**From:** **Judy Ohmer** ohmer.alaska@gmail.com
**Subject:**
**Date:** June 22, 2026 at 10:06 AM
**To:**

TO: Petersburg Borough Assemblymen
FR: Judy Ohmer
DT: June 21, 2026
RE: Reports as Requested Related to Telecom Towers and their Setbacks

Much has been learned about the dangers and drawbacks since the already-existing towers in our town have been erected. Just because those towers have been very close to schools, childcare centers, assisted-living facilities...does not set a precedent for continuing to do the same. Three wrongs don't make a right.

Since October of 2025, in every public meeting, testimony has been about the placement of the proposed telecom towers. It's not been about no towers. The 1,500 setback required in many communities is neither a random number nor designed to deny tower construction. It's a safety issue. And in all that time, the intent and the hope has been to work WITH the Assembly on creating what's best for Petersburg, its people, and the future of our community.

The attachment outlines some of the history and what's currently known.

# Telecommunication Tower Setbacks

Research Briefing & Scientific Justification for a 1,500-Foot Setback Ordinance

Prepared June 2026 | Health · Safety · Aesthetic Grounds | Current 2025 Research Included

## PART 1 — WHY 1,500 FEET: THE SCIENTIFIC AND GOVERNMENTAL BASIS

The 1,500-foot setback is not arbitrary or precautionary in the abstract — it is the specific distance recommended by a peer-reviewed journal (Environmental Research, 2024), enacted by Bar Harbor, Maine, endorsed by the New Hampshire State 5G Commission, adopted by the Palo Alto Unified School District, and supported by multiple independent studies from four continents. The Assembly is not being asked to act on theory. It is being asked to act on an accumulating record.

### The Direct Scientific Basis for 1,500 Feet

*Levitt & Lai, Environmental Reviews (2010): 'As a general guideline, cell base stations should not be located less than 1,500 feet from the population, and at a height of about 150 feet.' This is the foundational peer-reviewed recommendation for the specific distance your Assembly is being asked to adopt.*

★ ***2025*** *Pearce, Environmental Research (2024): Advises base stations be placed no closer than 500 meters (1,640 feet) from the population to minimize public RF exposure and decrease future municipal liability. States there is 'a large and growing body of evidence that human exposure to RFR from cellular phone base stations causes negative health effects.' This is the most current peer-reviewed scientific recommendation for the 1,500-foot distance.*

### New Hampshire State 5G Commission (2020)

*The New Hampshire Commission on 5G and Wireless Technology — a state government body led by Dr. Kent Chamberlin, Chair Emeritus of Electrical and Computer Engineering at the University of New Hampshire — recommended a minimum setback of at least 500 meters (approximately 1,640 feet) from homes, schools, and workplaces. The Commission's final report was submitted to the Governor and Legislature in November 2020. The Commission also referred to the FCC as a 'captured agency with undue industry influence,' citing the Harvard Press book Captured Agency.*

### Palo Alto Unified School District (2018–19)

*Resolution No. 2018-19.19 supports the City of Palo Alto immediately establishing local municipal zoning setback rules of 1,500 feet or more from an operating wireless transmitter and a school site, to protect individuals — especially children — from the potential negative effects associated with radiation exposure.*

### Enacted Ordinance Precedents — 1,500 Feet Is Not Unprecedented

| Jurisdiction | Setback — 1,500 ft or Equivalent |
|---|---|
| Bar Harbor, Maine | 1,500 ft from schools — ENACTED |
| Palo Alto, CA (School Board) | 1,500 ft from wireless transmitter and school site — ENACTED |
| Encinitas, California | 1,500 ft between antennas — ENACTED |
| New Hampshire 5G Commission | 1,500–1,640 ft recommended — State Government Report |
| Bedford, New Hampshire | 750 ft from nearest residentially-zoned property — ENACTED |
| Calabasas, California | 1,000 ft from homes and schools — ENACTED |
| Scarsdale, New York | 500 ft from homes, schools, parks, houses of worship — ENACTED |
| Vancouver School Board | 1,000 ft from school property — ENACTED |
| Davis, California | 500 ft from residential zone and schools — ENACTED |

## PART 2 — HEALTH JUSTIFICATION: CURRENT AND ESTABLISHED RESEARCH

The Assembly has asked for scientific evidence. Below is both the established peer-reviewed record and the most current 2024–2025 studies, marked with ★. All effects documented below occurred at

radiation levels within or below current FCC limits — meaning the existing federal standard does not protect against these documented harms.

## ★ Most Current Research — 2024 and 2025

★ **2025** ★ *Sailo et al., Electromagnetic Biology and Medicine (June 2025, India): Residents living within 50 meters of cell towers reported significantly more adverse health symptoms — including anxiety, memory problems, inflammatory issues, and joint and nerve pain — all at radiation levels BELOW current FCC safety limits. A companion study (2025) found residents within 300 meters reported more allergies, infections, and cognitive issues than those more than 400 meters away. Study authors conclude the evidence justifies changes to policy. (Environmental Health News, August 2025)*

★ **2025** ★ *Gulati et al., Germany (2024): Found significantly higher rates of chromosomal aberrations — key indicators of genetic damage and a biologically plausible pathway to increased cancer risk — in residents living near cell towers. This is the most recent direct biological evidence linking tower proximity to cancer-related cellular changes. (Environmental Health Sciences, 2025)*

★ **2025** ★ *Hardell and Nilsson, Sweden (2024): Documented microwave syndrome symptoms — neurological symptoms, tinnitus, fatigue, insomnia, emotional distress, skin disorders, and blood pressure variability — in people newly exposed to 5G antennas. Symptoms resolved when people left the exposure area. (Environmental Health Sciences, 2025)*

★ **2025** ★ *Pearce, Environmental Research (2024): Peer-reviewed recommendation that base stations be placed no closer than 500 meters (1,500 feet) from the population to minimize RF exposure and decrease future liability for municipalities and carriers. States there is 'a large and growing body of evidence that human exposure to RFR from cellular phone base stations causes negative health effects.' (EHSciences.org, 2025)*

★ **2025** ★ *Lin, Frontiers in Public Health (2025): Comprehensive review of health and safety practices calls for urgently updated RF exposure policies. Published in a peer-reviewed medical journal.*

## Established Research Body — Peer-Reviewed Studies

*Balmori, Environmental Research (2022): Review of studies from 20 countries found 73.6% reported human health impacts near cell towers, including cancer. FCC exposure limits — unchanged since 1996 — do not account for long-term, continuous residential exposure. A recent analysis concluded the human exposure limit is 200 times too high to protect against cancer risk.*

*Khurana et al., International Journal of Occupational and Environmental Health (2011): Review of epidemiological studies found 8 of 10 studies reported increased adverse neurobehavioral symptoms or cancer in populations living within 500 meters of base stations. None reported exposure above accepted guidelines — suggesting current guidelines are inadequate.*

*Dode et al., Science of the Total Environment (2011): 10-year study by the Municipal Health Department and universities in Brazil found clearly elevated relative risk of cancer mortality within 500 meters. After publication, the city prosecutor sued several carriers and requested nearly half the antennas be removed. Many were dismantled.*

*Wolf and Wolf (2004, International Journal of Cancer Prevention): Among 622 residents within 350 meters of a cell tower, cancer incidence was 129 per 10,000 per year — compared to 16–31 per 10,000 among those farther away. A 300% increase in cancer was detected within 300 meters.*

*Eger et al. (2004, Germany): Residents within 400 meters had a significantly higher rate of newly diagnosed cancers and developed cancer on average 8 years earlier than those farther away. Within 5 years of tower operation, relative cancer risk tripled.*

*Falcioni et al., Environmental Research (2018): Large-scale animal study exposed rats to RF radiation at levels comparable to cell tower emissions and found elevated cancer rates — the same cancers found in the U.S. National Toxicology Program study.*

*Rodrigues et al., International Journal of Environmental Research and Public Health (2021): Found higher cancer mortality near cell towers in Brazil. Recommends deactivating towers within 500 meters of homes, workplaces, hospitals, and schools.*

## Immune System and Blood Markers: New Biological Evidence

*★ **2025** ★ Zothansiama et al. (India, 2017 — confirmed by 2025 follow-up): Residents within 80 meters of a cell tower had significantly higher micronuclei (DNA damage), increased lipid peroxidation, and reduced antioxidant capacity versus those more than 300 meters away. The 2025 companion study confirmed chronic immune stress markers, including elevated monocytes associated with cardiovascular risk and systemic inflammation. Epidemiologist Nicolas Hulscher described the monocyte finding as 'most striking.' (Children's Health Defense, March 2026)*

### A Local Example — Why This Ordinance Matters Now

*A GCI 125-foot telecommunications tower has been proposed in a local residential neighborhood at only 20 feet from the property line. While this placement may be technically legal under current zoning, it falls within every documented hazard zone identified in the research above. The closest cancer cluster studies document effects at 300–400 meters (approximately 1,000–1,300 feet). The closest symptom studies document effects at 50–80 meters. A 125-foot tower at 20 feet is not a setback — it is direct adjacency. The Assembly should be examining whether structures documented to cause harm at 300 meters should be permitted at 6 meters from a neighbor's property line, regardless of whether current zoning technically allows it. This is precisely the gap a setback ordinance exists to close.*

### International Regulatory Comparison

*Nations including Italy, Switzerland, China, and Russia have adopted RF exposure regulations 10 to 100 times stricter than the U.S., with corresponding setback requirements from residences, schools, and playgrounds. U.S. FCC limits have not been reviewed since 1996. The WHO's International Agency for Research on Cancer classified RF radiation as a Group 2B possible carcinogen in 2011. Scientists have since called for an upgrade to Group 1 (proven carcinogen). (Environmental Health Sciences; WHO IARC)*

*The American Academy of Pediatrics has called for cell tower siting that keeps children away from RF radiation exposure, citing children's developing biology as a specific vulnerability factor. Multiple California school districts — Los Angeles USD, Palo Alto USD, Temecula Valley USD — have passed resolutions banning new towers on or near school property. Portland Public Schools ended new leases for cell towers.*

## PART 3 — AESTHETIC, PROPERTY VALUE, STRUCTURAL & SAFETY IMPACTS

Property value impacts operate on multiple compounding dimensions — visual disamenity, cancer cluster stigma, structural fall zones, hazardous materials, fire risk, and an insurance exclusion landscape that transfers all financial risk to property owners and the municipality when damage occurs. Where a proposed tower sits only 20 feet from a property line — as with the proposed GCI 125-foot tower — every one of these layers applies to the adjacent property at maximum intensity, even if current zoning permits the placement.

### 3a. Aesthetic and Visibility Impact

*'Aesthetics — or rather the adverse impact on aesthetics — of externalities routinely has the largest impact on property values.' — David E. Burgoyne, ASA, SR/WA, Certified General Real Estate Appraiser, submitted to FCC on behalf of Smart Communities and Special Districts Coalition (representing 31+ million residents). Research in the Journal of Real Estate Finance and Economics found declines averaging 2.46%, rising to 9.78% for homes in direct line of sight. Realtors report reductions up to 20–30% for properties in closest proximity.*

### 3b. Cancer Cluster Documentation and Stigma Devaluation

For properties within the closest radius — under 500 meters — the cancer cluster research creates a documented category of devaluation beyond visual impact. Disclosure obligations in many states require sellers to reveal known material defects including environmental health concerns. The stigma discount is recognized in appraisal practice.

*Wolf and Wolf (2004): 300% cancer increase within 300 meters. Eger et al. (2004): cancer risk tripled within 400 meters. Dode et al. (2011): elevated cancer mortality within 500 meters. Gulati (2024): chromosomal damage markers near towers. These studies create a documented, citable body of evidence that directly suppresses market value for properties in closest proximity — and that suppression is a legitimate, established basis for municipal setback regulation.*

### 3c. Structural Hazard: Fall Zone

*The standard engineering convention is that a tower's fall zone equals its full height. A 125-foot GCI tower proposed at only 20 feet from a property line would have a fall zone of 125 feet — placing it entirely over the neighboring property and extending approximately 105 feet beyond it. Where towers can grow taller after initial permitting with little public oversight, the fall zone expands without neighboring owners' knowledge or consent. OSHA designates cell tower climbing the most hazardous occupation. (The Doan Law Firm, 2025; Environmental Health Sciences, 2025)*

### 3d. Fire Risk and Hazardous Materials

*Cell tower compounds contain diesel fuel tanks and lead-acid batteries. Documented fires include: a 125-foot tower fire at a Virginia church (2020); a 145-foot monopole fire in Memphis surrounded by apartments; fires at school athletic facilities in Ohio and California; and a 5G small cell fire in Los Angeles (2019). The NFPA recognizes five electrical hazard categories at cell sites. The International Association of Firefighters has officially opposed towers on fire stations since 2004 and secured an exemption from California SB649. (Environmental Health Trust; Wireless Estimator)*

### 3e. The Insurance Gap — Risk Transfers to the Municipality

*Major insurers, public school insurance pools, and municipal risk authorities classify EMF — including RF radiation from cell towers — as a pollutant explicitly excluded from most CGL, property, and umbrella policies. 'Bodily injury, personal injury, or property damage arising directly or indirectly out of electromagnetic radiation... this insurance does not apply.' U.S. wireless carriers have been unable to obtain insurance for long-term RF liability for over a decade. The Swiss Re Institute classifies 5G as an 'off-the-leash' risk comparable to early asbestos liability. T-Mobile's 2023 SEC filing disclosed that cell tower health lawsuits could have a 'material adverse effect' on its business — a warning it made to investors but not to the communities where it builds. (Environmental Health Trust, 2025; Swiss Re Institute; Genesis Insurance policy language)*

## PART 4 — CRITICAL LEGAL FRAMEWORK FOR A DEFENSIBLE ORDINANCE

This is the piece most advocacy posts leave out — and the most important for drafting language that will survive a legal challenge.

*The Telecommunications Act of 1996 (47 U.S.C. § 332(c)(7)) prohibits local jurisdictions from outright banning wireless facilities but expressly preserves local authority to regulate placement, construction, and modification — provided the overall regulation does not have the effect of prohibiting wireless service. A properly drafted setback ordinance with a variance process is regulation, not prohibition, and is legally defensible. (Steel in the Air, Cell Tower Zoning and Permitting, 2024)*

### Your ordinance language must include:

- Frame setbacks as **regulation**, not prohibition — courts consistently strike down ordinances that function as outright bans.
- Include a **variance process** — carriers must demonstrate no feasible alternative location exists and that strict application would prohibit service.
- Document findings in the ordinance's **Findings and Purpose section** — this is your administrative record and your legal defense.
- Cite **specific studies and government reports**. The NH Commission report is your strongest government-level citation. The Pearce 2024 peer-reviewed study directly supports the 1,500-foot distance.
- Require proof of a **significant gap in service coverage** through objective in-kind testing — drive-test data and dropped call records.
- Include **RF emissions monitoring** and conditions for permit revocation.

- Require a **sealed engineer's hazard report** (structural and electrical) before any permit — the Malibu, CA model.
- Require **hazardous materials disclosure** (diesel tanks, batteries) and a spill remediation bond.

## PART 5 — CITATION QUICK REFERENCE (★ = 2024–2025 Research)

| Source | What It Supports |
|---|---|
| ★ Sailo et al. (2025) India | Residents within 50m: significantly more mood, cognitive, inflammatory symptoms — BELOW FCC limits |
| ★ Gulati et al. (2024) Germany | Higher chromosomal aberrations (DNA damage) near towers — direct cancer risk link |
| ★ Hardell & Nilsson (2024) Sweden | Microwave syndrome symptoms in people newly exposed to 5G antennas |
| ★ Pearce (2024) Env. Research | 500m (1,500 ft) setback recommended to minimize RF exposure and decrease municipal liability |
| ★ Lin (2025) Frontiers Public Health | Urgently updated RF exposure policies needed — peer-reviewed medical journal |
| NH 5G Commission (Nov. 2020) | 1,500–1,640 ft setback — official government commission recommendation |
| Palo Alto USD Res. 2018-19.19 | School district formal support for 1,500 ft setback |
| Balmori (2022) Env. Research | 73.6% of studies from 20 countries show health impacts near towers |
| Khurana et al. (2011) | 8 of 10 epidemiological studies: adverse symptoms or cancer within 500m |
| Dode et al. (2011) | Elevated cancer mortality within 500m — 10-year study; prosecutor removed antennas |
| Wolf & Wolf (2004) | 300% cancer increase within 300m; 129 vs 16-31 per 10,000 |
| Eger et al. (2004) Germany | Cancer risk tripled within 400m; average 8 yrs earlier diagnosis |
| Navarro et al. (2003) | Dose-response symptoms; 300m minimum distance recommended |
| Falcioni et al. (2018) | Animal study: RF at cell tower levels caused elevated cancers — same as NTP study |
| Rodrigues et al. (2021) | Higher cancer mortality near towers; deactivate within 500m of homes and schools |
| Env. Science & Policy (2024) | Precautionary approach is a human rights obligation given incomplete science |
| J. Real Estate Finance & Econ. | Property value decline up to 9.78% within visibility range |
| Burgoyne Appraisal (2017) | Aesthetics = largest single property value impact factor |
| Swiss Re Institute | 5G classified "off-the-leash" high risk; asbestos liability comparison |
| Genesis Ins. / major CGL policies | EMF explicitly excluded — insurance gap transfers risk to municipality |
| Bar Harbor, ME Ordinance | Precedent: 1,500 ft enacted setback for schools |
| Malibu, CA Ordinance (2021) | Model: sealed engineer hazard report required pre-permit |

| | |
|---|---|
| WHO IARC Classification | RF radiation: Group 2B possible carcinogen; upgrade to Group 1 called for by scientists |
| Environmental Health Trust | Clearinghouse: peer-reviewed studies, ordinance models, government actions |

★ = *Research published 2024–2025, included to address Assembly request for current evidence. This briefing is for ordinance drafting and does not constitute legal advice. Consult municipal counsel when finalizing ordinance language.*

# Cell Tower Setbacks

*Real-World Cases, News Coverage & Government Actions*

*For Assembly Presentation | Compiled June 2026 | Alaska Cases Included*

*The following are documented, news-reported, and government-verified cases — not just studies. These are real communities, real people, real actions taken by elected officials, courts, and school boards across the country and in Alaska. Each one builds the case that a 1,500-foot setback is not precaution for its own sake… it is proportionate response to documented harm.*

## SECTION 1 — ALASKA CASES: THIS IS NOT JUST HAPPENING ELSEWHERE

Alaska communities are already fighting these battles. Two cases in Southeast Alaska — one resulting in a legal victory for residents — and an active dispute in the Haines Borough directly parallel the situation your Assembly now faces.

### Sitka, Alaska — Residents Win Against 120-Foot Tower (2025)

**COVERED BY:** KCAW Public Radio (Sitka), Children's Health Defense, Daily Sitka Sentinel, Petersburg Pilot. Case decided by Alaska Office of Administrative Hearings.

**WHAT HAPPENED:** Tidal Network — a broadband enterprise of the Central Council of Tlingit and Haida Indian Tribes of Alaska — applied for a variance to build a 120-foot cell tower in the Nancy Court residential neighborhood of Sitka. Sitka's zoning code limits structures to 35 feet in residential zones. The proposed tower would have stood just 145 feet from neighboring homes. Resident Hal Spackman said publicly: 'It's so close to my home, I could stand on my back porch and hit it with a rock. A 120-foot cell tower on a landslide zone behind a bunch of houses with kids? Maybe it doesn't bother us at all. Maybe it can lead to serious health effects for little children later in their lives. I don't know. When you see a bad idea, you know it.'

**COMMUNITY ORGANIZING:** Neighbors organized as 'Sitka for Safe Tech,' retained a telecommunications attorney, and were supported by Children's Health Defense's Stop 5G initiative. The planning commission unanimously denied the variance in April 2025, finding Tidal Network failed to demonstrate the tower was the least intrusive means of closing a coverage gap and failed to show there were no alternative sites.

**TIDAL NETWORK APPEALED:** When the Sitka Assembly convened to hear the appeal, four of six assembly members disclosed conflicts of interest and could not participate. The case was referred to the Alaska Office of Administrative Hearings in Anchorage.

**OUTCOME — RESIDENTS WON:** On October 1, 2025, Administrative Law Judge Max Garner issued a 22-page decision upholding the planning commission's denial. The judge found that Tidal Network had not evaluated whether a 35-foot tower could meet its needs, and that it sought a variance not because of any issue with the property itself but because it wanted to use the property 'in a manner inconsistent with the restrictions' of a residential zone. Public comment was found to be 'uniformly opposed to the variance.'

**SIGNIFICANCE:** A state administrative law judge in Alaska sided with residents over a major carrier on cell tower siting in a residential neighborhood — on this exact type of issue. Residents' attorneys afterward called for 'appropriate ordinances to protect the health and safety of residents from inappropriate cell tower placement.' That is precisely what your Assembly has the authority to enact now — before a tower goes in and litigation becomes the only remedy.

**Petersburg, Alaska — 150-Foot Towers Draw Community Opposition (2025–2026)**

**COVERED BY:** KFSK Public Radio (Petersburg), Petersburg Pilot, Chilkat Valley News. Borough Assembly meetings and work sessions, January–February 2026.

**WHAT HAPPENED:** Tidal Network obtained permits to build three 150-foot communications towers in Petersburg, Alaska. Construction began on the first tower on Mill Road in November 2025 — without prior resident notification, because borough code does not require notifying neighbors of building permits. Residents discovered the construction underway and were taken by surprise. One of the proposed towers is planned adjacent to the fire hall on Haugen Drive — construction on that tower has not yet begun. Significantly, a new hospital is being built in close proximity to that same site. The research is unambiguous about the risk of siting cell towers near medical facilities: patients are among the most vulnerable populations, and hospitals are classified as Sensitive Uses under protective setback ordinances for exactly this reason.

**COMMUNITY CONCERNS:** Petersburg school board president and real estate owner Sarah Holmgrain testified at the January 13, 2026 planning commission meeting: 'From a real estate point of view, aside from all other concerns, the tower will hamper people within that vicinity from selling their property in the future.' Resident Andy Wright described the situation as a 'systemic communications failure' — a lack of effective communication from local government about what was being permitted and where.

**OUTCOME:** The Borough Assembly and Tidal Network held work sessions in January and February 2026. Tidal Network indicated it was 'open to relocating' two of the three unbuilt towers. Petersburg Mayor Bob Lynn stated the Borough would work with Tidal Network to find alternative sites if coverage could be maintained.

**SIGNIFICANCE:** In Petersburg, towers went up before residents knew. The community had no setback ordinance to invoke. The time to pass protective language is before a permit is issued — not after construction begins.

**Haines Borough, Alaska — Assembly Actively Wrestling with Setback Rules (January 2026)**

**COVERED BY:** Chilkat Valley News, January 2026.

**WHAT HAPPENED:** The Haines Borough Assembly is deliberating proposed cell tower setback rules. Tower companies, including Atlas Tower, have warned that setbacks could violate federal regulations and lead to legal disputes — the same argument your Assembly will hear. The issue remains unresolved, with further deliberations expected.

**SIGNIFICANCE:** The legal argument carriers use against setbacks — that they violate the Telecommunications Act — has been addressed in courts nationwide. A properly drafted ordinance with a variance process is regulation, not prohibition, and is legally defensible. Haines is navigating exactly the same pressure your Assembly will face.

## SECTION 2 — THE LOCAL SITUATION: WHY THIS ORDINANCE MATTERS NOW

### A Proposed GCI 125-Foot Tower at 20 Feet from a Property Line

A GCI 125-foot telecommunications tower has been proposed in a local residential neighborhood at only 20 feet from the property line. While this placement may be technically legal under current zoning, it falls within every documented hazard zone identified in peer-reviewed research. The closest cancer cluster studies document effects at 1,000 to 1,300 feet from a tower. The closest symptom studies document effects at 160 to 260 feet. This tower

is proposed at 20 feet — closer than any safety buffer identified in the scientific literature.

A 125-foot tower at 20 feet from a property line is not a setback — it is direct adjacency. By the standard engineering convention that a tower's fall zone equals its height, this tower would have a 125-foot fall zone — placing it entirely over the neighboring property and extending approximately 105 feet beyond it. In Alaska's winter conditions, the fall zone hazard is compounded significantly. Ice accumulation on tower structures — antennas, cables, and crossbars — can break free without warning, launching ice debris at high velocity across distances well beyond the tower's base. High winds, common in our area, can carry ice fragments even farther. This is not a theoretical risk. It is a documented structural hazard that OSHA and tower safety engineers recognize as a serious danger to anyone in proximity — particularly in residential settings where children play outdoors and neighbors have no reason to expect falling ice from a structure 20 feet away.

The Assembly should be examining whether structures documented to cause harm at 1,000 feet should be permitted at 20 feet from a neighbor's property line, regardless of whether current zoning technically allows it. This is precisely the gap a setback ordinance exists to close.

### Tidal Network: Proposed Tower Near a Childcare Center, Assisted Living Facility, and Hospital Under Construction

Tidal Network has proposed siting a tower in proximity to three of the most vulnerable-use facilities identified in the scientific literature and in our own draft ordinance's definition of 'Sensitive Uses' — a childcare center, an assisted living facility, and a hospital currently under construction. The research is unambiguous about who bears the greatest risk from RF radiation proximity: children, whose developing cells are more vulnerable to DNA damage; elderly residents in assisted living, whose immune systems are compromised; and patients in medical facilities, who are already in vulnerable health states. These are precisely the populations the 1,500-foot setback standard is designed to protect. The ordinance before your Assembly would classify all three of these facilities as 'Sensitive Uses' requiring a 1,500-foot setback from a freestanding macro tower. The proposed placement would not meet that standard — and the research record explains why that standard exists.

## SECTION 3 — CASES REPORTED BY MAJOR NATIONAL MEDIA

For Assembly members who need to see major news outlets on the record — these cases were reported nationally, not by advocacy groups.

### Ripon, California — CBS News (Multiple Reports, 2019)

**COVERED BY:** CBS News (national), CBS13 Sacramento, Newsweek, and additional outlets. CBS News correspondent Carter Evans reported on-site. Multiple CBS segments aired nationally.

**WHAT HAPPENED:** At Weston Elementary School in Ripon, California, four students were diagnosed with cancer — kidney cancer, brain cancer, and others. A cell tower was located directly on the school campus. Parent Monica Ferrulli's son Mason required 14 hours of surgery to remove a brain tumor and had to relearn how to walk, talk, and eat.

**OUTCOME:** Sprint voluntarily shut down and removed the tower — a tower it had declared safe and claimed met all federal limits. CBS News quoted an electromagnetic radiation specialist: 'I wouldn't send my kids there at all, it absolutely is dangerous. Children are still developing and their cells are still being divided.'

**SIGNIFICANCE:** Sprint's removal of a tower it declared safe is itself the admission. The carrier calculated that proximity to children and cancer is a liability it could not afford — without any court order requiring it.

**Liberty, Missouri — Kansas City Star / EHN (May–June 2025)**

**COVERED BY:** The Kansas City Star, Environmental Health News, KCTV (Gray News), KBTX. Story escalated to U.S. Congress.

**WHAT HAPPENED:** At Warren Hills Elementary School in Liberty, Missouri, at least six staff members — out of only 40 teachers — were diagnosed with breast cancer over a 12-year period. A seventh staff member died from liver cancer. A 120-foot cell phone tower stands just 130 feet from the school building. Parents began requesting school transfers for their children.

**CONGRESSIONAL ACTION:** U.S. Representative Sam Graves formally notified HHS Secretary Robert F. Kennedy Jr., calling for a federal investigation. Rep. Graves stated: 'The teachers, parents, and staff at Warren Hills Elementary School need some answers as to why so many of their friends, colleagues, and loved ones are being diagnosed with cancer.'

**SIGNIFICANCE:** A sitting U.S. Congressman demanding a federal investigation of a cell tower's proximity to a school is not fringe concern — it is Congress. May 2025.

**Pittsfield, Massachusetts — ProPublica, Berkshire Eagle, MA Supreme Judicial Court (2022–2025)**

**COVERED BY:** ProPublica, The Berkshire Eagle, Children's Health Defense, Spectrum News. Case reached the Massachusetts Supreme Judicial Court.

**WHAT HAPPENED:** When Verizon activated a cell tower in Pittsfield, Massachusetts, residents began getting sick almost immediately. The Board of Health investigated — reviewing over 1,000 peer-reviewed studies, interviewing scientists, and taking direct testimony. They identified 17 people made definitively ill. Symptoms included children vomiting in their beds, vertigo, heart palpitations, severe headaches, and sleep deprivation. Some residents slept in cars because their homes were uninhabitable.

**BOARD ACTION:** On April 11, 2022, the Pittsfield Board of Health issued a cease-and-desist order to Verizon — the first ever issued in the U.S. against a major wireless carrier — calling the tower a 'public nuisance' and a 'cause of sickness.'

**OUTCOME:** Verizon filed a federal lawsuit. City officials allegedly cooperated with Verizon to block the Board from obtaining independent legal counsel. The Board was coerced into rescinding its order. The case is now at the Massachusetts Supreme Judicial Court.

**SIGNIFICANCE:** This is the clearest U.S. documentation of a specific tower making specific people sick, confirmed by a government health board. And it illustrates exactly why proactive setback ordinances matter: once a tower is up and making people sick, the legal path to relief is nearly impossible.

**Long Beach, California — WHYY Public Radio / NPR (March 2023)**

**COVERED BY:** WHYY Public Radio (NPR affiliate), Children's Health Defense, multiple local outlets.

**WHAT HAPPENED:** Homeowners fought to stop AT&T from installing a 5G cell tower 25 feet from their front door. The hearing examiner's formal determination stated: 'It does appear through reliable, credible evidence that the FCC regulations as to what are safe RF emission standards are outmoded and inadequate to safeguard the

public… the FCC's determination as to what are safe and acceptable RF emission exposure levels are antiquated and not based on current scientific evidence and are instead industry sponsored, outdated, and just plain wrong, causing the public to be exposed to unnecessary and harmful radiation.'

**OUTCOME:** AT&T canceled the tower in March 2023.

**SIGNIFICANCE:** A government hearing examiner — not an activist, not a study author — declared FCC safety standards 'industry sponsored, outdated, and just plain wrong.' That language is on the official record.

**Wyandotte, Michigan — Court Grants Restraining Order (2024)**

**COVERED BY:** Environmental Health Trust (near-daily coverage noted in case documentation).

**WHAT HAPPENED:** T-Mobile installed 5G antennas on the smokestack of Washington Elementary School in Wyandotte, Michigan. The school superintendent resigned amid the controversy. A Wayne County Circuit Court judge granted a temporary restraining order to delay activation. The lawsuit stated: 'Unless enjoined by this Court, T-Mobile will begin transmitting noxious, dangerous wireless radiation from the antennas atop Washington Elementary School continuously all day, every day at a site where young children study and play during their most important developmental years.'

**SIGNIFICANCE:** A sitting Michigan circuit court judge agreed there was sufficient basis to halt activation — and a school superintendent resigned over the controversy. Courts are beginning to take the evidence seriously.

## SECTION 4 — WHAT THE WIRELESS INDUSTRY ADMITS IN ITS OWN FILINGS

For Assembly members who trust industry over advocacy groups — here is what the carriers themselves have put in writing, under penalty of securities law.

T-MOBILE SEC FILING, 2023 — Annual Report to Shareholders (legally required disclosure): 'We, along with equipment manufacturers and other carriers, are subject to current and potential future lawsuits alleging adverse health effects arising from the use of wireless handsets or from wireless transmission equipment such as cell towers. Any of these allegations or changes in risk assessments could result in significant legal and regulatory liability, and could have a material adverse effect on our business, reputation, financial condition, cash flows and operating results.'

**TRANSLATION:** T-Mobile told its investors — in a legally binding document — that cell tower health liability is a real financial risk to its business. It does not say that to the parents of children at schools near its towers.

SWISS RE INSTITUTE — One of the world's leading reinsurance authorities — classified 5G as an 'off-the-leash' risk. Their report states: 'Existing concerns regarding potential negative health effects from electromagnetic fields are only likely to increase. An uptick in liability claims could be a potential long-term consequence.' Insurance authorities have stated the situation mirrors the early history of asbestos liability. U.S. wireless carriers have been unable to obtain insurance coverage for liabilities related to long-term RF exposure for over a decade. Most Commercial General Liability policies now explicitly exclude bodily injury or property damage arising from electromagnetic radiation.

## SECTION 5 — GOVERNMENT BODIES THAT HAVE TAKEN FORMAL ACTION

Alaska cases are highlighted. Every jurisdiction below exercised exactly the local authority your Assembly holds today.

| Government Body | Action Taken | Date |
|---|---|---|
| NH State 5G Commission | Official report recommending 1,500–1,640 ft setback from homes, schools, and workplaces. Submitted to Governor and Legislature. | Nov. 2020 |
| Palo Alto USD, CA | Resolution No. 2018-19.19 supporting 1,500 ft setback from schools and wireless transmitters. | 2018–19 |
| Bar Harbor, Maine | Enacted 1,500 ft setback ordinance for schools. Currently in force. | Enacted |
| Sitka, Alaska — Planning Commission + Admin. Law Judge | Unanimously denied Tidal Network variance for 120-ft residential tower. Alaska Administrative Law Judge upheld denial on appeal. Public "uniformly opposed." | Apr. & Oct. 2025 |
| Haines Borough Assembly, Alaska | Actively deliberating cell tower setback rules following community opposition. Tower companies warned setbacks could trigger federal legal challenges. | Jan. 2026 |
| Pittsfield, MA Board of Health | Issued cease-and-desist against Verizon — first ever in U.S. — declaring tower a "public nuisance" and "cause of sickness." | Apr. 2022 |
| U.S. Rep. Sam Graves (MO) | Formally notified HHS Secretary RFK Jr. demanding federal investigation of cancer cluster at school 130 ft from a cell tower. | May 2025 |
| Wayne County Circuit Court, MI | Granted temporary restraining order halting T-Mobile antenna activation on elementary school smokestack. | 2024 |
| Intl. Assoc. of Firefighters | Officially opposed cell towers on fire stations since 2004; secured exemption from California SB649. | 2004, 2017 |
| Los Angeles USD, CA | Resolution opposing cell towers on school property; called for RF cautionary level 10,000x lower than FCC limits. | Enacted |
| Vancouver School Board | Resolution prohibiting cell antennas within 1,000 feet of school property. | Enacted |
| Bedford, NH | Ordinance: 750 ft setback from nearest residentially-zoned property. | Enacted |
| Calabasas, CA | No Tier 2 telecommunications facilities within 1,000 ft of homes and schools. | Enacted |
| Scarsdale, NY | No wireless facilities within 500 ft from homes, schools, parks, or houses of worship. | Enacted |

| | | |
|---|---|---|
| Vermont: Manchester Selectboard | Rejected Verizon cell tower proposal, explicitly citing health concerns. | 2025 |
| Gila County, AZ | Rejected 165-foot cell tower despite planning staff recommendation to approve, following strenuous resident objection. | Recent |
| MA Supreme Judicial Court | Agreed to hear Pittsfield cell tower case — first state supreme court to take up local government authority vs. carrier rights in a health dispute. | 2025 |

## SECTION 6 — THE EQUITY DIMENSION: WHO BEARS THE BURDEN

Cell tower infrastructure and its associated health and aesthetic burdens fall disproportionately on communities least positioned to fight back.

Montgomery County, Maryland Public Schools (2022–23 data): An analysis of 25 high school campuses found that schools with cell towers on their property served significantly higher populations of low-income students — an average Free and Reduced-Price Meals (FARMS) rate of 51.88% versus 30.69% at schools without towers. (Environmental Health Sciences, 2026 — American Public Health Association presentation)

The FCC's proposed 2025 rules to 'eliminate barriers to wireless deployments' — which would strip local governments of nearly all setback and siting authority — drew opposition from the United States Conference of Mayors, the National League of Cities, the National Association of Counties, and the National Association of Telecommunications Officers and Advisors. Over 5,900 comments were filed in opposition. The organizations representing America's cities and counties are fighting to preserve exactly the kind of local authority your Assembly is exercising. (EHSciences, April 2026)

## SECTION 7 — TALKING POINTS FOR ASSEMBLY PRESENTATION

If you have five minutes at a mic, these are the points that land:

### 1. AN ALASKA ADMINISTRATIVE LAW JUDGE SIDED WITH RESIDENTS OVER A CARRIER.

In Sitka, Alaska — October 2025 — a state judge upheld the planning commission's denial of a 120-foot tower in a residential neighborhood. The judge found Tidal Network hadn't even evaluated whether a shorter tower would work. Residents' attorneys afterward called for ordinances to protect the health and safety of residents from inappropriate cell tower placement. That is what this Assembly can do today.

### 2. A 125-FOOT GCI TOWER IS PROPOSED 20 FEET FROM A PROPERTY LINE IN OUR COMMUNITY.

That is not a setback. A 125-foot tower has a 125-foot fall zone — which would extend entirely over and well past the neighboring property. In Alaska's winters, ice accumulates on tower structures and breaks free without warning, carried by wind across distances well beyond the base. The research documents health effects at 1,000 feet. This tower is proposed at 20 feet.

**3. SPRINT REMOVED A TOWER THEY SAID WAS SAFE.**

After four children at a California elementary school got cancer, Sprint voluntarily removed a tower it had repeatedly declared safe. They removed it because proximity to children and cancer is a liability they could not afford — and neither can we.

**4. A U.S. CONGRESSMAN CALLED FOR A FEDERAL INVESTIGATION. MAY 2025.**

Rep. Sam Graves (Missouri) notified HHS Secretary RFK Jr. about cancer diagnoses among teachers at a school 130 feet from a cell tower. Six teachers out of 40 diagnosed with breast cancer. This is not fringe concern — this is Congress.

**5. A GOVERNMENT HEALTH BOARD ISSUED THE FIRST CEASE-AND-DESIST AGAINST A MAJOR CARRIER.**

Pittsfield, Massachusetts Board of Health declared a Verizon tower a 'public nuisance' and 'cause of sickness' after 17 residents were made ill — some sleeping in their cars because their homes were uninhabitable. The case is now at the Massachusetts Supreme Court.

**6. A HEARING EXAMINER CALLED FCC SAFETY STANDARDS 'INDUSTRY SPONSORED AND JUST PLAIN WRONG.'**

Not an activist. Not a study author. A government hearing examiner, in an official ruling, in Long Beach, California, 2023. On the record.

**7. T-MOBILE WARNED ITS OWN INVESTORS ABOUT CELL TOWER HEALTH LIABILITY.**

In its 2023 SEC filing — a legally binding document — T-Mobile disclosed that cell tower health lawsuits could have a 'material adverse effect' on its business. It did not make that disclosure to the parents of children at schools near its towers.

**8. THE FCC'S SAFETY LIMITS HAVE NOT BEEN UPDATED SINCE 1996.**

Flip phones. No smartphones. No 5G. No streaming. That is the science base for the standards still in place today. A New Hampshire state commission recommended 1,500 feet. Bar Harbor, Maine enacted 1,500 feet. Palo Alto's school board voted for 1,500 feet. Sitka, Alaska's judge upheld their residential height limits. We are not the first. We will not be the last.

**9. THE NATIONAL LEAGUE OF CITIES, THE U.S. CONFERENCE OF MAYORS, AND THE NATIONAL ASSOCIATION OF COUNTIES ARE ALL FIGHTING TO PRESERVE LOCAL SETBACK AUTHORITY.**

The FCC wants to strip that authority. The organizations representing America's cities and counties are pushing back. Passing a protective ordinance is how we exercise the authority we still have — before it is taken.

*Sources on file. All cases documented with citations available in the companion Research Briefing. Compiled June 2026 for ordinance drafting and public presentation purposes.*