



**M** *CBJ Law Department*  
**MEMORANDUM**

**To:** Dale Pernula, Director  
Community Development Department  
CBJ Planning Commission

**From:** Jane E. Sebens *JES*  
Deputy City Attorney

**Subject:** Federal Telecommunications Act of 1996  
“Environmental” vs. “Health” Effects of Radio Frequency Emissions

**Date:** December 2, 2011

The Planning Commission has requested that the Law Department provide a legal opinion on the scope of the phrase “environmental effects of radio frequency emissions” in the following Section 332 (c)(7)(B)(iv) of the Federal Telecommunications Act of 1996 (“FTA”):

(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.

(emphasis added). The specific question is whether this federal law prohibits the Planning Commission from considering and regulating personal wireless service facilities on the basis of the “*health effects*” of radio frequency emissions.

The short answer is, yes. After reviewing and updating earlier research, including a review of the FCC’s related federal regulations, it is evident that the phrase “environmental effects” of radio frequency emissions is broadly interpreted and applied to include the “health effects” of such emissions. Thus, the Planning Commission is prohibited by current federal law from regulating or reviewing cell tower conditional use permit applications on the basis of the health effects of radio frequency emissions.

It should be noted that federal law does not prohibit the local regulation of cell tower placement on the basis of other environmental or health and safety concerns--the federal preemption extends to those concerns only as they relate to radio frequency emissions. Thus, under the authority of CBJ Code 49.15.330(d)((5)(A) and (f)(1), the Director and the Planning Commission, respectively, may consider

whether a proposed conditional use permit for a personal wireless service facility “will materially endanger the public health or safety” in any way that does not relate to radio frequency emissions.

Please do not hesitate to contact me if you have any questions or need more information.

For your reference and convenience, I am including a 2009 memorandum I prepared regarding local regulatory authority under the Federal Telecommunications Act of 1996. I am also attaching a more recent and informative article regarding local regulation of cell towers, published by a large California law firm. (On its website, the firm touts itself as a preeminent real estate law firm that for nearly 40 years has been publishing a “12-volume encyclopedia on California real estate law,” which “is the most widely used and judicially recognized real estate legal treatise in California.”)



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**ARTICLE**

**LOCAL MATTER OR FEDERAL CASE? THE NETWORK  
OF CELL TOWER REGULATION IN CALIFORNIA**

By Arthur F. Coon and Sean Marciniak\*

**I. INTRODUCTION.**

Few planning and zoning decisions generate more controversy than the placement of cellular phone antennas.<sup>1</sup> If the proposed site lies near a residential area, neighbors often will organize for purposes of challenging the proposal and, more often than not, they are sophisticated. In the City of San Francisco, one resident successfully challenged the placement of a tower after he switched his mobile device into “field test” mode, systematically recorded his carrier’s signal strength in the vicinity, demonstrated signal strength was good to excellent in most of the area, and thereby convinced the City that his carrier did not need another tower.<sup>2</sup>

These contests will continue to grow in complexity and in number. Population growth means more users,<sup>3</sup> and more users will sustain demand for more towers.<sup>4</sup> Moreover, the newest technology that is capable of handling the many functions that consumers now demand and expect—pictures, movies, video conferencing—utilizes higher

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frequencies, which translates into smaller coverage areas. Thus, more towers will prove necessary to serve the existing user population.<sup>5</sup>

Numerous questions surface in this type of land use decision. To what extent may a local city or county regulate the process? What are the bounds of its discretion? What is an agency to make of community concerns about electromagnetic energy associated with an antenna? The issues that emerge in siting cell phone antennas are among the many that the federal government has sought to address through regulation. And the government has been attempting to perfect the regulation of telecommunications for some time.

#### A. Overview of Federal Telecommunications Act of 1996.

The U.S. government first attempted to regulate the telecommunications industry during the Great Depression, when it created a statutory framework, known as the Communications Act of 1934, in order to promote competition among telephone companies and radio broadcasters.<sup>6</sup> But as decades passed, it became clear that monopolies were continuing to form.<sup>7</sup> Moreover, technology was advancing in unanticipated ways, such that laws designed to regulate the invention of Alexander Graham Bell now had to accommodate creatures such as the Internet and wireless phone service. Another problem that surfaced was that technology, particularly digital innovations, began allowing certain carriers—e.g., a telephone company—to offer services usually associated with a different industry—e.g., cable television service. As a result, several different industries began offering the same services, but remained subject to the distinct regulatory regimes that governed them at their formation.<sup>8</sup>

In 1996, the U.S. Congress undertook its “first major overhaul” of the telecommunications law in 62 years.<sup>9</sup> Lawmakers intended the Federal Telecommunications Act of 1996 (“1996 Telecommunications Act,” or “Act”)<sup>10</sup> primarily to encourage competition, but also to contemplate and regulate the provision of new technologies. In terms of competition, for instance, the Act obligated telecommunications carriers to interconnect directly or indirectly with the facilities and equipment of other carriers, subject to reciprocal compensation agreements.<sup>11</sup> Meanwhile, existing carriers had to accommodate new entrants in that these “incumbents” had a duty to provide newcomers with interconnection for the transmission and routing of telephone and other services.<sup>12</sup>

In terms of new technologies, the Act now contemplated the Inter-

net,<sup>13</sup> the proliferation of wireless services, and the development of the facilities that delivered them—e.g., cell phone towers.<sup>14</sup> Regulating the latter posed a particularly difficult challenge, as the U.S. Congress had to balance two somewhat contradictory purposes affecting these facilities. First, Congress had expressed an intention “to promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”<sup>15</sup> This policy, in turn, contemplated that various states had “longstanding practice of granting and maintaining local exchange monopolies.”<sup>16</sup> On the other hand, Congress sought “to preserve the authority of State and local governments over zoning and land use matters except in the limited circumstances set forth in the conference agreement.”<sup>17</sup>

#### **B. Overview of cell phone tower regulation under the Act.**

Section 332 of the Act contains the byproduct of Congress’ effort to balance local and federal control in the siting of wireless facilities. In terms of delegation, state or local governments can be extremely flexible in their decisions. For instance, a city may adopt an ordinance that regulates the placement of towers according to open-ended considerations such as “necessity” and “community character.”<sup>18</sup> Nor are considerations such as property values and aesthetics impermissible.<sup>19</sup> Moreover, the jurisdictions’ decisions need only be supported by “substantial evidence,” which is not a difficult standard to satisfy—i.e., it is more than a scintilla and less than a preponderance of evidence.

As described in this article, however, Congress did restrict local authorities in some important respects.<sup>20</sup> For instance:

- State and local governments may not reject the siting of a tower on the basis of radio frequency emissions—i.e., radiation—unless a tower exceeds standards set forth by the Federal Communications Commission (“FCC”).<sup>21</sup>
- State or local governments may not ban, either outright or de facto, the siting of towers in their jurisdiction. Similarly, a jurisdiction may not cause a provider to have a “significant gap” in its coverage.<sup>22</sup>
- State and local governments may not unreasonably discriminate among providers of functionally equivalent services, but can treat facilities differently where they create different visual, aesthetic, or safety concerns.<sup>23</sup>

Aside from these more substantive restrictions, there are procedural considerations at work. For instance, a jurisdiction's decision must be in writing and consist of a certain amount of detail.<sup>24</sup> Time also is of the essence, as a jurisdiction must process tower applications in 90 to 150 days, depending on whether the equipment is merely an addition to an existing facility—a process known as “collocation”—or constitutes an entirely new facility.<sup>25</sup>

This article discusses the 1996 Telecommunications Act primarily as it has been applied in California courts and the Ninth Circuit Court of Appeals. However, where another jurisdiction has explored an issue that California authority does not address, or has influenced a California opinion, such authority also is discussed. Also warranting attention are some California state regulations that have developed that address a local agency's ability to consider an application for a cell phone tower.

Section II of this article discusses the flexibility that local jurisdictions enjoy in regulating the siting of cell phone towers; Section III discusses federal limitations and preemptions that local jurisdictions face; Section IV discusses federal procedural regulations concerning findings and timing; and Section V discusses limitations on, and the preemption of, actions by local jurisdictions imposed by statewide legislation in California.

## II. THE BOUNDS OF LOCAL AUTHORITY

### A. Local control preserved.

Section 332(c)(7)(A) of the 1996 Telecommunications Act preserves local governments' authority over zoning decisions regarding placement and construction of wireless service facilities, subject to enumerated limitations in §332(c)(7)(B).<sup>26</sup> In accordance with this statutory mandate, courts have approved a wide variety of grounds upon which a local jurisdiction may regulate the siting of a cell phone tower, and require only that local decisions be supported by “substantial evidence.”

#### 1. Substantial evidence.

The Act mandates that a state or local government's cell phone tower decision be “supported by substantial evidence contained in a written record.”<sup>27</sup> Such a standard is not difficult to meet, and there appears to be universal agreement among the circuits as to the substantive content of this requirement. In sum, the “substantial evidence” quantum implies “less than a preponderance, but more than a scintilla

of evidence. 'It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.'"<sup>28</sup> Review under this standard is essentially "deferential," such that courts may "neither engage in [their] own fact-finding nor supplant [a local government's] reasonable determinations."<sup>29</sup>

This standard of review is a familiar one in California insofar as planning and zoning decisions are concerned.<sup>30</sup>

## 2. Bases of decision are broad.

A local agency need not muster any great quantum of proof to support its decision, nor does the agency face any great restrictions in picking the substantive grounds for decision on which it may rely. For instance, the agency may adopt ordinances that regulate the placement of towers according to broad considerations such as "necessity" and "community character,"<sup>31</sup> which demand a considerable amount of discretion. An agency also may base decisions on property values, aesthetics, and environmental concerns.<sup>32</sup> Moreover, an agency may structure an ordinance according to a "tiered" framework, such that towers proposed in certain areas (e.g., industrial or commercial zones) face lesser substantive and procedural restrictions than those placed in more sensitive communities (e.g., residential zones).<sup>33</sup> What follows is a non-exclusive list of considerations that courts have approved:

**Necessity.** A city is permitted to regulate a tower application on the basis of whether "the proposed use...is necessary or desirable for, and compatible with, the neighborhood or the community."<sup>34</sup> "Necessity" can focus on the existing adequacy of a given carrier's service; in one case, a single consumer did in fact manage to defeat an application where he used a "field test" mode on his cellular phone to systematically record his carrier's signal strength and show its adequacy.<sup>35</sup> "Necessity" also may concern the cumulative need for service in light of multiple providers—i.e., the circumstance where competitors of a tower proponent have a proliferation of towers in a given area. However, even if an agency complies with the substantial evidence test in showing such a proposed tower is unnecessary because competitors have the area well-covered, it will be difficult for that locality to pass the "discrimination" and "substantial gap" tests discussed further below in Section IV.<sup>36</sup>

**Aesthetics.** Numerous decisions from the Ninth Circuit approve a

local agency's consideration of how a cell phone tower affects the visual resources of a community, such as a scenic viewshed.<sup>37</sup> Requiring visual impact studies, screening, and other types of camouflage has met court approval.<sup>38</sup>

**Community character.** A number of decisions from the Ninth Circuit approve a local agency's consideration of how a cell phone tower harmonizes with the surrounding neighborhood.<sup>39</sup> From a practical standpoint, a cell phone tower is less likely to be deemed compatible with a residential neighborhood than with a commercial or industrial neighborhood.

**Height, setbacks, and other traditional zoning considerations.** A number of decisions from the Ninth Circuit approve a local agency's decision to subject cell phone antennas to traditional zoning considerations like the above.<sup>40</sup>

**Property values.** It appears that California courts recognize property values as a legitimate consideration in regulating the siting of cell phone towers, though such values may not support rejection of a facility if the fear of property value depreciation is based on concern about the health effects caused by radio frequency emissions.<sup>41</sup> It would appear a proponent of property value evidence must adhere to some rigor in its analysis, and show not only radio frequency energy levels, but also how such levels would affect market appraisals.<sup>42</sup> At the same time, this consideration is likely to generate controversy due to a California Supreme Court decision holding that electromagnetic radiation from power lines does not damage property, and that evidence supporting its contribution to health risks is unreliable.<sup>43</sup> Of course, that decision was published in 1996, and it is unclear, and beyond the scope of this article, what supplemental evidence has arisen in the past 15 years. At the same time, another California decision has held that, where a taking is established, a party's fears of electromagnetic energy, regardless of their reasonableness, may affect the calculus of what amount of just compensation is due.<sup>44</sup>

**Historic considerations.** Historic considerations concern the impact of a cell phone tower on historic resources, such as the impacts of construction or operation of a facility on a historic building or historic neighborhood. For instance, many cell phone facilities are collocated on building tops, and proposing



to do so on an historic structure would raise the prospect that the tower could destroy the cultural value of that resource. The Ninth Circuit has not expressly adopted this as a factor that agencies may consider in accepting or rejecting a facility application, but other circuits have.<sup>45</sup>

**Environment.** It does not appear a California court has addressed the issue of environmental conditions, but courts in other jurisdictions have recognized that cell phone towers may have impacts in areas such as slope stability, soil erosion, hydrology, and interference with flood management.<sup>46</sup> Cell phone towers also have been shown to impact biological resources, such as birds and migration routes, and the FCC acknowledges that species and habitat concerns may warrant the preparation of an environmental document.<sup>47</sup> It should be noted that any application for a cell phone tower also may need to undergo review under the National Environmental Policy Act ("NEPA")<sup>48</sup> and the California Environmental Quality Act ("CEQA").<sup>49</sup> Unless consideration of an environmental concern is specifically preempted by the 1996 Telecommunications Act (e.g., consideration of radio frequency emissions outside specific limitations), it would appear that any environmental topic arising through these review processes would qualify as adequate criteria in evaluating the siting of a cell phone tower. Providers and agencies may consider whether smaller facilities would be eligible for exemption from these environmental review frameworks under specific provisions in each act or their implementing regulations.<sup>50</sup>

**Cumulative impact.** It appears that if evidence shows a proposed tower, when considered in combination with other existing, proposed, or foreseeable towers, has a cumulative effect on a community resource, such an evidentiary showing could support an agency's decision to reject the proposed tower. However, the record must contain evidence of such a cumulative impact.<sup>51</sup> Note that the radiofrequency emission standards, set by the FCC, do address cumulative concerns, and that compliance with such standards will preempt further consideration of this issue by a local government agency, as is discussed further below.

The individual considerations listed above may be mixed and combined in a variety of frameworks, such that a state or local agency may

vary requirements in certain areas or zones so as to provide incentives or disincentives for proposals in that vicinity. The Ninth Circuit approved such a framework in *Sprint Telephony PCS, L.P. v. County of San Diego*.<sup>52</sup>

In that case, the City of San Diego enacted an ordinance that categorized applications for wireless telecommunications facilities into four “tiers,” depending primarily on the visibility and location of a proposed facility. Depending on the tier, different requirements would apply. For example, an application for a low-visibility structure in an industrial zone generally had to satisfy lesser requirements than an application for a large tower in a residential zone.<sup>53</sup> While the court did not identify and itemize the requirements, it appeared they were substantive in nature. Presumably, an agency could also vary its procedural requirements in a like fashion; for instance, it likely could streamline review in industrial zones by delegating decisions to an administrator, but posit review authority in a planning commission or other advisory or legislative body where a tower is proposed in a residential zone.

### 3. Conclusion.

The above examples illustrate that a state or local government has great flexibility in deciding whether or not it may permit or reject an application to construct and operate a cell phone tower. Even such open-ended considerations as “necessity” and “community character” may guide an agency decision, and the decision-making body need only ensure there is “substantial evidence” in the record supporting its decision.

That said, the space in which an agency may exercise this considerable discretion is a bounded one. As the next section discusses, the 1996 Telecommunications Act establishes limits and controls that a local agency cannot escape with regard to certain topical areas.

### III. LIMITATIONS ON AN AGENCY'S DISCRETION IN CONSIDERING TOWERS.

Though state and local governments enjoy a broad degree of discretion in approving or rejecting applications for cell phone towers, the 1996 Telecommunications Act provides for a number of limitations that preempt local decision making. Essentially, an agency cannot reject an application if:

- (1) The agency does so on the basis of radio frequency emissions where evidence shows the proposed power will meet federal standards;

- (2) Rejection would implement a ban on cell phone towers, effectively constitute a ban, or create a significant gap in a provider's service; or
- (3) Rejection would constitute unreasonable discrimination among providers of functionally equivalent services.

Per federal law, state and local agencies also must ensure their decision is in writing, though existing California law already contains such a requirement.<sup>54</sup> More significant is that agencies must make their decision within prescribed time limits (i.e., 90 to 150 days, depending on facility), or they will suffer a presumption that delay was unreasonable. At the same time, an agency can rebut that presumption, presumably through a showing of diligent efforts to complete environmental review or some other entitlement process.

#### A. Radio frequency emissions.

##### 1. Factual background.

Aside from aesthetics, perhaps no aspect of a cell phone tower will raise more opposition than the prospect of exposing neighbors to radio frequency ("RF") emissions. Such emissions consist of electric and magnetic energy moving at the speed of light, and can be further characterized by their wavelength and frequency. As the FCC explains, "the wavelength is the distance covered by one complete cycle of the electromagnetic wave, while the frequency is the number of electromagnetic waves passing a given point in one second."<sup>55</sup> Opponents of cell towers simply call it radiation.

In theory, biological effects of exposure can result. Just as microwave ovens cook food by subjecting it to electromagnetic waves, RF energy can heat tissue rapidly when exposure levels are high. Under such conditions, tissue damage occurs because the human body cannot cope with or dissipate this excessive heat. However, the FCC acknowledges that at "relatively low levels of exposure to RF radiation... the evidence for production of harmful biological effects is ambiguous and unproven," including increases in the risk of cancer.<sup>56</sup> The uncertainties of RF energy levels associated with wireless antennae often spawn widespread opposition, and constitute the real motivation behind challenges to cell tower proposals.<sup>57</sup>

##### 2. FCC sets standards on RF emissions.

Section 332(c)(7)(B)(iv) of the Act provides that no state or local government may regulate the siting of a cell phone tower based on

“the environmental effects of radio frequency emissions to the extent that such facilities comply with the [FCC’s] regulations concerning such emissions.”<sup>58</sup> The FCC’s guidelines, adopted in 1996, have a two-fold purpose in that they: (1) identify acceptable exposure levels, and (2) identify which transmitting facilities, operations and devices will be “categorically excluded” from performing routine, initial evaluations.

The exposure levels are based on maximum RF exposure and the FCC asserts they “are designed to protect the public health with a very large margin of safety.”<sup>59</sup> The Environmental Protection Agency and the Food and Drug Administration have endorsed this calculus, and a federal court of appeals upheld the adoption of these standards, under the “substantial evidence” standard of review discussed above.<sup>60</sup> The actual requirements can be found in the following regulations and policy documents: Sections 1.1307(b) and 1.1310 of the FCC’s Rules and Regulations [47 C.F.R. §§1.1307(b), 1.1310]; the FCC’s OET Bulletin 65, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields,” August 1997 (“Bulletin 65”); and an interpretive guide of Bulletin 65 the FCC published in 2000, entitled “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance.” (“LSGAC Guide”).

The FCC standards also identify cellular facilities that will qualify for a “categorical exclusion” from further review. These generally include low-powered, intermittent, or inaccessible RF transmitters and facilities. For instance, facilities that qualify include conventional cellular facilities which generate 1,000 watts of power or less; conventional cellular facilities that are not mounted on a building and sit 10 meters above ground level; PCS facilities that generate 2,000 watts of power or less; or PCS facilities that are not mounted on a building and sit at least 10 meters above ground.<sup>61</sup>

Per FCC regulation, an Environmental Assessment (“EA”), pursuant to NEPA, must be prepared where a tower proponent cannot show the facility in question will qualify for a categorical exclusion or otherwise comply with the exposure standards.<sup>62</sup> An applicant should have little difficulty determining whether a categorical exclusion applies because the FCC provides a number of tables designed to streamline this process; however, determining exposure levels for non-qualifying facilities is not always a simple matter. Several factors govern this calculus, including the frequency of the RF signal, the operating power of the transmitting station, the actual power radiated from the antenna, the duration

of exposure at a given distance from the antenna, and the number and location of other antennas in the vicinity.<sup>63</sup>

This latter factor—what neighboring towers exist—raises the prospect of a cumulative analysis, and the FCC regulations appear to require it. Where more than one antenna is collocated, an applicant “must take into consideration *all* of the RF power transmitted by all of the antennas when determining maximum exposure levels.”<sup>64</sup> Bulletin 65 states that “*all* significant contributors to the ambient RF environment should be considered, including those otherwise excluded from performing routine RF evaluations, and applicants are expected to make a good-faith effort to consider these other transmitters.”<sup>65</sup> In defining a “significant” contributor, the FCC contemplates those producing more than 5 percent of the applicable exposure limit.<sup>66</sup> And while the regulations focus on single towers with multiple antennas, Bulletin 65 also contemplates receptors situated between two towers.<sup>67</sup>

However, note that qualifying for a categorical exclusion would appear to make further cumulative analysis unnecessary; Bulletin 65 provides a decision tree meant to help agencies and carriers navigate the RF evaluation process, and qualifying for a categorical exclusion obviates further discussion.<sup>68</sup> Thus, it appears that qualifying for a categorical exclusion is synonymous with making a determination that, borrowing California state environmental law terminology, a facility will make no cumulatively considerable contribution to a cumulative impact.<sup>69</sup>

### **3. Where a proposed tower complies with FCC regulations, a state or local government is preempted from considering the issue further.**

Section 332(c)(7)(B)(iv) of the Act provides that no state or local government may regulate a cell phone tower 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.” In other words, agencies may not regulate cell phone towers to the extent their radiation complies with FCC standards, as set forth in Sections 1.1307(b) and 1.1310 of the FCC’s Rules and Regulations and the FCC’s OST/OET Bulletin Number 65. This prohibition covers even “indirect” environmental effects of RF emissions.<sup>70</sup>

Only a handful of cases that treat the issue have emerged in California, and they provide little guidance beyond the Act’s statutory language.<sup>71</sup> Courts in other jurisdictions, too, generally have been respectful of the

statutory mandate, holding that an agency's authority is limited to verifying compliance with FCC rules.<sup>72</sup> But it may be the case that, where an agency is faced with alternative sites, it may select one over another on the basis of exposure levels.<sup>73</sup>

#### B. Interference with other transmissions.

Aside from affecting human health, RF emissions also have the potential to interfere with the operation of other radio waves, including those emanating from emergency communications, consumer electronic equipment, and other wireless services. However, while state and local governments may regulate cell phone towers on the basis of public safety considerations, an agency may not reject an application on the basis it will interfere with the radio frequencies of emergency communication devices and other systems.<sup>74</sup> The FCC since has ruled that local agencies are preempted from regulating in this area.<sup>75</sup>

#### C. Prohibition against unreasonable discrimination.

The Act mandates that “[t]he regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof...shall not unreasonably discriminate among providers of functionally equivalent services.”<sup>76</sup> Conversely, “the Act explicitly contemplates that some discrimination ‘among providers of functionally equivalent services’ is allowed. Any discrimination need only be reasonable.”<sup>77</sup>

As the Ninth Circuit has observed, almost all federal courts have held that providers alleging unreasonable discrimination must show that they have been “treated differently from other providers whose facilities are ‘*similarly situated*’ in terms of the ‘*structure, placement or cumulative impact*’ as the facilities in question.”<sup>78</sup> With regard to justifying a rejection based on a cumulative impact, the only federal district court case from the Ninth Circuit on this issue held that a mere increase in the number of wireless antennas in a given area over time can justify differential treatment of providers.<sup>79</sup>

To demonstrate that an agency has unreasonably discriminated against a carrier, the carrier must make some “systematic comparison” of other sites that have received approvals.<sup>80</sup> Merely demonstrating there are competing facilities in the area, without a detailed inquiry into the similarity of those existing facilities in terms of structure, placement, and cumulative impact, will not suffice.<sup>81</sup>

**D. Agency cannot ban or effectively prohibit provision of wireless service; agency cannot create a substantive gap in service.**

**1. Bans and moratoriums.**

**a. Bans.**

The Act provides that the “regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or any instrumentality thereof...shall not prohibit or have the effect of prohibiting the provision of personal wireless services.”<sup>82</sup> In other words, an agency may not institute a general ban on new service providers or otherwise effectively prohibit the provision of wireless services.<sup>83</sup>

The courts have not been particularly receptive to petitioners who make a facial challenge to an ordinance. Where the plain language of an ordinance does not make obvious an outright prohibition, a challenger must meet a high burden of proving that “no set of circumstances exists under which the [ordinance] would be valid.”<sup>84</sup> That an agency theoretically could exercise its discretion to reject every proposed facility has no bearing on this calculus. Thus, where the City of San Diego set forth a number of requirements and considerations for siting cell phone towers, the Ninth Circuit, in validating the ordinance, held: “It is certainly true that a zoning board *could* exercise its discretion to effectively prohibit the provision of wireless services, but it is equally true (and more likely) that a zoning board would exercise its discretion only to balance the competing goals of an ordinance—the provision of wireless services and other valid public goals such as safety and aesthetics.”<sup>85</sup> In a different opinion, the Ninth Circuit provided examples in which a ban might be established. “If an ordinance required, for instance, that all facilities be underground and the plaintiff introduced evidence that, to operate, wireless facilities must be above ground, the ordinance would effectively prohibit it from providing services. Or, if an ordinance mandated that no wireless facilities be located within one mile of a road, a plaintiff could show that, because of the number and location of roads, the rule constituted an effective prohibition.”<sup>86</sup>

It appears a party also can use an agency’s permitting history to show that a ban has or has not been instituted; for instance, the Ninth Circuit held no ban existed where evidence showed a city authorized the installation of some 2,000 antennas at about 450 sites, including 30 of the complaining carrier’s own facilities.<sup>87</sup>

### b. Moratoria.

An agency may institute a moratorium on the approval of cell phone towers as it contemplates the adoption of planning and zoning rules that address their siting, but only in a limited manner. Any moratorium must comply with the Act's requirement that local officials must evaluate applications for wireless facilities "within a reasonable period of time."<sup>88</sup> In fact, Congress implemented the Act's "reasonable period of time" provision to "stop local authorities from keeping wireless providers tied up in the hearing process through invocation of state procedures, moratoria, or gimmicks."<sup>89</sup>

A leading case on this issue is *Sprint Spectrum, L.P. v. City of Medina*, in which the United States District Court for the Western District of Washington held that a city's six-month moratorium did not constitute an illegal ban.<sup>90</sup> However, other courts have rejected different moratoria in different circumstances.<sup>91</sup> On August 5, 1998, a committee of the FCC composed of state and local government officials entered into an agreement with industry groups that established guidelines that (1) encouraged the parties to cooperate to facilitate the siting of wireless facilities, and (2) established that 180 days constituted a reasonable period for moratoria.<sup>92</sup> The guidelines recognize that moratoria sometimes may need to endure beyond 180 days, but that these devices "should not be used to stall or discourage the placement of wireless telecommunications facilities within a community...."<sup>93</sup> Where disputes arise, the parties agreed to an informal dispute resolution process that involves the participation of local government experts and industry representatives, who consider the circumstances and make non-binding recommendations.<sup>94</sup>

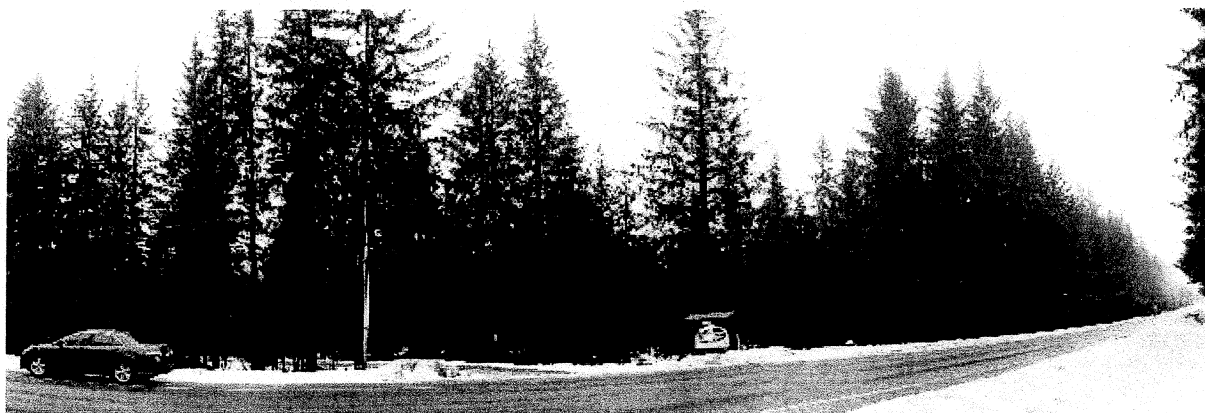
It is unclear to what extent this informal dispute resolution process has been successful, or utilized. However, in the past ten years, there appears to have been only one case addressing moratoria.<sup>95</sup>

### c. Courts no longer allow more relaxed standard for challenge under section 253.

In previous years, carriers had challenged state and local regulations on the basis of Section 253 of the Act, rather than Section 332.<sup>96</sup> Whereas Section 332 concerns itself with local zoning and cellular facilities, Section 253(a) more broadly preempts regulations which "may prohibit, or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications ser-



**PERCEIVED IMPACT OF INSTALLATION OF  
119' TALL TELECOMMUNICATIONS MONOPOLE  
AT SPRUCE MEADOWS RV PARK  
ON NEIGHBORING PROPERTY VALUES,  
BASED ON INTERVIEWS WITH KNOWLEDGEABLE  
MARKET OBSERVERS, JUNEAU, ALASKA**



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**OUR FILE:** 11-137

**ATTACHMENT D**

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Ref: Perceived Impact of Installation of 119' Tall Telecommunications Monopole at Spruce Meadows RV Park on Neighboring Property Values, Based on Interviews with Knowledgeable Market Observers, Juneau, Alaska; Our File no. 11-137

Dear Ms. Haynes:

Westower Communications is developing communication facilities in Juneau and was recently before the City and Borough of Juneau Planning Commission to obtain a conditional use permit to approve a facility at Spruce Meadows RV Park. Decision on the permit was deferred to a future meeting at which additional information could be provided to determine the impact of wireless telecommunication facilities on surrounding residential values. We have agreed to complete a first phase study to identify the valuation issues through discussions with planning staff, local knowledgeable people involved in this issue and local real estate appraisers, brokers and other market participants who would enable us to discern the market perception relative to this issue in the Juneau market.

We have viewed the subject site, interviewed the property owners, site developers and planner, and reviewed the material submitted to the planning department, including plans. It appears that the tower, a monopole, will be 20' to 30' above the existing tree height. To limit its contrast against the other trees in the neighboring view shed, it will be painted green or brown. In our opinion, this would be similar to monopoles found in other residential settings in the Mendenhall Valley. As planned, it would not cause a serious view blight and would not provide noise, smell, or any other tactile interference to make it disharmonious with the neighborhood. Based on our interviews with four Realtors, seven appraisers, and our own experience in the market place, it does not appear that there would be any substantial or measurable decrease in value of neighborhood property due to the proposed development.

In addition to interviewing knowledgeable market observers, we have collected anecdotal information which substantiates this finding. The only additional research that might be done to further probe the issue would be to identify recent sales in residential areas where there are cell

Alissa Haynes  
December 20, 2011  
Page 2

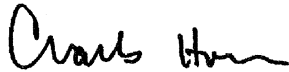
towers and do a one-on-one comparison to see how those sale prices compare to the sale values of other properties with a lesser presence of cell tower influence. In my opinion, it is highly probable that this additional analytical effort would not differ from the conclusions found from interviewing local, knowledgeable market observers.

Your attention is invited to the attached report which describes the subject property, outlines our methodology, discerns the opinions of knowledgeable market observers and identifies areas of other cell towers in residential settings that might have comparisons to the subject. Also, we have outlined what type of locational impacts may result in substantial decrease in property values. The report contains other background information relative to our conclusions, and summarizes Assumptions and Limiting Conditions, Definitions and Certification of this consultation.

If you have any questions or comments, please do not hesitate to call.

Respectfully Submitted,

HORAN & COMPANY, LLC



Charles E. Horan, MAI  
AA41

CEH:jy

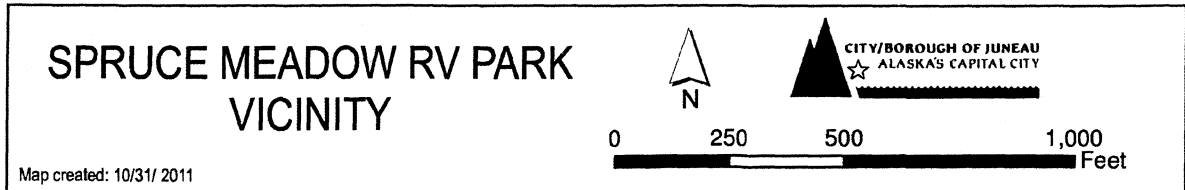
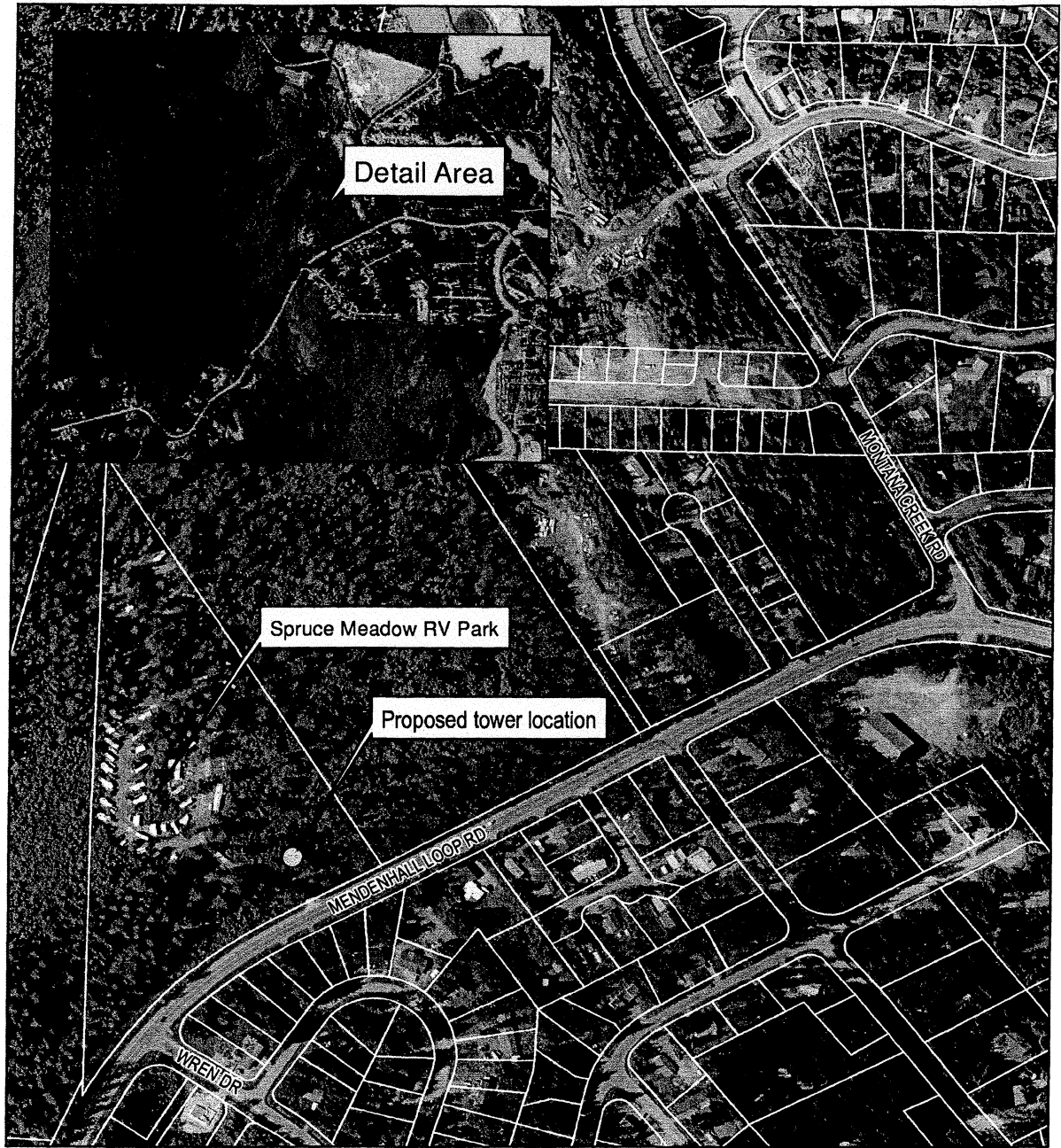
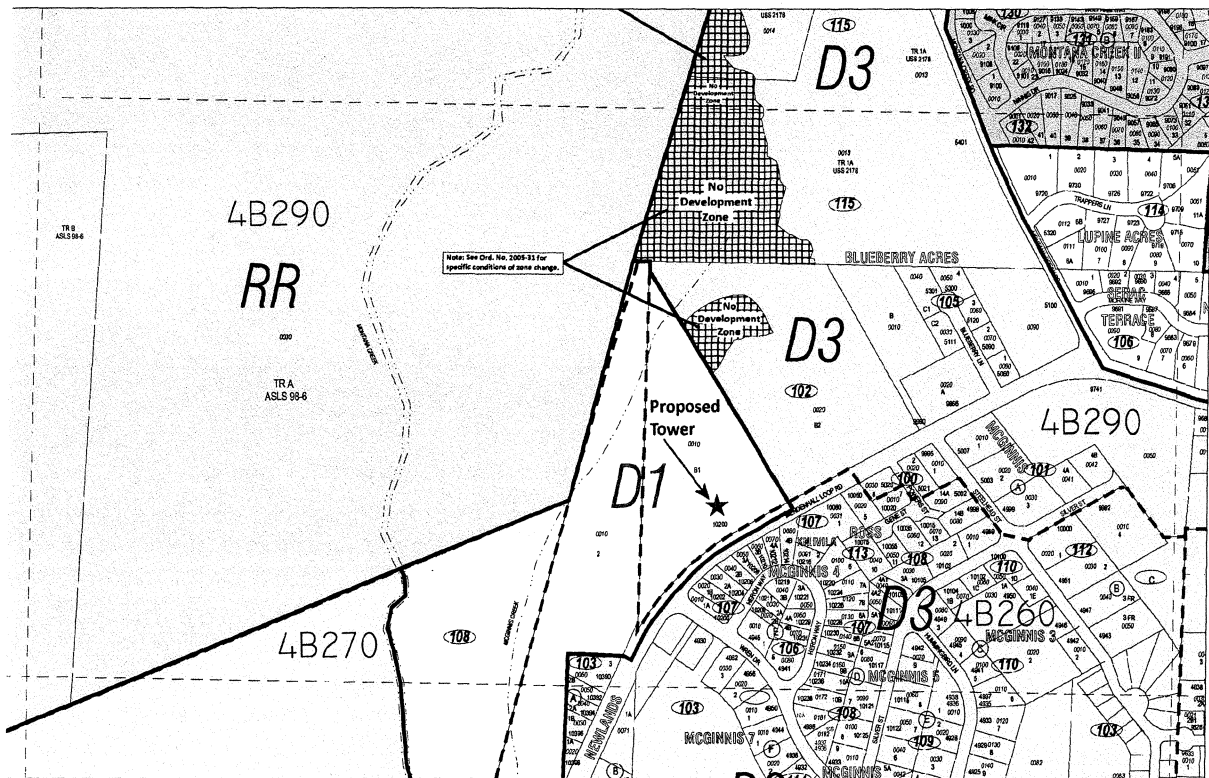


FIGURE 1 - SPRUCE MEADOW TOWER LOCATION MAP

**Proposed Project**

Westower Communications is negotiating approximately a 50'x50' lease from the owners of the Spruce Meadows RV Park, which is located at 10200 Mendenhall Loop Road, Juneau, Alaska described as Tract B1 of USS 1767. The site is developed as an RV Park on 12.5 acres zoned D1 - Low Density Residential - and has a conditional use permit for the existing development. The site has a band of tall spruce trees along the highway, approximately 90' to 100' tall. There is a meandering stream and forested wetlands with intermittent openings. The zoning map shows there is rural (RR) development lands to the west and more densely-zoned D3 lands to the northeast and south. Properties east and west are generally undeveloped. There is a residential subdivision across the street to the south developed with single-family homes and duplexes.



**FIGURE 2 - ZONING MAP WITH PROPOSED TOWER SITE LOCATION**

The project is for a proposed installation of an outdoor equipment cabin, a battery storage compartment and diesel generator in a shed muffled to 55 decibels mounted on a steel platform within the proposed lease area. The area will have a chain link fence. The installation will include six antennas on a platform and four 4' microwave antennas mounted on the proposed 119' high steel monopole tower.

As proposed and considered in our analysis, it is assumed that limited tree removal will take place for the placement of the pole. The conditional use permit application indicates the integrity of the tree buffer along the highway will be maintained by staff's recommendation on the condition of

approval requiring “the applicant will work with staff and avoid removing any trees over 12" in diameter, where practical.” The structure will be 95' away from the right-of-way of the Mendenhall Loop Road and about 300' away from the nearest RV park site and 250' from the eastside of the property. The existing evergreen trees should significantly obscure the pole, although it will be visible between the trees at certain angles. Views of the highest reach of the tower will also be visible from some neighborhood perspectives. Most traffic near the property would probably not notice the pole because its color will blend in with the high trees. The pole will be painted brown or green to help it blend in. It is expected the pole will be relatively well-screened and have a minimum visual impact to the area.

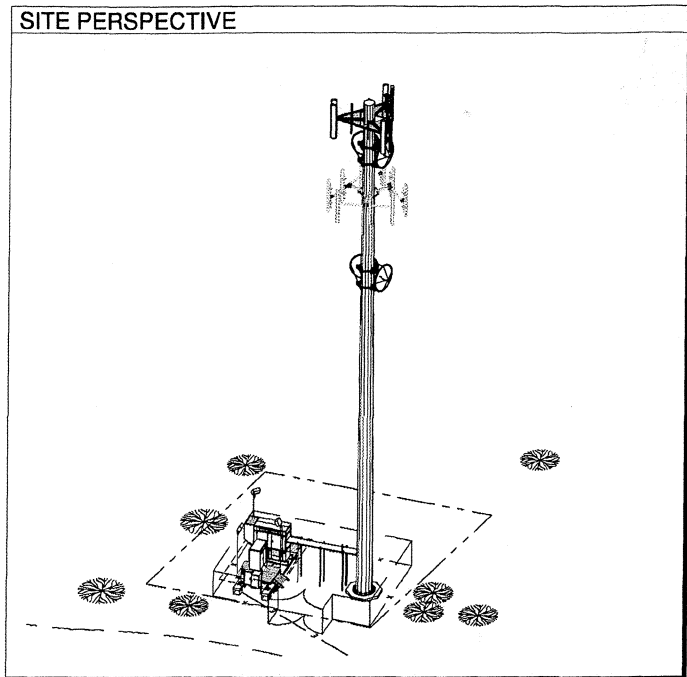


FIG 3 - SITE PERSPECTIVE

It is assumed the structure will meet wind and weight bearing specifications as it goes through the local building code process. The antennas will distribute electromagnetic radio waves that contain some level of radiation. These radio frequency levels must be in compliance with FCC emissions. There is a concern on the local level about the health hazards of cell tower emissions. There have been local concerns about these health risks and these risks are also expressed in national and international literature on the issues on cell towers and their possible bio-hazards. There are two sides to this debate. While a sincere concern for health risks have been raised at a number of public meetings for conditional use permits in conjunction with tall cellular phone tower development in Juneau, there is extensive public literature that indicates there is no convincing scientific evidence that weak radio frequency signals from base stations and wireless networks cause adverse health effects<sup>1</sup>. It is obvious that new research and information may emerge over time and the arguments for and against the health concerns may change in the future. The only purpose of our study is to determine if there is a current negative market response to the presence of cell towers in the type of screened setting anticipated at the Glacier Meadows RV Park as of December 2011.

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<sup>1</sup> See American Cancer Society web site under question *Do Cellular Phone Towers Cause Cancer?*  
<http://www.cancer.org/Cancer/CancerCauses/OtherCarcinogens/AtHome/cellular-phone-towers>

**Juneau Real Estate Market**

A market is a place where buyers and sellers meet to determine a price. The market in Juneau is relatively well developed with most transactions being handled by Realtors. There is an active Multiple Listing Service (MLS) that gives reasonable exposure for the bulk of the sales. As an indicator of the volume and pricing trends in this market, Figure 4 from the Juneau Economic Development Association shows average selling price of a single-family residence through the first quarter of 2011.

This trend covers a period when housing prices had run up, which generally follows the national trend, peaking in 2007 and then cooling in the following years based on the national recession and the uncertainty in the real estate market. The Juneau market, however, has remained strong over the past three years with a persistent employment and population base. Also, the capital creep ended or slowed significantly in 2009 along with the announcement that the Kensington Mine would come online. Indeed, production began in June 2010. Further, the influence of the state government in Juneau remained positive due to the strength of the treasury as a result of persistent high oil prices. In this environment, demand is good, sales brisk and the market would be characterized as in balance.

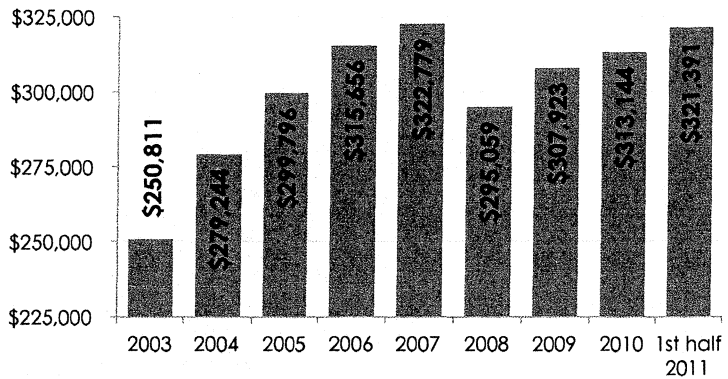
At the same time, the demand for cell phone usage has increased significantly. The increased demand has been filled mostly by AT&T and GCI within the Juneau area. They or their contractors have developed cell towers within the community in an attempt to get as complete coverage as possible. The Mendenhall Valley residential area has seen a development of several towers and some permitting of towers that have not been built. It is reported that within the subject area itself, reception is spotty for some carriers. The subject tower is proposed by a contractor for Verizon, which would introduce a new cell carrier in the Juneau market. Linda Williams, operator of the Glacier Meadows RV Park indicated a significant number of her patrons are unable to get cell access since they are Sprint customers. Anecdotally, others in the Montana Creek back loop area have found reception to be spotty.

**Housing**

**Juneau Housing Sales and Prices**

In the first half of 2011, home prices were up, and the average number of days on the market was down. The average price of a single-family residence was \$321,391—a three percent increase over the first half of 2009 and similar to 2007 (peak) prices. During the same period, the price of single-family homes nationally fell by 7 percent. Nationally homes are at their 2003 prices.

Single-Family Home Prices in Juneau, 2003-2011



Source: Juneau and Southeast Economic Indicators 2011, Juneau Economic Development Council

**FIG 4 - JUNEAU HOUSING STUDY**

**Value Impact and Harmony of Cell Tower Presence**

This study specifically addresses the City and Borough of Juneau Code 49.15.330 (d)(5)(B) f, which require the Planning Director and Commission to answer the question "Will [the proposed development] substantially decrease the value of or be out of harmony with property in the neighborhood area?" The term "substantially decrease the value" would mean there would be a measurable negative influence. In the subject instance, this would come from the visual impact of the tower and the market's perceived health and safety risks that would be substantial enough to be discernable through sales activity reflecting a measurable downward pricing trend discernable in the market. The term "be out of harmony" would be captured in these elements of market diminution due to the negative impact of sight, sound, smell or other perceived health or safety risks that were not present prior to the permitted use.

In the past, the appraiser has studied the Juneau market including specific sales research and interviews with knowledgeable market observers to discern what types of negative uses or situations may result in an impact on property values. Some of these impacts may be substantial or measurable to pricing in the market. Some impacts are more subtle and not considered to have a measurable impact on property values relative to comparable properties in areas without the particular disharmonious use. Some examples of situations that, in the extreme, may impact property values and on the other hand, if more subtle, probably would not impact property values include the following:

- a home in a slide area
- properties next to high voltage power lines, with view obstruction
- properties with significant view obstructions such as power poles, commercial and industrial or degraded uses within the view shed
- properties next to noxious odors or noises such as sewage treatment plants or airport noise
- properties within avalanche areas
- properties that have had oil spills or other bio-hazardous events that have been mitigated -- cleaned up or managed in place.

In order to determine the impact of these types of negative attributes, we have considered a variety of methods including matched-paired sales studies and interviews with local knowledgeable market observers. The matched-paired sales method would include identifying recent sales of properties near cell towers that are similarly situated to the proposed situation. These sales could then be contrasted with other neighborhood sales or sales as similar as can be found in all regards except for the influence of cell towers due to proximity or visual orientation. This would be a time consuming and costly study. Its ultimate reliability would depend upon the availability of observations or sales that would provide the needed contrast. In situations where cell towers are large, of noticeable contrasting colors, and provide extreme nearby view obstructions in a residential settings, it would be an easier hypothesis to test. In the subject's case, where the cell tower would be more subtle, it may be difficult to discern the subtle differences and would require a greater amount of market research with a questionable outcome depending on the quality of available data.



As an alternative, there is a more direct way to address the problem. We developed a second method, interviewing knowledgeable market observers.

Ultimately, real estate is local. Prices paid and the factors influencing those prices are based on local preferences and market knowledge. Trends observed in other areas may not be immediately applicable to the local market. Professionals who have observed their local market, especially Realtors and appraisers who are familiar with hundreds or thousands of transactions in the local market, would be the best to first discern what the expected impact of cellular phone towers would be on price or market value. The definition of market value is:

The most probable price that a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

(12 C.F.R. Part 34.42(g); 55 Federal Register 34696, August 24, 1990, as amended at 57 Federal Register 12202, April 9, 1992; 59 Federal Register 29499, June 7, 1994)

*The Dictionary of Real Estate Appraisal, 5th Edition, Appraisal Institute, Pages 123*

The critical element here is the knowledge of the buyers and sellers. In order to determine the buyer and seller knowledge base, we have interviewed appraisers, Realtors and others who are knowledgeable within the market place, having observed buyer and seller response to prices for various positive and negative aspects of residential real estate transactions in Juneau.

#### **INTERVIEWS WITH MARKET PARTICIPANTS**

##### **Juneau Residential Real Estate Appraisers' Feedback**

We've interviewed a significant number of brokers and residential real estate appraisers who work within the Juneau market and regularly communicate with buyers and sellers. Seven appraisers with over 100 years of experience and over 10,000 residential appraisals were asked if they had ever used a discount or adjustment for a property's locational influence relative to cell towers in the residential settings similar to the subject. The answer was no. Further inquiry was made as to what types of negative neighborhood influences might require consideration of market adjustments. Examples

included proximity to Lemon Creek Correctional Center, the garbage dump, substation noise, avalanche zone or slide areas, residential views over industrial parks or old mobile home parks. It is important to note that many of these negative influences are relative to comparables taken from other areas and are not necessarily negative for comparables from the similarly situated area.

#### **Juneau Residential Realtors' Feedback**

Similar to the question proposed to appraisers, Realtors were interviewed to ascertain if they had detected any influence of cell towers in their experience with buyers and sellers. Four Realtors interviewed represented involvement of approximately 1,400 transactions, with over 30 years experience within the Juneau market. Their responses were generally that there was no significant influence and, oftentimes, if cell towers were disguised, they were overlooked. There was an acknowledgment that if cell towers interfered significantly with the view shed, such as a large, direct, obstruction, which obstructed an otherwise scenic view, it may be an issue. However, there were no specific situations noted in this regard. One realtor commented that if there were a large tower developed immediately adjacent to the property it might have some influence, but it depended on the degree and how well screened the tower would be. In several cases, Realtors commented that they were never discussed or not known to have existed in areas where they were present. In some cases, cell tower installations were confused with electrical installations.

When asked if there were health concerns related to cell towers within the market that impacted value, the answer was no. One comment was that there may have been some health concerns with proximity to electrical substations, and they would expect that concerns of cell towers might be similar, however, there was no known adjustment for price based on these situations.

The Realtors were asked what kind of negative influences in the market they would consider substantial or measurable due to locational elements. Waste water treatment plant, a gas company, down wind from the dump and proximity to the jail and avalanche areas were all mentioned. Properties that had persistent noise or odor, significant view obstruction or known hazards such as avalanche may be considered significant within the market. When queried about less significant negative influences that may not be substantial, the indication was that if the degree of influences were moderate or subtle, they would not be significant market determinances.

#### **Anecdotal Data**

The presence of cell towers in many instances are unnoticed. There are comments from Realtors who sold houses adjacent to cell towers that they were not even aware the cell towers were there. One realtor handled two separate transactions within the last few years, literally across the street from the 100' tall cell tower at Valley Boulevard and Mendenhall Loop Road (8503 Valley Boulevard) and indicated the cell tower had no apparent influence on the transaction. A comment was made that the congested intersection and traffic along Mendenhall Loop Road would have more of an impact on price consideration.

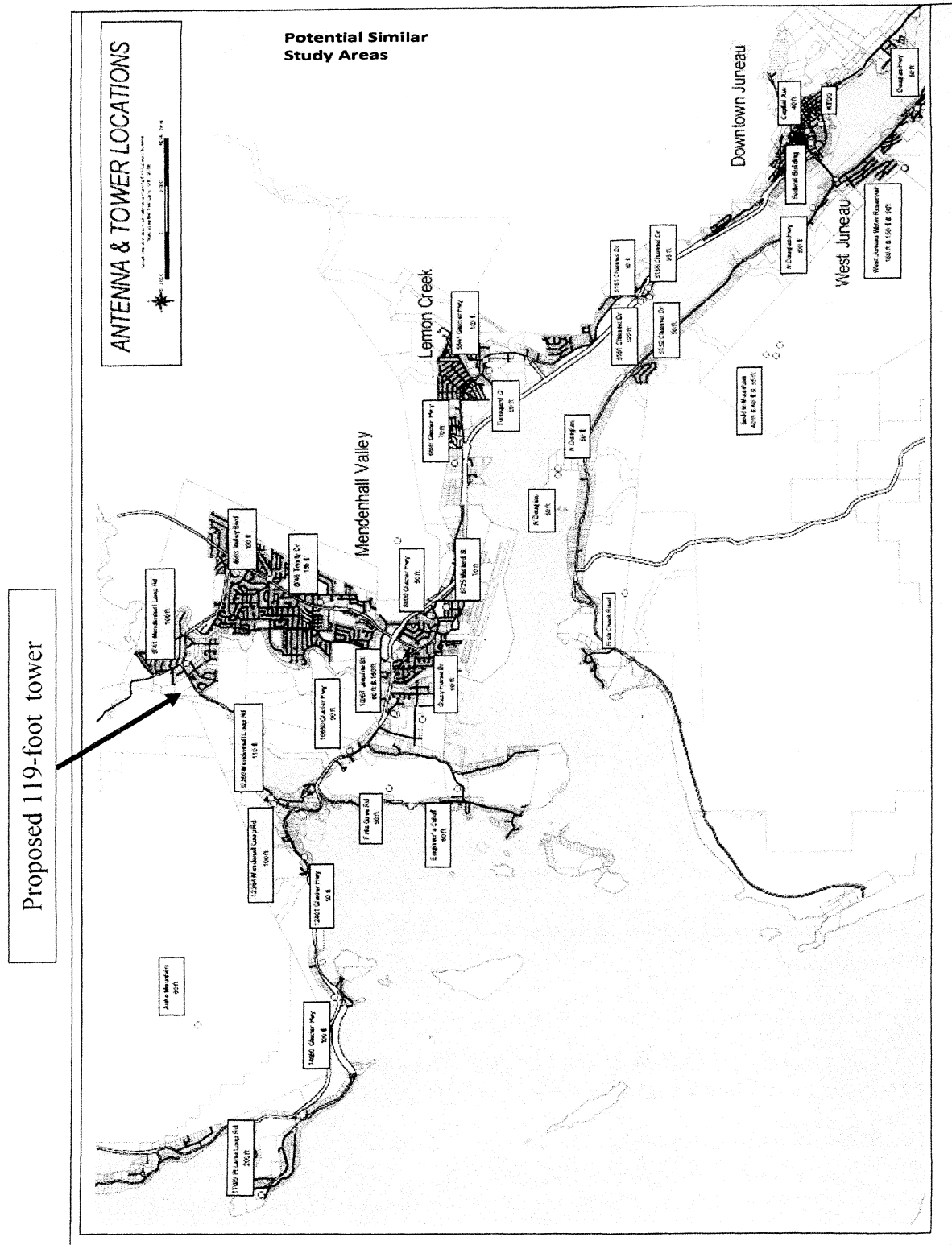


FIGURE 5 - ANTENNA AND TOWER LOCATIONS

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A renter at 12280 Mendenhall Loop Road, Darrell West, indicated the nearby cell tower made no negative difference to him or his roommates. In fact they appreciated that they had very good reception for their 3G Android cell phones.

The former City and Borough of Juneau Assessor related an incident where as Assessor he had made a downward adjustment for a cell tower on North Douglas. Within a year of making a substantial downward adjustment, he reported the property sold for \$200,000 over the adjusted value. There seems to be an acknowledgment in the market that a large tower blocking a scenic view could have an influence on value but this would be a rare case. There was no anecdotal data related to the Mendenhall Valley residential areas that would indicate well-situated, disguised cell towers would have a negative impact on surrounding property values.

### **Price Comparison**

The scope of this study did not include an analysis of pricing of properties directly in the influence of cell towers that would be comparable to the subject situation. The appraiser has reviewed various cell tower locations in the area as indicated on the adjacent map Figure 5. The most competitive towers would be those located at 12260 and 12364 Mendenhall Loop Road, at the Valley Chapel at 9741 Mendenhall Loop Road, 8503 Valley Boulevard, and 8748 Trinity Drive. The adjacent Figure 5 indicates the potential similar study areas that would likely mimic the impact, if any, in the proposed area.

Further study could be done to suggest a radius of influence for these towers and identify sales, which have occurred since their installation. The compared sales analysis would attempt to identify properties similarly situated of similar characteristics in similar market conditions (time) and determine if there were significant price differences between the sales explainable by the influence of the cell tower. It is not certain how many sales and paired similar properties would fulfill this criteria. Based on the research done so far and the interviews with knowledgeable market observers, it does not appear likely that the most competitive similarly situated cell towers would produce a negative influence on market values discernable by this paired sales technique. However, we stand ready to pursue this type of study if so desired.

### **Conclusion**

Based on a review of the competing potential similar study areas-neighborhoods, lack of documented discounts or negative market reactions towards the presence of cell towers in these residential settings based on interviews with local knowledgeable market observers, it is my conclusion there would be no substantial decrease of value due to the presence of the proposed cell tower to the surrounding neighboring properties. It is further my opinion that if a more in-depth study was completed through market price comparisons, it is highly probable it would not change this conclusion.

**HORAN & COMPANY, LLC**

# **ADDENDA**

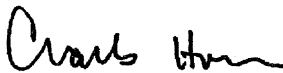
11-137 / Spruce Meadows RV Park Tower Installation

**HORAN & COMPANY, LLC**

**CERTIFICATION OF CONSULTATION**

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are my personal, impartial, and unbiased professional analyses, opinions, conclusions and recommendations.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute, which include the Uniform Standards of Professional Appraisal Practice.
- The use of this report is subject to the requirements of the Appraisal Institute relating to the review by its duly authorized representatives.
- I have made a personal inspection of the property that is the subject of this report.
- No one provided significant real property appraisal or appraisal consulting assistance to the person signing this certification.
- As of the date of this report, I, Charles Horan, MAI, have completed the continuing education program of the Appraisal Institute.



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Charles E. Horan, MAI, AA41

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December 21, 2011

Report Date

## **HORAN & COMPANY, LLC**

### **ASSUMPTIONS AND LIMITING CONDITIONS**

This appraisal report and valuation contained herein are expressly subject to the following assumptions and/or conditions:

1. It is assumed that the data, maps and descriptive data furnished by the client or his representative are accurate and correct. Photos, sketches, maps, and drawings in this appraisal report are for visualizing the property only and are not to be relied upon for any other use. They may not be to scale.
2. The valuation is based on information and data from sources believed reliable, correct and accurately reported. No responsibility is assumed for false data provided by others.
3. No responsibility is assumed for building permits, zone changes, engineering or any other services or duty connected with legally utilizing the subject property.
4. This appraisal was made on the premise that there are no encumbrances prohibiting utilization of the property under the appraiser's estimate of the highest and best use.
5. It is assumed that the title to the property is marketable. No investigation to this fact has been made by the appraiser.
6. No responsibility is assumed for matters of law or legal interpretation.
7. It is assumed that no conditions existed that were undiscoverable through normal diligent investigation which would affect the use and value of the property. No engineering report was made by or provided to the appraiser.
8. Unless otherwise stated in this report, the existence of hazardous material, which may or may not be present on the property, was not observed by the appraiser. The appraiser has no knowledge of the existence of such materials on or in the property. The appraiser, however, is not qualified to detect such substances. The presence of substances such as asbestos, urea-formaldehyde foam insulation, or other potentially hazardous materials may affect the value of the property. The value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value. No responsibility is assumed for any such conditions, or for any expertise or engineering knowledge required to discover them. The client is urged to retain an expert in this field, if desired.
9. The value estimate is made subject to the purpose, date and definition of value.
10. The appraisal is to be considered in its entirety, the use of only a portion thereof will render the appraisal invalid.

**HORAN & COMPANY, LLC**

11. Any distribution of the valuation in the report between land, improvements, and personal property applies only under the existing program of utilization. The separate valuations for land, building, and chattel must not be used in conjunction with any other appraisal and is invalid if so used.
12. The signatory of this appraisal report is a member of the Appraisal Institute. The bylaws and regulations of the Institute require each member and candidate to control the use and distribution of each appraisal report signed by such member or candidate. Therefore, except as hereinafter provided, the party for whom this appraisal report was prepared may distribute copies of this appraisal report in its entirety to such third parties as selected by the party for whom this appraisal report was prepared; however, selected portions of this appraisal report shall not be given to third parties without the prior written consent of the signatory of this appraisal report. Further, neither all nor any part of this appraisal report shall be disseminated to the general public by the use of advertising media, public relations media, news media, sales media or other media for public communication without the prior written consent of signatory of this appraisal report.
13. The appraiser shall not be required to give testimony or appear in court by reason of this appraisal with reference to the property described herein unless prior arrangements have been made.



## **HORAN & COMPANY, LLC**

### **QUALIFICATIONS OF CHARLES E. HORAN, MAI**

**Professional Designation**  
**State Certification**  
**Bachelor of Science Degree**

MAI, Member Appraisal Institute, No. 6534  
State of Alaska General Appraiser Certification, No. AA41  
University of San Francisco, B.S., 1973, Major: Business Administration

#### **Employment History**

|             |   |
|-------------|---|
| August 2004 | Owner, HORAN & COMPANY, LLC   |
| 03/87-07/04 | Partner, HORAN, CORAK AND COMPANY   |
| 1980-02/87  | Partner, The PD Appraisal Group, managing partner since November 1984<br>(formerly POMTIER, DUVERNAY & HORAN) |
| 1976-80     | Partner/Appraiser, POMTIER, DUVERNAY & COMPANY, INC., Juneau and Sitka, Alaska                                |
| 1975-76     | Real Estate Appraiser, H. Pomtier & Associates, Ketchikan, AK   |
| 1973-75     | Jr. Appraiser, Ketchikan Gateway Borough, Ketchikan, AK   |

#### **Lectures and Educational Presentations**

1998, "Easement Valuation Seminar," Alaska Chapter Appraisal Institute, Anchorage, AK  
1998, "Easement Valuation Seminar," Seal Trust, Juneau, Alaska  
1997, "Sitka Housing Market," Sitka Chamber of Commerce  
1997, developed and taught commercial real estate investment seminar for Shee Atika, Inc.  
1994, developed and taught seminar "Introduction to Real Estate Appraising," University of Alaska/S.E., Sitka Campus  
1985, Speaker at Sitka Chamber of Commerce, "What is an Appraisal? How to Read the Appraisal"  
1984, Southeast Alaska Realtor's Mini Convention, Juneau, Alaska  
    Day 1: Introduction of Appraising, Cost and Market Data Approaches  
    Day 2: Income Approach, Types of Appraisals, AIREA Accredited Course  
1983, "The State of Southeast Alaska's Real Estate Market"  
1982, "What is an Appraisal?"

#### **Types of Property Appraised**

**Commercial** - Retail shops, enclosed mall, shopping centers, medical buildings, restaurants, service stations, office buildings, auto body shops, schools, remote retail stores, liquor stores, supermarkets, funeral home, mobile home parks, camper courts. Appraised various businesses with real estate for value as a going concern with or without fixtures such as hotels, motels, bowling alleys, marinas, restaurants, lounges.

**Industrial** - Warehouse, mini-warehouse, hangars, docks barge loading facilities, industrial acreage, industrial sites, bulk plant sites, and fish processing facility. Appraised tank farms, bulk terminal sites, and a variety of waterfront port sites.

**Special Land** - Partial Interest and Leasehold Valuation - Remote acreage, tidelands with estimates of annual market rent. Large acreage land exchanges for federal, state, municipal governments and Alaska Native Corporations; retail lot valuations and absorption studies of large subdivisions; gravel and rock royalty value estimates; easements, partial interests, conservation easements; title limitations, permit fee evaluations. Appraised various properties under lease to determine leasehold and leased fee interests. Value easements and complex partial interests.

**Special Projects** - Special consultation for Federal land exchanges. Developed Land Evaluation Module (LEM) to describe and evaluate 290,000 acres of remote lands. Renovation feasibility, residential lot absorption studies, commercial and office building absorption studies. Contract review appraiser for private individuals, municipalities and lenders. Restaurant feasibility studies, Housing demand studies and overall market projections. Estimated impact of nuisances on property values. Historic appreciation / market change studies. Historic barren material royalty valuations, subsurface mineral and timber valuation in conjunction with resource experts. Mass appraisal valuations for Municipality of Skagway, City of Craig, Ketchikan Gateway Borough and other Alaska communities. Developed electronic/digital assessment record system for municipalities. Developed extensive state-wide market data record system which identified sales in all geographic areas.

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## **HORAN & COMPANY, LLC**

### **Expert Witness Experience and Testimony**

2009 Expert at mediation - Talbot's Inc vs State of Alaska, et al. IKE-07-168CI

2008 Albright vs Albright, IKE-07-265CI, settled

2006 State of Alaska vs Homestead Alaska, et al, 1JU-06-572, settled

2006 State of Alaska vs Heaton, et al, 1JU-06-570CI, settled

2006 State of Alaska vs Jean Gain Estate, 1JU-06-571, settled

2004 Assessment Appeal, Board of Equalization, Franklin Dock vs City and Borough of Juneau

2000 Alaska Pulp Corporation vs National Surety - Deposition

U.S. Senate, Natural Resources Committee

U.S. House of Representatives, Resource Committee

Superior Court, State of Alaska, Trial Court and Bankruptcy Courts

Board of Equalization Hearings testified on behalf of these municipalities: Ketchikan Gateway Borough, City of Skagway, City of Pelican, City and Borough of Haines, Alaska

Witness at binding arbitration hearings, appointed Master for property partitionment by superior state court, selected expert as final appraiser in multi parties suit with settlements of real estate land value issues

### **Partial List of Clients**

#### Federal Agencies

Bureau of Indian Affairs  
Bureau of Land Mngmnt  
Coast Guard  
Dept. Of Agriculture  
Dept. Of Interior  
Dept. Of Transportation  
Federal Deposit Ins Corp  
Federal Highway Admin.  
Fish & Wildlife Service  
Forest Service  
General Service Agency  
National Park Service  
USDA Rural Develop.  
Veterans Administration

#### Lending Institutions

Alaska Growth Capital  
Alaska Pacific Bank  
Alaska Ind. Dev. Auth.  
ALPS FCU  
First Bank  
First National Bank AK  
Key Bank  
Met Life Captial Corp.  
National Bank of AK  
Rainier National Bank  
SeaFirst Bank  
True North Credit Union  
Wells Fargo  
Wells Fargo RETECHS

#### ANCSA Corporations

Cape Fox, Inc.  
Doyon Corporation  
Eyak Corporation  
Goldbelt  
Haida Corporation  
Huna Totem  
Kake Tribal Corporation  
Klawock-Heenya Corp.  
Klukwan, Inc.  
Kootznoowoo, Inc.  
Sealaska Corporation  
Shaan Seet, Inc.  
Shee Atika Corporation  
TDX Corporation  
The Tatitlek Corporation  
Yak-Tat Kwan

#### Companies

AK Electric Light & Power  
AK Lumber & Pulp Co.  
AK Power & Telephone  
Allen Marine  
Arrowhead Transfer  
AT&T Alscorn  
Coeur Alaska  
Delta Western  
Gulf Oil of Canada  
Hames Corporation  
HDR Alaska, Inc.  
Holland America  
Home Depot  
Kennecott Greens Creek  
Kennedy & Associates  
Madsen Construction, Inc.  
Service Transfer  
Standard Oil of CA  
The Conservation Fund  
Union Oil  
Ward Cove Paking  
White Pass & Yukon RR  
Yutana Barge Lines

#### Municipalities

City & Borough of Haines  
City & Borough of Juneau  
City & Borough of Sitka  
City of Akutan  
City of Coffman Cove  
City of Craig  
City of Hoonah  
City of Ketchikan  
City of Klawock  
City of Pelican  
City of Petersburg  
City of Thorne Bay  
City of Wrangell  
Ketchikan Gateway Borg.  
Municipality of Skagway

#### Other Organizations

Baranof Island Housing  
Authority (BIHA)  
Central Council for Tlingit  
& Haida Indian Tribes  
of Alaska (CCTHITA)  
Diocese of Juneau  
Elks Lodge  
Hoonah Indian Assoc.  
LDS Church  
Moose Lodge  
SE AK Land Trust (SEAL)  
SE AK Reg Health  
Consortium (SEARHC)  
Sitka Tribe of Alaska  
The Nature Conservancy

#### State of Alaska Agencies

Alaska State Building  
Authority (formerly  
ASHA)  
Attorney General  
Dept. of Fish & Game  
Dept. of Natural Service,  
Div. of Lands  
Dept. of Public Safety  
Dept. of Transportation &  
Public Facilities  
(DOT&PF)  
Mental Health Land Trust  
Superior Court  
University of Alaska

## **HORAN & COMPANY, LLC**

### **Education**

- Uniform Standards of Professional Appraisal Practice - 2011 Update, Juneau, AK; June 2011
- Current Issues & Regulatory Updates Affecting Appraisers #10066; William King & Associates, Inc., Juneau, AK; June 2011
- Loss Prevention Program for Real Estate Appraisers; LIA Administrators & Insurance Services; Juneau, AK; June 2011
- Uniform Appraisal Standards for Federal Land Acquisitions (UASFLA), Rockville, MD, Oct 2010
- Business Practices and Ethics, Seattle, WA, Apr 2010
- Fall Real Estate Conference, Seattle, WA, Dec 2009
- 7-hour National USPAP Update Course, Seattle, WA, May 2009
- Fall Real Estate Conference, Seattle, WA, Nov 2008
- Attacking and Defending an Appraisal in Litigation, Kent, WA, Sep 2008
- Sustainable Mixed-Use N.I.M., Seattle, WA, Feb 2008
- Appraising 2-4 Unit Properties, Bellevue, WA, Sep 2007
- Business Practices and Ethics, Seattle, WA, Jun 2007
- 7-hour National USPAP Update Course, Seattle, WA, Jun 2007
- Residential Market Analysis and Highest and Best Use, Seattle, WA, Apr 2007
- Basic Appraisal Procedures, Seattle, WA, Feb 2007
- USPAP Update Course, Anchorage, AK, Feb 2005
- Rates & Ratios: Making Sense of GIMs, OARs, and DCF, Anchorage, AK, Feb 2005
- Best Practices for Residential Appraisal Report Writing, Juneau, AK, Apr 2005
- Scope of Work - Expanding Your Range of Services, Anchorage, AK, May 2003
- Litigation Appraising - Specialized Topics and Applications, Dublin, CA, Oct 2002
- UASFLA: Practical Applications for Fee Appraisers, Jim Eaton, Washington, D.C., May 2002
- USPAP, Part A, Burr Ridge, IL, Jun 2001
- Partial Interest Valuation - Undivided, Anchorage, AK, May 2001
- Partial Interest Valuation - Divided, Anchorage, AK, May 2001
- Easement Valuation, San Diego, CA, Dec 1997
- USPAP, Seattle, WA, Apr 1997
- The Appraiser as Expert Witness, Anchorage, AK, May 1995
- Appraisal Practices for Litigation, Anchorage, AK, May 1995
- Forestry Appraisal Practices, Atterbury Consultants, Beaverton, OR, Apr 1995
- Advanced Sales Comparison & Cost Approaches, Univ. of Colorado, Boulder, CO, Jun 1993
- Computer Assisted Investment Analysis, University of Maryland, MD, Jul 1991
- USPAP, Anchorage, AK, Apr 1991
- General State Certification Review Seminar, Anchorage, AK, Apr 1991
- State Certification Review Seminar, Dean Potter, Anchorage, AK, Apr 1991
- Highest and Best Use and Market Analysis, Baltimore, MA, Mar 1991
- Financial Institution Reform, Recovery & Enforcement Act of 1989, Doreen Fair Westfall, Appraisal Analyst, OTS, Juneau, AK, Jul 1990
- Real Estate Appraisal Reform, Gregory Hoefler, MAI, OTS, Juneau, AK, Jul 1990
- Standards of Professional Practice, Anchorage, AK, Oct 1987
- Federal Home Loan Bank Board Memorandum R41C Seminar, Catherine Gearhearth, MAI, FHLBB District Appraiser, Juneau, AK, Mar 1987
- Market Analysis, Boulder, CO, Jun 1986
- Federal Home Loan Bank Board Regulation 41b, Instructor Bob Foreman, MAI, Seattle, WA, Sep 1985
- Litigation Valuation, Chapel Hill, North CA, Aug 1984
- Standards of Professional Practices, Bloomington, IN, Jan 1982
- Course 2B, Valuation Analysis & Report Writing, Stanford, CA, Aug 1980
- Course 6, Introduction to Real Estate Investment Analysis, Aug 1980
- Course 1B, Capitalization Techniques, San Francisco, CA, Aug 1976
- Course 2A, Case Studies in Real Estate Valuation, Aug 1976
- Course 1A, Real Estate Principles and Valuation, San Francisco, CA, Aug 1974

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