communication towers, including un-guyed, unlit, monopole or lattice-designed structures, impact protected migratory birds in two significant ways. The first is by injury, crippling loss, and death from collisions with towers and their supporting guy-wire infrastructure, where present. The second significant issue associated with communication towers involves impacts from non-ionizing electromagnetic radiation emitted by them (See Attachment).

In addition to the 147 Birds of Conservation Concern (BCC) species, the FWS has listed an additional 92 species as endangered or threatened under the Endangered Species Act. Together with the bald and golden eagle, this represents 241 species of birds whose populations are in trouble or otherwise merit special protection, according to the varying criteria of these lists. The Department suggests that FirstNet consider preparing a programmatic environmental impact statement (see attachment) to determine and address cumulative impacts from authorizing FirstNet projects on those 241 species for which the incremental impact of tower mortality, when

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added to other past, present, and reasonably foreseeable future actions, is most likely significant, given their overall imperiled status. Notwithstanding the proposed implementing procedures, a programmatic NEPA document might be the most effective and efficient method for establishing best management practices for individual projects, reducing the burden to individual applicants, and addressing cumulative impacts.

Categorical Exclusions

The Department has identified 13 of the proposed categorical exclusions (A-6, A-7, A-8, A-9, A-10, A-11, A-12, A-13, A-14 A-15, A-16, A-17, and A-19) as having the potential to significantly affect wildlife and the biological environment. Given this potential, we want to underscore the importance of our comments on FirstNet's procedural guidance under Environmental Review and Consultation Requirements for NEPA Reviews and its list of extraordinary circumstances in Appendix D.

Environmental Review and Consultation Requirements for NEPA Reviews

To ensure there are no potentially significant impacts on birds from projects that may otherwise be categorically excluded, the Department recommends including the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act to the list of requirements in this section.

Extraordinary Circumstances

To avoid potentially significant impacts on birds from projects that may otherwise be categorically excluded, the Department recommends including species covered under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act to the list of environmentally sensitive resources. Additionally, adding important resources to migratory birds such as sites in the Western Hemisphere Shorebird Reserve Network and Audubon Important Bird Areas to the paragraph on areas having special designation or recognition would help ensure their consideration when contemplating use of a categorical exclusion.

Developing the Purpose and Need

The Department recommends inclusion of language that would ensure consideration of all other authorities to which NEPA is supplemental as opposed to simply the FirstNet mission. As currently written, the procedures are limited to ensuring the purpose and need considers the FirstNet mission. If strictly applied, this approach would severely limit the range of reasonable alternatives, and likely preclude consideration of more environmentally benign locations or construction practices.

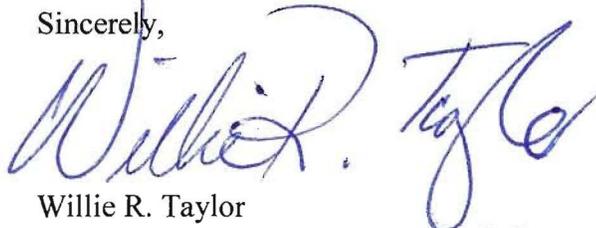
Environmental Review Process, Apply NEPA Early in the Process, Where Action is by Non-Federal Entity

The Department recommends that FirstNet be required to coordinate with federal agencies having jurisdiction by law or special expertise on construction and lighting of its network of towers.

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Thank you for the opportunity to comment on the draft document. If you have any questions concerning the comments, please contact Diana Whittington, NEPA Migratory Bird lead, at (703) 358-2010. If you have any questions regarding Departmental NEPA procedures, contact Lisa Treichel, Office of Environmental Policy and Compliance at (202) 208-7116.

Sincerely,

A handwritten signature in blue ink, appearing to read "Willie R. Taylor". The signature is fluid and cursive, with the first name "Willie" being the most prominent.

Willie R. Taylor
Director, Office of Environmental Policy
and Compliance

Enclosure

Literature Cited

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Enclosure A

Background

The placement and operation of communication towers, including un-guyed, unlit, monopole or lattice-designed structures, impact protected migratory birds in two significant ways.

The first is by injury, crippling loss, and death from collisions with towers and their supporting guy-wire infrastructure, where present. Mass mortality events tend to occur during periods of peak spring and fall songbird migration when inclement weather events coincide with migration, and frequently where lights (either on the towers and/or on adjacent outbuildings) are also present. This situation has been well documented in the U.S. since 1948 in the published literature (Aronoff 1949, see Manville 2007a for a critique). The tallest communication towers tend to be the most problematic (Gehring *et al.* 2011). However, mid-range (~400-ft) towers as proposed by the First Responder Network Authority (FirstNet, a newly created entity under the Department of Commerce) can also significantly impact protected migratory birds, as can un-guyed and unlit lattice and monopole towers (Gehring *et al.* 2009, Manville 2007a, 2009, 2013a). Mass mortalities (more than several hundred birds per night) at un-guyed, unlit monopole and lattice towers were documented in fall 2005 and 2011 in the Northeast and North Central U.S. (*e.g.*, Manville 2007a). It has been argued that communication towers including “short” towers do not impact migratory birds, including at the population level (*e.g.*, Arnold and Zink 2011), but recent findings have contradicted that assertion (Manville 2007a, 2013a, Longcore *et al.* 2012, 2013).

The second significant issue associated with communication towers involves impacts from non-ionizing electromagnetic radiation emitted by these structures. Radiation studies at cellular communication towers were begun circa 2000 in Europe and continue today on wild nesting birds. Study results have documented nest and site abandonment, plumage deterioration, locomotion problems, reduced survivorship, and death (*e.g.*, Balmori 2005, Balmori and Hallberg 2007, and Everaert and Bauwens 2007). Nesting migratory birds and their offspring have apparently been affected by the radiation from cellular phone towers in the 900 and 1800 MHz frequency ranges – 915 MHz is the standard cellular phone frequency used in the United States. However, the electromagnetic radiation standards used by the Federal Communications Commission (FCC) continue to be based on thermal heating, a criterion now nearly 30 years out of date and inapplicable today. This is primarily due to the lower levels of radiation output from microwave-powered communication devices such as cellular telephones and other sources of point-to-point communications; levels typically lower than from microwave ovens. The problem, however, appears to focus on very low levels of non-ionizing electromagnetic radiation. For example, in laboratory studies, T. Litovitz (personal communication) and DiCarlo *et al.* (2002) raised concerns about impacts of low-level, non-thermal electromagnetic radiation from the standard 915 MHz cell phone frequency on domestic chicken embryos – with some lethal results (Manville 2009, 2013a). Radiation at extremely low levels (0.0001 the level emitted by the average digital cellular telephone) caused heart attacks and the deaths of some chicken embryos subjected to hypoxic conditions in the laboratory while controls subjected to hypoxia were unaffected (DiCarlo *et al.* 2002). To date, no independent, third-party field studies have been conducted in North America on impacts of tower electromagnetic radiation on migratory birds. With the European field and U.S. laboratory evidence already available,

independent, third-party peer-reviewed studies need to be conducted in the U.S. to begin examining the effects from radiation on migratory birds and other trust species.

Discussion

Collision Deaths and Categorical Exclusions

Attempts to estimate bird-collision mortality at communication towers in the U.S. resulted in figures of 4-5 million bird deaths per year (Manville 2005, 2009). A meta-review of the published literature now suggests, based on statistically determined parameters, that mortality may be 6.8 million birds per year in Canada and the U.S.; the vast majority in the United States (Longcore *et al.* 2012). Up to 350 species of birds have been killed at communication towers (Manville 2007a, 2009). The Service's Division of Migratory Bird Management has updated its voluntary, 2000 communication tower guidelines to reflect some of the more recent research findings (Manville 2013b). However, the level of estimated mortality alone suggests at a minimum that FirstNet prepare an environmental assessment to estimate and assess the cumulative effects of tower mortality to protected migratory birds.

A second meta-review of the published mortality data from scientific studies conducted in the U.S. and Canada (Longcore *et al.* 2013) strongly correlates population effects to at least 13 species of Birds of Conservation Concern (BCC, USFWS 2008). These are mortalities to BCC species based solely on documented collisions with communication towers in the U.S. and Canada, ranging from estimated annual levels of mortality of 1 to 9% of their estimated total population. Among these where mortality at communication towers was estimated at over 2% annually are the Yellow Rail, Swainson's Warbler, Pied-billed Grebe, Bay-breasted Warbler, Golden-winged Warbler, Prairie Warbler, and Ovenbird. Longcore *et al.* (2013) emphasized that avian mortality associated with anthropogenic sources is almost always reported in the aggregate, *i.e.*, "number of birds killed," which cannot detect species-level effects necessary to make effective and meaningful conservation assessments, including determining cumulative effects. These new findings strongly suggest the need for at least an environmental assessment by FirstNet, or more likely, an environmental impact statement.

Radiation Impacts and Categorical Exclusions

There is a growing level of anecdotal evidence linking effects of non-thermal, non-ionizing electromagnetic radiation from communication towers on nesting and roosting wild birds and other wildlife in the U.S. Independent, third-party studies have yet to be conducted in the U.S. or Canada, although a peer-reviewed research protocol developed for the U.S. Forest Service by the Service's Division of Migratory Bird Management is available to study both collision and radiation impacts (Manville 2002).

As previously mentioned, Balmori (2005) found strong negative correlations between levels of tower-emitted microwave radiation and bird breeding, nesting, and roosting in the vicinity of electromagnetic fields in Spain. He documented nest and site abandonment, plumage deterioration, locomotion problems, reduced survivorship, and death in House Sparrows, White Storks, Rock Doves, Magpies, Collared Doves, and other species. Though these species had historically been documented to roost and nest in these areas, Balmori (2005) did not observe these symptoms prior to construction and operation of the cellular phone towers. Balmori and Hallberg (2007) and Everaert and Bauwens (2007) found similar strong negative correlations

among male House Sparrows. Under laboratory conditions, DiCarlo *et al.* (2002) raised troubling concerns about impacts of low-level, non-thermal electromagnetic radiation from the standard 915 MHz cell phone frequency on domestic chicken embryos – with some lethal results (Manville 2009). Given the findings of the studies mentioned above, field studies should be conducted in North America to validate potential impacts of communication tower radiation – both direct and indirect – to migratory birds and other trust wildlife species.

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