## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

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THE APPLICATION OF	)
THE TOWERS, LLC D/B/A VERTICAL BRIDGE	)
AND KENTUCKY RSA 1 PARTNERSHIP BY CELLCO	)
PARTNERSHIP D/B/A VERIZON WIRELESS, ITS	)
MANAGING PARTNER	)
FOR ISSUANCE OF A CERTIFICATE OF PUBLIC	) CASE NO.: 2025-00302
CONVENIENCE AND NECESSITY TO CONSTRUCT	)
A WIRELESS COMMUNICATIONS FACILITY	)
IN THE COMMONWEALTH OF KENTUCKY	)
IN THE COUNTY OF MARSHALL	)

SITE NAME: TIM ROAD

\* \* \* \* \* \* \*

#### APPLICANTS' RESPONSE TO REQUEST TO INTERVENE OF JENNIFER FISK

#### 1.0 INTRODUCTION

The Towers, LLC d/b/a Vertical Bridge and Kentucky RSA 1 Partnership by Cellco Partnership d/b/a Verizon Wireless (collectively "Applicants"), by counsel, make this timely Response to the request for intervention and hearing filed on behalf of Jennifer Fisk on December 8, 2025.

Applicants request that intervention be denied, no public hearing be held, and a Certificate of Public Convenience and Necessity ("CPCN") be granted to Applicants to proceed with construction of the proposed communications facility based on the facts, evidence, and argument below.

#### 2.0 KEY FACTS AND EVIDENCE

Applicants have proposed a 255' self-support cellular antenna tower with a 10' lightning rod in the within Case No. 2025-00302 as documented in the "CPCN Application." As stated in Paragraph 28 of said Application:

"The general area where the proposed facility will be located is predominantly rural in character and consists primarily of agricultural uses and sparse residential uses. The site parcel itself is rural with significant wooded areas and a residential use at the north edge of the parcel."

The proposed tower site is located on a large parcel and is set back approximately 237 feet from Arant Road.<sup>2</sup> Ms. Fisk's property is Parcel 9 as identified on the "500' Radius & Adjoiner Map" filed as part of Exhibit B to the CPCN Application. Only a portion of Ms. Fisk's property is within 500' of the tower site. The Site Plan with Aerial Overlay drawing (P-1) attached as part of Exhibit B to the CPCN Application shows extensive tree cover between the residence owned by Ms. Fisk and the tower site.

The aforementioned "500' Radius & Adjoiner Map" shows a number of other parcels adjoining the parent parcel on which the proposed tower is located. Location of the tower further away from Ms. Fisk's property might only raise objection from other neighbors who have residences on their property or claim to have residential development plans. Ms. Fisk's filing makes no showing of a "more suitable location" which is "reasonably available." She merely objects based on purported impact on *her* property

<sup>&</sup>lt;sup>1</sup> Exhibits B and C of the CPCN Application, as incorporated herein, provide numerous illustrative drawings of the proposed tower site and vicinity.

<sup>&</sup>lt;sup>2</sup>See "Proposed Overall Site Plan with Equipment Pad & Tower Distance to Property Line" (P-2) as part of Exhibit B to the CPCN Application.

<sup>&</sup>lt;sup>3</sup> See 807 KAR 5:063 – Section 1(s). Of course, Applicants have no condemnation power so must find a location a landlord is willing to lease. In attacking the selected site location, Ms. Fisk must, as a threshold matter, show any suggested alternative location is

with no evidence germane to the broader standards which govern the PSC's decision. Such unproven objection could be asserted by any property owner in the vicinity. Accordingly, Ms. Fisk's request presents no "special reasons" for intervention.

Applicants have attached and incorporated a *Real Estate Value Impact Report* from Glen D. Katz, MAI, SRA, AI-GRS, AI-RRS, a property valuation expert, ("Katz Report") as **Exhibit A** to this Response. The Katz Report weighs heavily against any determination of property value reduction from the proposed tower. Ms. Fisk's bare bones request for intervention which identifies no dollar value amount of purported property value reduction and includes no such supported expert testimony.

Applicants have further attached and incorporated as **Exhibit B** to this Response a *Statement of Network Need for a New Communications Tower* ("Statement of Need") dated August 24, 2024 signed by Verizon Radio Frequency Engineer Antonia Ramos. The Statement of Need illustrates the proposed tower is necessary to resolve a significant service gap in the area. This is uncontroverted expert testimony of service need.

Marshall County has not adopted general planning and zoning regulations applicable to unincorporated areas, nor has it adopted specific regulations regarding the placement, construction and modification of wireless communications facilities. Any property purchased in unincorporated Marshall County is acquired within a legal framework where the surrounding neighbors are free to develop their property in any manner they desire without regulation from local government beyond any required local building permit. In this vacuum of local regulation, there is no basis to see how a cellular

technically feasible and available for leasing. She has offered no such evidence and has not proffered that she could do so at a later point in the proceeding.

antenna tower 237 feet from the property line could reduce property value of Ms. Fisk's property on the other side of Arant Road. Almost any commercial, industrial or agricultural<sup>4</sup> land use not otherwise constrained by federal or state law could be undertaken directly across the street from Ms. Fisk's property at any time.

Ms. Fisk's request for hearing is not supported of record in writing by 3 interested persons with appropriate residency. Accordingly, the standard for a local public hearing set forth in KRS 278.650 is not met.

#### 3.0 APPLICABLE LAW SUPPORTS DENIAL OF INTERVENTION

**3.1 Overview.** Applicants reject any claim that the presence of a cellular antenna tower in the subject area of Marshall County is disfavored based on property value allegations. The Kentucky Legislature has adopted KRS 278.546 finding that "... state-of-the-art telecommunications is an essential element to the Commonwealth's initiatives to improve the lives of Kentucky citizens, to create investment, jobs, economic growth, and to support the Kentucky Innovation Act of 2000...." An unsupported argument against a proposed tower by a single neighbor is a "not in my back yard" ("NIMBY") plea. Inherently, it arises from general aesthetic objection which cannot be a basis for denial of the CPNC Application which would be in compliance with the Telecommunications Act and PSC regulations.<sup>5</sup> Moreover, such allegations cannot overcome public policy of the

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<sup>&</sup>lt;sup>4</sup> Note the broad authority of a property owner to conduct agricultural activities under the agricultural supremacy statute at KRS 100.203(4). Ms. Fisk has no guarantee under the law of the Commonwealth that property in the vicinity of her own will remain undisturbed in a natural state.

<sup>&</sup>lt;sup>5</sup> Cellco Partnership v. Franklin Co., KY, 553 F. Supp. 2d 838, 851 (E.D. Ky. 2008). See also *T-Mobile Cent.*, *LLC v. Charter Township of West Bloomfield*, 691 F.3d 794 (6<sup>th</sup> Cir. 2012) and *New Par v. Charter Township of Brighton*, 452 F. Supp. 3d 663 (E.D. Michigan 2020).

Commonwealth and the mission of the PSC in encouraging utility service. Grant of intervention on a bare bones speculative pleading would only create delay and cost for all involved with no likelihood that legal grounds for denial of the requested CPCN could be established.

Ms. Fisk's request attempts to position the PSC to become the Commonwealth's "Property Value Policeman" for new cellular antenna towers. Even if Ms. Fisk were to later be permitted to produce expert testimony supporting her property valuation claims, such evidence would only create a record of disputed evidence considering the Katz Report. KRS 278.650 does provide that the PSC "... may take into account the character of the general area concerned and the likely effects of the installation on nearby land uses and values." However, the statute does not compel the agency to deny a proposed cellular antenna tower even in the unlikely event some adverse effect on a neighboring property's value were to be determined. Applicants are aware of no final denial of a tower CPCN case by the PSC on such basis and Ms. Fisk cited no such decision.

#### 3.2 The Need for Service is the Critical Determinant for the Grant of a CPCN.

To obtain a CPCN, the Applicants need to demonstrate a need for the proposed cellular antenna tower to provide service and an absence of wasteful duplication.<sup>6</sup> Ms. Fisk's request for intervention presents no issue of absence of radio frequency need nor of alleged duplication of service.<sup>7</sup> Even if Ms. Fisk's speculative allegation of property value reduction could be proven, denial of the CPCN Application would not be authorized by

<sup>&</sup>lt;sup>6</sup> Kentucky Utilities Co. v. Public Service Commission, 252 S.W.2d 885 (Ky. 1952). In accord is Iola Capital v. Public Service Commission of Kentucky, 659 S.W.3d 563, 574 (Ky. App. 2022).

<sup>7</sup> *Id.* at 890.

Kentucky statutory law or any regulation of the PSC. The Court of Appeals explained in *Iola Capital v. Public Service Commission of Kentucky*, 659 S.W.2d 563, 571 (Ky. App. 2022), "As should be evident from the language used in the statute, regulations, and caselaw, CPCN's are concerned with the need for services for consumers in general, rather than how the services will affect the property owners whose land is traversed by the utility." The same principles apply in the present case so as to make the unsupported request for intervention an exercise in futility which offers no assistance to the PSC in reaching its ultimate decision on the CPCN Application.

**3.3 Absence of Setback Regulations**. The PSC has no regulations which require a cellular antenna tower to be any particular distance from an adjoining property line or a residence in the vicinity. The regulations of a government agency with jurisdiction over cellular antenna tower siting constitute substantial evidence.<sup>8</sup> The absence of a setback requirement in the PSC's otherwise comprehensive regulations prevents there from being substantial evidence to support a denial of the CPCN Application on a claim the tower is too close to a neighboring residence. No *objective* setback standard has been established pursuant to regulation or statute.<sup>9</sup> Reliance on claims of property value reduction to deny

<sup>&</sup>lt;sup>8</sup> Cellco Partnership v. Franklin Co., KY, 553 F. Supp. 2d 838, 845-846 (E.D. Ky. 2008).

<sup>&</sup>lt;sup>9</sup>Kentucky's appellate courts have held land use permitting schemes which are not based on objective standards to be unconstitutional. See *Hardin County v. Jost*, 897 S.W.2d 592 (Ky. App. 1995). Ms. Fisk is attempting to persuade the PSC to make an *ad hoc* decision as to whether proximity to a tower could impact property value when the PSC has adopted no generally applicable standards as to what distance is or is not sufficient to avoid adverse impact on a property in the vicinity or identified what types of structures could be considered adversely effected. The PSC should decline to open this Pandora's Box in consideration of the potential for violation of arbitrariness and equal protection mandates and in light of the federal Telecommunications Act requirement that it not discriminate among providers.

a request for CPCN would thus involve speculation based on no objective standards and be arbitrary in violation of Section 2 of the Kentucky Constitution.

#### 3.4 Expert Report Supporting Absence of Negative Effect on Property Value.

As mentioned above, Applicants have submitted the expert testimony of Glen Katz, a highly credentialed appraiser, as **Exhibit A** to this Response in the form of a *Real Estate Value Impact Study* (a/k/a the "Katz Report"). The Katz Report, speaks for itself in meticulous and reasoned detail. The concluding paragraphs of the Katz Report illustrate Ms. Fisk's bare allegations provide no basis for intervention:

Property owners near tower facilities, highly visible utility structures, associated easements, etc., are not penalized on value. There are no changes to ownership rights. Insurability is not affected. Mortgage terms to buyers and owners are not influenced. Consistently, communications tower structures, like overhead electric distribution lines, water towers, and buried utility easements, are beneficial and necessary infrastructure. As a result of expanding utilities and increased services, neighborhoods and properties experience positive influences. Because of the deployment of cellular facilities over the past several decades, owners and buyers of real estate expect excellent cell phone reception, and that connectivity requires adequate infrastructure. Cell towers satisfy demand and are visibly absorbed by the landscape of a neighborhood and lifestyles of the population. Cell towers are much like other modern infrastructure. Although cell towers may be noticed initially, they quickly fade into the background and have no negative effect on value - just as streets, easements, telephone poles, utility lines, streetlights, and the other visible infrastructure components of modern life do not generally have negative influences on real estate values.

Therefore, based on the actions of market participants buying, occupying, investing, and selling real estate properties, consistent market evidence shows this type of tower facility has not, and does not, negatively impact surrounding property, and supports the positive influences on value and demand for real estate due to expansion of public utilities, which includes wireless telecommunications tower infrastructure." *Id.* at Katz Report, p. 9-10.

The bare allegations of Ms. Fisk cannot be relied upon by the PSC to deny the CPCN Application or even grant intervention in the face of the expert testimony detailed

in the Katz Report. Even if Ms. Fisk were to be allowed to later produce expert testimony consistent with her allegations, it would only mean there was contradictory evidence in the record. Kentucky law would not support the PSC ignoring proven need for improved wireless service through a new tower to be thwarted by the PSC allowing speculative property value considerations as to a single neighbor's property to trump utility service considerations. Moreover, the federal Telecommunications Act would not allow such result in that it would be, at minimum, a prohibition of wireless service.

3.5 Grant of Intervention is in Sole Discretion of PSC. Only the Kentucky Attorney General is entitled to intervention in a PSC proceeding as a matter of right. Intervention for any other person is permissive in the sole discretion of the PSC.<sup>10</sup> Kentucky's has recently recognized this discretion in *Iola Capital v. Public Service Commission of Kentucky*, 659 S.W.3d 563, 574 (Ky. App. 2022)("The Commission had the discretion to disallow any requests by the appellants to intervene in CPCN matters."). See also SBA Communications Corp. v. PSC of Kentucky, 2023 Ky. App. Unpub. LEXIS 551, Review Denied by SBA Communications Corp. v. Public Service Commission, 2024 Ky. LEXIS 123 (Ky. April 12, 2024). The statutory standard for permissive intervention, KRS 278.040(2), requires that "the person seeking intervention must have an interest in the "rate" or "service" of a utility, since those are the only two subjects under the jurisdiction of the PSC.<sup>11</sup> Ms. Fisk has claimed no such interest.

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<sup>&</sup>lt;sup>10</sup> Inter-County Rural Electric Cooperative Corporate v. Public Service Commission of Kentucky, 407 S.W.2d 127, 130 (Ky 1966).

<sup>&</sup>lt;sup>11</sup> EnviroPower, LLC v. Public Service Commission of Kentucky, No. 2005-CA-001792-MR, 2007 WL 289328 AT 3 (Ky. App. Feb. 2, 2007).

The regulatory standard for permissive intervention, set forth in 807 KAR 5:001, Section 4, is two-fold. Commission regulation 807 KAR 5:001, Section 4(11) requires a person to set forth in the motion to intervene either (1) a special interest in the proceeding that is not otherwise adequately represented in the case, or (2) that intervention is likely to present issues or develop facts that will assist the Commission in fully considering the matter without unduly complicating or disrupting the proceedings. Ms. Fisk's filling meets neither prong of the regulatory requirement.

**3.6** *Potts* does not Require Grant of Intervention. The Court of Appeals Opinion styled *Potts v. Public Service Commission*, 643 S.W.3d 83 (Ky. App. 2021), decided prior to *Iola*, is no panacea for Ms. Fisk. The Opinion plainly recognizes "... we will not usurp the Commission's role to fact find whether Biddle and Potts have demonstrated a special interest requiring they be granted intervention." *Id.* at 94. "Demonstration" of a special interest puts the evidentiary burden on persons attempting to intervene. No such demonstration exists in the within action in which only bare bones allegations have been made by the request for intervention.

A key distinction from *Potts*, *supra*, is that: "Biddle and Potts <u>offered</u> to provide not just their own opinions as to the inappropriateness of the placement of the cell tower and the feasibility of other sites, but also <u>expert witnesses</u> to support their opinions." (Emphasis added). *Id.* at 95. Ms. Fisk has made no such offer and seeks grant of intervention on grounds only of a cryptic one-page filing. Thus, she has not met the minimum requirements for intervention to be considered.

3.7 The PSC Recently Denied a Similar Request for Intervention. The PSC has denied a request for intervention in a cellular tower CPCN case just this year in Case

No 2025-00028 on the following reasoning:

"The request did not identify any special interest in the proceeding, but rather general objections: to the location of the proposed facilities; that residential property values will decrease; and concerns regarding health risk due to the proximity of the cell tower. The request stated that the proposed project will have a negative impact on residential home values in the area but provided no evidence, not did they indicate a willingness or ability to generate evidence to support this allegation. More specifically, the request did not provide any documentation of specific potential negative impacts on the proposed locations of the facilities or of the surrounding area...." (Emphasis added). May 27, 2025 Order in PSC Case #2025-00028, 2025 Ky PUC LEXIS 345.

A CPCN was granted in Case #2025-00028 after the denial of intervention.

Ms. Fisk's request for intervention is strikingly similar to the one addressed in Case No. 2025-00028 and should meet the same result. With all due respect, Ms. Fisk is merely an adjoining property owner with an opinion as to property valuation issues. Her filing identifies no special status of her property making it different from any other property in the vicinity containing a residence. She is more than welcome to file public comment with the PSC, but no persuasive basis exists for the grant of intervention.

3.8 The Federal Telecommunications Act Prevents Denial of a CPCN Application on Unsupported Property Valuation Allegations. The U.S. Court of Appeals for the Sixth Circuit has held that lay opinion or generalized concerns are not substantial evidence justifying a rejection of a new cellular tower application under the federal Telecommunications Act. Such unsupported allegations are all that is offered in Ms. Fisk's bare bones request for intervention. Federal courts have also found that unsupported opinion is not substantial evidence. *Cellco Partnership* at 849. See *T-Mobile Central, LLC v. Charter Township of West Bloomfield*, 691 F.3d 794, 804 (6<sup>th</sup> Cir. 2012). The conclusory filing of Ms. Fisk requesting intervention offers no support for the claim of

property value reduction. Intervention would be of no assistance to the PSC in reaching its decision on the CPCN Application under KRS Chapter 278, its own implementing regulations or within the parameters of the federal Telecommunications Act. Grant of intervention and reliance on the allegations of Ms. Fisk to deny the CPCN Application would violate the federal Telecommunications Act for absence of substantial evidence and for prohibition of wireless service. The PSC should not allow Ms. Fisk to lead the agency into such a quagmire.

3.9 The PSC Should Consider the FCC 150-Day Shot Clock before Opening the Door to Protracted Intervention Proceedings. The Federal Communications Commission 150-day Shot Clock<sup>12</sup> governs the decision period for state and local government action on new tower applications. PSC Staff issued a "No Deficiency" letter on October 22, 2025, so the Shot Clock is already well under way. Protracted proceedings in which, at best, the record will contain contradictory evidence on whether a tower impacts Mrs. Fisk's property value will only push resolution of this proceeding toward the 150-day deadline when the property valuation issue is not determinative of the grant of a CPCN. Such futile delay only postpones resolution of the uncontested significant gap in wireless service in the area. Applicants reserve all rights pursuant to the Shot Clock.

#### 4.0 CONCLUSION AND REQUEST FOR RELIEF

Applicants request the PSC deny the request for intervention on all applicable law discussed above. The uncontested radio frequency need for the tower in the interest of the public convenience and necessity cannot be thwarted under Kentucky law and/or the federal Telecommunications Act, regardless of one neighbor's speculative claims of

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<sup>&</sup>lt;sup>12</sup> 24 F.C.C.R. 13994, 13996.

reduction in property values.

Ms. Fisk's opportunity to file public comment is more than sufficient to provide her with any due process to which she is entitled.

The PSC should deny the request for a local public hearing<sup>13</sup> or any other form of public hearing in Frankfort. The PSC has overwhelmingly made tower CPCN decisions "on the record." There is no rational basis for any different approach in this case.

In the alternative, should the PSC grant the request for intervention, it should by appropriate Order narrow the scope to the property value issue raised in the request and provide for reasonable confidentiality protection for proprietary information held by Applicants. Moreover, since the request for intervention made no allegations as to radio frequency need for the site, inquiry into such topic should be excluded from the intervention proceedings. Ms. Fisk should be required to offer any testimony on property valuation only via expert testimony in that the Applicants have already offered expert testimony on such issues and lay testimony cannot be a basis for a tower permitting decision under the federal Telecommunications Act. In addition, the author of any correspondence, study, appraisal, report, or article offered by Ms. Fisk as evidence in this proceeding should be subject to in-person cross-examination by counsel for Applicants at the location of any public hearing in this proceeding in order to protect the due process rights of applicants. Finally, reference to any alternative site location offered by Ms. Fisk should be supported by a written statement of interest from the subject landowner confirming they will entertain a long term lease for a cell tower site on the same or better

<sup>&</sup>lt;sup>13</sup> The "3 interested persons" request standard of KRS 278.650 has not been met by the individual filing of Ms. Fisk.

lease terms than the existing property owner and for a tower of the same height and design as proposed in the existing CPCN Application.

WHEREFORE, there being no grounds for grant of intervention or for denial of the subject application and substantial evidence of record being in support of the requested CPCN, Applicant respectfully request the Kentucky Public Service Commission:

- (a) Accept this Response for filing;
- (b) DENY the request for intervention and hearing;
- (c) Issue a Certificate of Public Convenience and Necessity to construct and operate the cellular antenna tower at the location requested without further delay; and
- (d) Grant Applicants any other relief to which they are entitled.

Respectfully submitted,

Is David A. Pike

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David A. Pike And

Is 7. Keith Brown

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Attorneys for Applicants

#### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that on this 15th day of December 2025, a true and accurate copy of the foregoing was electronically filed with the PSC and sent by U.S. Postal Service first class mail, postage prepaid, to Tom Blankenship, Attorney at Law, P. O. Box 571 Benton, KY 42025 (Attorney for Jennifer Fisk).

Respectfully submitted,

1st 7. Keith Brown

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F. Keith Brown Attorney for Applicants

## **EXHIBIT A**

# REAL ESTATE VALUE IMPACT STUDY BY GLEN D. KATZ, MAI, SRA, AI-GRS, AI-RRS

## **Real Estate Value Impact Study**

For

Proposed Wireless Communications Facility
The Towers, LLC, d/b/a Vertical Bridge, and
Kentucky RSA 1 Partnership by Cellco Partnership,
d/b/a Verizon Wireless
Site Name: Tim Road
PSC Project #: Project 17361069
Assessor Parcel Number: 05-00-00-075
1429 JB Copeland Road
Symsonia, Marshall County
Kentucky 42082

Date of Report: November 7, 2025

## **Prepared For:**

Kentucky Public Service Commission 211 Sower Boulevard, P.O. Box 615 Frankfort, Kentucky 40602-0615

## **Prepared By:**

Glen D. Katz, MAI, SRA, AI-GRS, AI-RRS Realty Solutions Co., Inc. P.O. Box 20983 Louisville, KY 40250 November 7, 2025

Kentucky Public Service Commission 211 Sower Boulevard, P.O. Box 615 Frankfort, Kentucky 40602-0615 Realty Solutions Co., Inc.

Finding Answers to Real Estate Questions

Subject: Real Estate Value Impact Study

The Towers, LLC, d/b/a Vertical Bridge, and Kentucky RSA 1 Partnership by Cellco

Partnership, d/b/a Verizon Wireless

Site Name: Tim Road 1429 JB Copeland Road

Symsonia, Marshall County, Kentucky 42082

#### Commissioners:

I have completed an impact study regarding potential influence of wireless communications tower facilities on market value of surrounding properties. The study consists of analyzing sale activity and value trends of properties located in proximity to tower structures and tower systems, as compared to properties which are not in proximity but are otherwise competitive as replacements in the market.

Public utilities provide a platform for economic sustainability, community growth, and safety. These factors in turn influence value and demand for real estate. Based on the actions of buyers, occupants, and sellers of real estate, it is clear that communications towers are part of this platform. Consistently, measured market activity shows this type of facility has not, and does not, negatively impact surrounding property; instead providing significant positive impact on value and demand for real estate. There are no indications for value diminution of properties with suburban or low-density residential and agricultural characteristics similar to the project neighborhood, or neighborhoods in general.

This report is intended solely for use by Applicant, and the identified governmental review panel for the project, Kentucky Public Service Commission. The intended use of the reported opinions and conclusions is to assist Applicant, and the governmental review panel in making permitting decisions regarding the subject project. The undersigned, Glen D. Katz, MAI, SRA, AI-GRS, AI-RRS, recognizes this report will be submitted as part of the public record.

The attached report is a summary of the research and analysis performed. Thank you for the opportunity to present this information. Please contact me if you have questions or comments.

Respectfully,

Glen D. Katz, MAI, SRA, AI-GRS, AI-RRS

slan D. KATZ

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## Scope of Work

## **Project identification**

The project is identified by site and neighborhood analysis. Construction plans, aerial maps, and government census data are reviewed. Neighborhood and market characteristics are identified to understand the four forces that affect value:

- > social forces;
- > economic forces;
- > governmental forces, and;
- > environmental forces

## **Facility Description**

The facility will be in a low-density residential and agricultural area. Construction will be comprised of a 255' self-support structure with 10' lightning arrestor, totaling a height of 265 feet. Base elevation will be ~507.25 feet AMSL. The construction will be located on an approximately 100' x 100' leased site with a 80' x 80' fenced compound. There will be supporting storage cabinets and gravel ground cover. There is designed space for co-location of other wireless service providers in the facility. The facility will be accessed by a gravel-covered easement driveway extending from the west side of Arant Road. These characteristics comprise the most common features of wireless communications facilities in similar areas of the United States.

#### Data researched

Existing tower facilities, wireless communications, high voltage electric overhead transmission, or water tower storage tanks, are identified for analysis based on residential and commercial exposures. In some cases, there are multiple towers involved in a public utility system, such as high voltage electric overhead transmission lines.

#### Value Definition

The research analysis is based on 'market value' of real estate. The federal definition via the FDIC contains the most widely accepted components of market value.

Market value means the most probable price which 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 own 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.

## Analysis Applied

Sales of residential properties are tracked to establish rates of change in value due to external exposures, market conditions, and determine potential influence from proximity to tower facilities. Comparison is made between value trends of properties in proximity, and without proximity to tower facilities. Three methods of data extraction are discussed:

- Analysis of "before and after" sale data. This method tracks value trends before and after installation of a tower facility. Property sale data before a facility is installed is compared to sale data occurring after a facility is installed. This method will have limitations when a facility installation occurred in the distant past. Older sales occurring before the installation frequently experience significant changes before they are resold: physical changes such as renovation, updating, addition, and/or economic changes (i.e., 2007-2009 recession, Covid-19 pandemic, changes in highest and best use, etc.) In these cases, value change over a long time period may be attributed to multiple overriding sources, and allocating value change solely to tower influence can be misleading.
- ➤ Comparison of "unit-value" of properties that are functionally identical in all aspects except proximity. The unit value will typically be price per-square-foot of gross living area (sale price / above-grade living area). The information will reveal any differences between proximity categories. While providing excellent evidence, this method has limitations due to the variety of property differences and related difficulty in matching properties that are adequately similar with the exception of proximity.
- ➤ One of the most common analysis methods is "market conditions" value trend analysis. This compares value trends of properties located with proximity to existing tower facilities, to value trends of properties located without proximity. Rates of value change due to market conditions are compared between the two property types to extract any differences due to proximity to a tower facility.

The case study is based on analysis of residential properties. Because those kinds of properties sell more often and tend to be more homogeneous than commercial or agricultural properties, there is a better opportunity of finding comparable sales that meet the criteria of being similar enough with respect to the value-determining variables.

In all cases, the methodologies allow controlling physical and locational attributes of the two sets of properties. Price and value effects or differences due to other characteristics of the properties are held constant, and any effect due to proximity is isolated. For this study, because of the data available, the "before and after" and "market conditions" methods are utilized.

## **Data Summary**

## History of Proximity Impact

Proximity impact is a frequent question in real estate. In the course of studying value impact due to proximity of private or public utility facilities to residential, commercial and agricultural properties, I have analyzed wireless communications tower facilities, high-voltage overhead transmission lines (HVOT), storage towers, oil pipelines, agricultural facilities, and federal interstates. For this report, the analysis consists of analyzing value trends of properties in proximity to public utility tower facilities.

Residential and commercial properties, whether urban, suburban or rural, and agricultural properties, follow similar demand patterns. In an article published in *The Appraisal Journal*, (no. 1 (Winter 2012): 30-45), James A. Chalmers identifies three general characteristic that drive property sensitivity to price effects:

- > use;
- > size; and
- > uniqueness.

Non-suburban, rural residential and commercial properties are often part of agricultural or recreational environments. Site sizes are larger, or they may be adjacent to large land parcels. They are also unique; because of the low-density development characteristics, there are few available, and even fewer available with specific classes of features such as site size, quality, floor plan, or auxiliary buildings. Low density development area properties are similar to urban and suburban properties in terms of use, but are superior in the sensitivity categories of site size and uniqueness/scarcity. In summary, they share the same use characteristics, but are more resilient than other residential and commercial categories.

In this study, urban/suburban residential properties are researched because of their high sale volume, and because they would be the first to show sensitivity. As illustrated, these properties and their values are not adversely sensitive to, and are not negatively impacted by, wireless communications tower facilities. Respectively, rural residential, agricultural, recreational, and commercial properties follow the same pattern.

Marshall County has not adopted planning and zoning for unincorporated areas of the County, and the project neighborhood is not subject to local zoning regulation. This is a frequent occurrence in low-density development and rural areas, and there are risks accepted by property owners because of the lack of control on land uses. Without localized land-use regulations, all legal uses of land are available. Land uses with a high impact on surrounding properties or a community in general, typically are characterized as producing adverse noise, odor, traffic, lighting, view, or neglected construction.

As a result, there is a higher risk expectation by buyers when making purchase decisions, regarding the quality and type of use of neighboring un-zoned properties. These risks are reflected in prices paid and resulting value trends. Regardless of these risks and buyer activity, communities without strict land-use controls continue to expand and develop need and demand for public utilities. The neighborhoods and communities remain influenced by social, economic, governmental, and environmental forces. There is no difference in regard to the positive impact from public utilities on surrounding values if a neighborhood does not have strict land-use zoning regulations.

## Questions on Property Ownership

Concepts regarding property rights, property insurability, and mortgages, are frequent topics on value influence for discussion from property owners. The following information is provided for insight.

**Property Rights:** Property owners near cell tower facilities retain all rights normally associated with ownership. There are no additional easements, encroachments, or use restrictions on surrounding properties.

**Insurability:** There are no insurability risk changes to physical property, ownership, or insurance availability or cost change. Interviews with property owners, insurance professionals, lenders, and title companies, confirms there are no conflicts on availability or premiums for physical property, or title insurance, for properties located near cell towers.

**Mortgage Terms:** The following national programs influencing mortgages are researched to determine status of cell towers in relation to residential mortgage financing. In all cases, there is no influence on mortgage availability or terms.

FHA: Federal Housing Administration (FHA) through the Dept. of Housing and Urban Development (HUD), is the largest insurer of mortgage in the world and provides mortgage insurance on loans made by FHA-approved lenders throughout the U.S. FHA has minimum property standards contained in *HUD Handbook 4000.1*. In particular, there is a section on "Externalities" and requirements for property compliance. Externalities are off-site conditions that have an adverse influence on a property, such as heavy traffic, special airport hazards, proximity to high pressure gas lines, high voltage electric overhead transmission lines and local distribution lines, smoke, fumes, and other offensive or noxious odors, and stationary storage tanks.

Cell towers are not identified as a specific hazard for surrounding properties, and are not a specific criterion for hazard analysis in obtaining FHA/HUD funding insurance for mortgage lenders.

VA: Veterans Administration (VA) helps Servicemembers, Veterans, and eligible surviving spouses become homeowners. VA provides home loan guaranty benefits and other housing-related programs to help buy, build, repair, retain, or adapt homes for occupancy. VA Home Loans are provided by private lenders such as banks and mortgage companies. VA guarantees a portion of the loan and lowers risk as a result, enabling lenders to provide borrowers with more favorable terms.

VA guidelines (Chapters 10 and 12) identifies *HUD Handbook 4000.1* as the resource for minimum property requirements. In addition, in reiterating hazard issues in the VA guidelines, cell towers are not identified or mentioned as a specific hazard for surrounding properties. Cell towers are not a criterion for hazard analysis in obtaining VA loans.

**USDA:** United States Department of Agriculture (USDA), through its Rural Development program (RD), makes direct loans as well as assisting approved lenders in providing low- and moderate-income households the opportunity to own adequate, modest, decent, safe and sanitary dwellings as their primary residence in eligible rural areas. The program provides loan guarantees to approved lenders in order to reduce the risk of extending 100% loans to eligible rural homebuyers. USDA publishes *Handbook 3550 (HB 3550)* containing minimum property requirements for USDA

loan programs. Cell Towers are not included for consideration, and are not a specific criterion in hazard analysis for obtaining loans under USDA programs.

**FNMA:** Federal National Mortgage Association (FNMA, aka Fannie Mae) is a government-sponsored enterprise (GSE). Fannie Mae purchases and guarantees mortgages made to borrowers via the secondary mortgage market. The mortgages it purchases and guarantees must meet strict criteria. Its "Selling Guide" publication is a primary information guide for secondary mortgage market lending. The Selling Guide does not include cell towers for specific analysis in the publication. Cell towers are not a hazard criterion in analysis for obtaining mortgage loans that will be purchased by Fannie Mae.

**FHLMC:** The Federal Home Loan Mortgage Corporation, (FHLMC, aka Freddie Mac) is a government-sponsored enterprise (GSE). Freddie Mac purchases and guarantees mortgages made to borrowers via the secondary mortgage market. The mortgages it purchases and guarantees must meet strict criteria. Its "Seller/Servicer Guide" publication is a primary information guide for secondary mortgage market lending. The Seller/Servicer Guide does not include cell towers for any specific analysis in the publication. Cell towers are not a hazard criterion in analysis for obtaining mortgage loans that will be purchased by Freddie Mac.

In addition, national, regional, local, and private sources of mortgage financing for commercial, industrial, agricultural, and residential property, have similar guidelines. In summary, cellular tower structures are not identified as a hazard criterion in making mortgage loan decisions.

## Impact Study Methodology

This impact study consists of studying real estate value trends at existing tower locations. The methodology is comprised of;

- paired sales and sale/resale analyses, focusing on measurement of value change due to market conditions, and;
- ightharpoonup direct comparison of properties with, and without, physical or view proximity exposure.

Specifically, the following steps form the analysis:

- Identify existing tower locations with surrounding developed land uses.
- Examine the neighborhood and market area to determine if there are compatible and competing properties with adequate sale volume to provide reliable and valid results.
- Categorize sales by proximity characteristics for measurement of influence: A distance of 500' to 750' is the threshold of measure for the close-proximity category, depending on the topography and direction of development characteristics. At further distances, the category changes to non-proximity, as tower views become blurred or obscured by topography, trees, roofs, tanks, power lines, or other towers.
- Track value change over time for the two proximity categories and compare the results to determine if there is a difference due to tower facility exposure, or;
- Track value change of properties before and after a tower facility is constructed. Then compare results to determine if there is a difference between the categories attributed to tower facility exposure.

Based on the data and analysis for tower projects; values and rates of value change for proximity and non-proximity properties are similar. There is no compelling evidence that either the anticipation of, or the existence of, tower facilities negatively impacts surrounding property values. This is not unexpected. Market forces that drive real estate value also create complimentary demand for public utility projects. These market forces are discussed as follows:

- ➤ Social Forces: Social forces are influenced by; population, education, and lifestyles. There has been an exponential increase in digital data, and the public demands satisfying that need as part of the core supply of public services. In particular, cellular service is essential infrastructure and has become a predominant function in businesses, schools, and social services. Regarding U.S. households, over 76% adults live in homes served solely by cellular phone service, and over 86% of children live in homes with only cellular service. Regarding emergency services, over 70% of emergency calls are made with cellular phones. As a result, anything less than consistent inbuilding service is detrimental to value and demand for real estate.
- Economic Forces: Economic forces are influenced by; employment, wages, business, schools, and regional community development. Communications facilities are required for education and efficient and competitive diversification of work forces. Cellular service has a direct connection to economic development. Cellular signal capacity creates a significant number of positive impacts for its users and their communities.
- ➤ Governmental Forces: Government responds to community needs for, laws and policies, public services, zoning, and building codes. Many jurisdictions have comprehensive plans requiring government agencies to expand public utilities and services. The regulations enabling public

utilities are a direct reaction to public needs, particularly for education, economic purposes, and health and safety services. Another major impact of governmental influence in expansion of public services is developing wider choices of service providers, which translates to competition in service quality and costs for consumers. This helps erase the digital divide problem, which is the economic gap between those who have adequate access to services and those who do not. This gap is influenced by income, location, and level of education among other factors, and can affect further development in areas where the divide exists.

As indicated, the subject neighborhood does not have strict land-use zoning regulations. Buyers have absorbed the risk associated with lack of zoning when making purchase decisions regarding the quality and type of use of neighboring un-zoned properties, and related influences on value. Regardless of these risks and buyer activity, communities without strict land-use controls continue to expand and develop need for public utilities on a positive trend.

Environmental Forces: Environmental forces are the final determining factor. They deal with climate, topography/soil, natural barriers, transportation systems and linkages, and the nature and desirability of the neighborhood surrounding a property. These forces shape population location, growth, and where supporting infrastructure will be most effective and valuable as a resource.

## **Study Conclusions**

As illustrated by measured market response, both in this report and in nationally published studies, the forces of value are consistent. Public utilities and related services are essential to meeting current and future requirements for progressive standards of living. Public utilities and related services, by nature, expand to meet demands of expanding population and community growth. The benefits of communication facilities for economic and community development are clear. Without adequate services, there will be a tendency for decreasing demand and property values in a community. Where services already exist, coverage and data capacity may need to be adjusted due to population changes. As a result of meeting population needs, telecommunications facilities have become a part of the landscape in the same way that power, telephone, and other utilities have. Like all utilities, there is requirement for telecommunications facilities in strategic locations in any community.

Property owners near tower facilities, highly visible utility structures, associated easements, etc., are not penalized on value. There are no changes to ownership rights. Insurability is not affected. Mortgage terms to buyers and owners are not influenced. Consistently, communications tower structures, like overhead electric distribution lines, water towers, and buried utility easements, are beneficial and necessary infrastructure. As a result of expanding utilities and increased services, neighborhoods and properties experience positive influences. Because of the deployment of cellular facilities over the past several decades, owners and buyers of real estate expect excellent cell phone reception, and that connectivity requires adequate infrastructure. Cell towers satisfy demand and are visibly absorbed by the landscape of a neighborhood and lifestyles of the population. Cell towers are much like other modern infrastructure. Although cell towers may be noticed initially, they quickly fade into the background and have no negative effect on value – just as streets, easements, telephone poles, utility lines, streetlights, and the other visible infrastructure components of modern life do not generally have negative influences on real estate values.

Therefore, based on the actions of market participants buying, occupying, investing, and selling real estate properties, consistent market evidence shows this type of tower facility has not, and does not, negatively impact surrounding property, and supports the positive influences on value and demand for real estate due to expansion of public utilities, which includes wireless telecommunications tower infrastructure.

Tim Road, Project #Project 17361069

## Addendum

#### Professional Disclosure

I certify that:

- The statements of fact contained in this report are true and correct to the best of my knowledge and belief.
- The reported analyses, opinions and conclusions are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the project 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 project that is the subject of this report or to the parties involved with this assignment.
- My engagement and compensation for completing this assignment is not contingent upon the development or reporting of a predetermined opinion that favors the cause of the client, the magnitude of the opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this report.
- This report complies with applicable sections of the Uniform Standards of Professional Appraisal Practice for Valuation Services and Appraisal Practice: Preamble, Definitions, Ethics Rule, Jurisdictional Exception Rule, Competency Rule.

Glen D. Katz, MAI, SRA, AI-GRS, AI-RRS

Glan D. KATZ

#### **Professional Qualifications**

Glen Katz has been in the field of real estate analysis for over 25 years. Beginning in both the commercial and residential arenas, he has transitioned to roles as consultant, reviewer, subject matter expert witness, and appraisal practice instructor. As principal of Realty Solutions Co. Inc., relationships have been developed with user-clients, peer appraisers, and appraisal firms. Resulting projects have been performed individually and as coordinating peer groups.

In appraisal practice, Mr. Katz has achieved the Appraisal Institute MAI (general/commercial) designation, and SRA (residential) designation. In specialized appraisal practice, Mr. Katz has achieved the Appraisal Institute appraisal review designations of AI-GRS (general/commercial) and AI-RRS (residential), as well as completing the following Appraisal Institute Professional Development Programs:

- Litigation
- Valuation of the Components of a Business Enterprise
- Valuation of Conservation Easements
- Valuation of Sustainable Buildings: Residential
- Valuation of Sustainable Buildings: Commercial

As a reviewer of appraisals, Mr. Katz serves clients in both the litigation and lending fields. Appraisal review reports are commonly performed under Uniform Standards of Professional Appraisal Practice (USPAP), Uniform Appraisal Standards for Federal Land Acquisitions (Yellowbook), and local jurisdictional guidelines.

As a subject matter expert witness, Mr. Katz has participated in cases regarding land and building damage, proximity influence, insurance claims, property tax assessment, construction defects, divorce settlements, boundary disputes, zoning noncompliance, bankruptcy, and alleged fraud.

As an appraisal practice instructor, Katz is qualified to teach the following Appraisal Institute residential, commercial, and specialized practice classes and seminars.

- Basic Appraisal Principles
- Basic Appraisal Procedures
- General Appraiser Sales Comparison Approach
- General Appraiser Site Valuation and Cost Approach
- Residential Market Analysis and Highest and Best Use
- Residential Sales Comparison and Income Approaches
- Residential Site Valuation and Cost Approach
- Appraisal of Manufactured Homes Featuring Next Generation Manufactured Homes
- Residential Applications: Using Technology to Measure and Support Assignment Results
- Rural Area Appraisals: Freddie Mac Guidelines and Property Eligibility Requirements
- Desktop Appraisals (Bifurcated, Hybrid) and Evaluations
- FHA Appraising for Valuation Professionals: FHA Single Family Housing Appraisal Requirements
- Ignorance Isn't Bliss: Understanding an Investigation by a State Appraiser Regulatory Board or Agency

#### Areas of appraisal expertise include:

- Commercial, industrial, complex residential, agricultural, special purpose properties
- Appraisal review, commercial and residential
- Proximity impact
- Eminent domain
- Expert witness/litigation support
- Property damages
- Insurance claims and reconstruction cost analysis
- Tax Appeal
- Estate valuation
- Green/high performance residential and commercial construction (sustainable/energy efficient)

#### Education

- Bachelor of Science in Business Administration, Marketing, University of Louisville
- Study focusing on real estate economics, Eastern Kentucky University
- Ongoing real estate economics education since 1993 has been obtained through the Appraisal Institute, and other professional groups serving specific real estate related fields.

#### **Professional Qualifications and Memberships**

- Certified General Real Property Appraiser, Kentucky License #1533
- MAI designated Member, Appraisal Institute
  - \*(MAI designation is held by professionals who can provide services relating to all types of real property, such as value opinions, evaluations, review, consulting and advice regarding investment decisions, among others. Property types may include commercial, industrial, agricultural, residential, vacant land and others.)
- SRA designated Member, Appraisal Institute
  - \*(SRA designation is held by professionals who can provide services relating to residential properties, including opinions of value, evaluations, review, consulting and advice regarding investment decisions, among others)
- AI-GRS designated Member, Appraisal Institute
  - \*(AI-GRS designation is held by professionals who can provide reviews of appraisals, including commercial, industrial, agricultural, residential, vacant land and others.
- AI-RRS designated Member, Appraisal Institute
  - \*(AI-RRS designation is held by professionals who have the tools to provide reviews and address the related issues unique to residential real property appraisals.
- Professional Development Programs Appraisal Institute
  - Litigation
  - Valuation of the Components of a Business Enterprise
  - Valuation of Conservation Easements
  - Valuation of Sustainable Buildings: Commercial
  - Valuation of Sustainable Buildings: Residential

#### **Appraisal Institute Service**

- 2008 to 2017, 2020 to present Education Chair, Bluegrass Chapter, Appraisal Institute
- 2018-2021 Appraisal Institute National Education Committee Liaison, Region V (Indiana, Kentucky, North Carolina, Ohio, Virginia, West Virginia)
- 2018 President, Bluegrass Chapter, Appraisal Institute
- 2016 and 2017 Government Relations Committee, Bluegrass Chapter, Appraisal Institute
- 2016 and 2017 Regional Representative, Bluegrass Chapter, Appraisal Institute
- 2013, 2014 and 2016 Leadership Development & Advisory Council, Appraisal Institute
- Candidate Advisor MAI, SRA, AI-GRS, and AI-RRS, Appraisal Institute

#### ADVANCED STUDY CURRICULUM

Provider	Title/Content				
	Valuation of Sustainable Buildings: Commercial - Registry				
	Valuation of Sustainable Buildings: Residential - Registry				
Appraisal Institute	Valuation of the Components of A Business Enterprise - Registry				
Professional	Litigation Professional Development Program - Registry				
Development	Valuation of Conservation Easements - Registry				
Programs	General Demonstration Report - Capstone Program				
l	Instructor Qualifying Conference				
	Leadership Development & Advisory Council - Washington D.C.				
	Uniform Appraisal Standards for Federal Land Acquisitions (Yellowbook)				
	Appraisal of Manufactured Homes Featuring Next-Generation Manufactured Homes				
	Application & Interpretation of Simple Linear Regression				
	Quantitative Analysis				
	Practical Applications in Appraising Green Commercial Properties				
	Residential & Commercial Valuation of Solar				
	Case Studies in Appraising Green Residential Buildings				
Appraisal Institute	Review Theory - General				
Courses	Review Theory - Residential				
Courses	Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets				
	The Appraiser as an Expert Witness: Preparation and Testimony				
	Litigation Appraising: Specialized Topics and Applications				
	Condemnation Appraising: Principles and Applications				
	Valuation of Conservation Easements				
	Advanced Sales Comparison & Cost Approaches				
	Advanced Residential Report Writing, Part II				
	Advanced Residential Applications & Case Studies, Part 1				
	Practical Application of Fundamental Analysis Complex Valuation				
	Inconsistency: it's Hiding in Plain Sight in Your (Residential) Appraisal				
	Inconsistency: it's Hiding in Plain Sight in Your (General) Appraisal				
	Avoiding Bias: Building a Bias Defense				
	Appraising in Floodplains				
	Litigation Assignments for Residential Appraisers: Doing Expert Work on Atypical Cases				
	Valuation Overview of Accessory Dwelling Units				
	The Cost Approach: Unnecessary or Vital to a Healthy Practice?				
	Artificial Intelligence, AVMs, and Blockchain: Implications for Valuation				
	Rural Area Appraisals: Freddie Mac Guidelines and Property Eligibility Requirements				
	Advanced Spreadsheet Modeling for Valuation Applications				
Appraisal Institute	Income Approach for Residential Appraisers				
	Marketability Studies: Advanced Considerations & Applications				
and Related Seminars	Appraising Distressed Commercial Real Estate: Here We Go again				
	REO Appraisal: Appraisal of Residential Property Foreclosure				
	Evaluating Residential Construction				
	Evaluating Commercial Construction				
	Regression Analysis in Appraisal Practice: Concepts & Applications				
	Self Storage Economics and Appraisal				
	Subdivision Valuation: A Comprehensive Guide				
	Appraising Convenience Stores				
	Appraisal of Nonconforming Uses				
	Appraisal of Special-Purpose Properties				
	Dynamics of Office Building Valuation				
	Environmental Risk and the Appraisal Process (Continued Next Page)				

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Provider	Title/Content			
International Right of Way Association	Course 105 - The Uniform Act - Executive Summary			
Marshall Valuation Service	Commercial Cost Approach Certification Program			
American Bankers Association	Federal Appraisal Policies: Hotlines, Complaint Forms and Revised Policy Statements			
CCIM Institute	Course CI-101, Financial Analysis for Commercial Investment Real Estate Course CI-103, User Decision Analysis for Commercial Investment Real Estate Course CI-104, Investment Analysis for Commercial Investment Real Estate Course 411, Gap Analysis and Real Estate Market Dynamics Course 412, Economics of Commercial Leases, and 1031 Exchanges			
HUD/FHA	HUD/FHA Appraiser Test and Certification The Model Energy Code (MED), U.S. Department Of Energy Appraising FHA Properties			
Home Builders Association of Louisville	Site Planning Basics of Building; Blueprint Reading, Building Codes, Siting			
CLE International	Eminent Domain, the Law of Condemnation and Land Use			
Eastern Kentucky University	Real Estate Finance, RST 330 Advanced Appraisal Application / Income Property Valuation, RST 410 Appraisal of Residential Property, RST 340			
University of Louisville	Bachelor of Science in Business Administration - Marketing			

### **Case Studies**

The case studies are developed through researching market activity of residential properties in neighborhoods adjacent to tower facilities. After identification of a tower facility, whether wireless communications, high voltage electric overhead transmission, or water storage tower, sale activity of homes are analyzed. The following methods of data extraction are discussed.

## Market Conditions Value Trend Analysis

For projects that have been in place for a long period, market conditions analysis is very applicable. The steps of analysis consist of:

- Research properties with tower proximity that have sold repeatedly in the identified period.
- Determine the periodic rate of market value change, appreciation or depreciation, for properties in the proximity category.
- Research properties in the same neighborhood, without tower proximity, with repeat or back-to-back sales.
- Determine the periodic rate of market value change, appreciation or depreciation for properties in the non-proximity category.
- Compare value change trends between the two groups of properties to extract any value change differences related to proximity influence.

#### Before and After Method

For projects recently constructed, the before and after method steps of analysis consist of:

- Research residential properties with tower proximity that sold prior to the tower installation, and then sold again after the tower installation.
- Determine the periodic rate of market value change, appreciation or depreciation, for properties in the proximity category.
- Research properties in the same neighborhood without tower proximity that sold prior to the tower installation, and then sold again after the tower installation.
- Determine the periodic rate of market value change, appreciation or depreciation, for properties in the non-proximity category.
- Compare value change trends between the two groups of properties to extract any value change differences related to proximity influence.

## Methodology Summary

The time range for sale data is from 2011 to the current market, not including sales and resales spanning the Covid 19 pandemic impact. This minimizes potential influence from significant imbalance between supply and demand resulting from the Covid 19 pandemic. In order to track rates of value change during the period, repeat or back-to-back sales of individual residential properties inside and outside a proximity distance range of 500' to 750' from a facility are researched.

In order to focus on the influence market conditions and proximity on appreciation or depreciation, emphasis is placed on properties with stable physical characteristics, and without unusual sale conditions or buyer/seller motivation influences. Specifically, sales involving properties with the following characteristics are discounted from analysis:

- Properties with substantial physical changes that influence value between the initial and subsequent transfers, such as renovation, construction addition, or suffering from deferred maintenance or neglect resulting in unusual physical deterioration and market response.
- Properties with distress socioeconomic characteristics, such as foreclosure, short-sales, auctions, and sales of bank-owned homes.
- Properties with unusual buyer or seller motivations, such as family transactions, estate liquidation, or investor activity in a predominantly owner-occupied market.
- Properties close to interstates and limited access roads are avoided to ensure home sales were not affected by highway access or traffic noise variables.
- In the study, sale price is adjusted by netting out seller-paid concessions if they occur.

If the above types of transfer activity are prevalent in a neighborhood, the facility and neighborhood is removed from consideration. The focus is to measure market activity that is not influenced by unusual property-specific or market-specific characteristics.

The following case studies illustrate analysis for two categories of tower facilities; wireless communications tower facilities and high voltage electric overhead transmission lines (HVOT). Two of the case studies compare rates of value change between proximity and non-proximity properties at existing facilities, and one case study additionally compares values of proximity and non-proximity properties before and after installation of a tower facility. In the case of the HVOT study, there are multiple towers involved in the utility system.

## Case Study Introduction

Case Study 1 – This study involves a high voltage electric overhead transmission power line corridor with 100' height lattice construction towers. The corridor traverses a residential single-family and condominium neighborhood. The tower structures and overhead electric lines in this location are located in easements amidst residential subdivision development, crossing a public street in a long diagonal direction, and continuing through residential subdivision development. The tower structures are generally spaced approximately 1,000' apart.

The project was installed pre-1993. The value evidence represents sales and resales of properties within 500' proximity to the facility, and outside 500' proximity to the facility. Rates of value change for each of the categories measured, and the results of the two categories of proximity are compared to analyze any potential impact.

Case Study 2 – This study involves a wireless communications facility adjacent to a residential single-family and condominium neighborhood. The tower structure is 219' height, self-support construction.

Installation of the project occurred in 2002. The value evidence represents sales and resales of properties within 500' proximity to the facility, and outside 500' proximity to the facility. Rates of value change of each of the categories are measured, and the two categories are compared to analyze any potential impact.

Case Study 3 – This study involves a wireless communications facility adjacent to a residential single-family detached neighborhood. The structure is 140' height, monopole construction.

Installation of the project occurred in 2016. The value evidence represents sales and resales of properties within 750' proximity to the facility, and outside 750' proximity to the facility. Rates of value change in each of the categories are measured, and the two categories are compared to analyze any potential impact.

For Case Study 3, it is important to note there are repeat sales of individual properties in each category, before and after installation, that illustrate consistent values and rates of value change.

## Case Study 1 – Group 1 (Proximity Sales)

• Facility: High voltage electric overhead transmission power lines and lattice construction towers, residential single-family detached and condominium subdivision location.

• Address: Gutenberg Road, Louisville, Jefferson County, Kentucky

FCC Identification: N/AYear of installation: Pre-1993

• Information source: Maps and individual research

• Neighborhood location: Jeffersontown

• Property Group Identification: Within 600' proximity to facility installation

• Reconciliation: The data represents sale activity beginning 01/01/2020. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is 5.00% to 15.57%. The average rate of annual appreciation is 9.66%, and the median or middle point of the range is 8.54%. The average sale price per square foot of above grade living area is \$182.

		Sold	Sale	%		% Change
Address		Date	Price	Change	Months	/Year
4603 Scott	Ct	4/30/2024	\$305,000	17.31%	32	6.49%
4603 Scott	Ct	8/31/2021	\$260,000			
4615 Haeringdon	Dr	9/9/2022	\$286,500	15.06%	24	7.48%
4615 Haeringdon	Dr	9/4/2020	\$249,000			
4808 Redmon	Ct	11/2/2022	\$272,000	6.67%	10	7.68%
4808 Redmon	Ct	12/20/2021	\$255,000			
4810 Hat	Ct	7/24/2024	\$280,000	20.69%	38	6.50%
4810 Hat	Ct	5/19/2021	\$232,000			
4901 Bova	Way	4/24/2023	\$290,500	27.13%	30	10.85%
4901 Bova	Way	10/23/2020	\$228,500			
8906 Hatlerhall	Dr	12/11/2023	\$242,800	15.67%	38	5.00%
8906 Hatlerhall	Dr	10/23/2020	\$209,900			
9403 Gutenberg	Rd	6/28/2022	\$250,100	29.38%	24	14.63%
9403 Gutenberg	Rd	6/25/2020	\$193,300			
9405 Gutenberg	Rd	12/30/2021	\$225,000	12.95%	17	9.40%
9405 Gutenberg	Rd	8/14/2020	\$199,200			
10506 Vintage Creek	Dr	5/17/2023	\$365,000	41.47%	38	13.05%
10506 Vintage Creek	Dr	3/13/2020	\$258,000			
10700 Vintage Creek	Dr	6/30/2022	\$400,000	31.15%	24	15.57%
10700 Vintage Creek	Dr	6/30/2020	\$305,000			

#### Case Study 1 – Group 2 (Non-Proximity Sales)

• Facility: High voltage electric overhead power lines and lattice construction towers, residential single-family detached and condominium subdivision location.

• Address: Gutenberg Road, Louisville, Jefferson County, Kentucky

FCC Identification: N/AYear of installation: Pre-1993

Information source: Maps and researchNeighborhood location: Jeffersontown

• Property Group Identification: Outside 600' proximity to facility installation

• Reconciliation: The data represents sale activity beginning 01/01/2020. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is 2.48% to 19.20%. The average rate of annual appreciation is 8.91%, and the median or middle point of the appreciation range is 8.58%. The average sale price per square foot of above grade living area is \$184.

		Sold	Sale	%		% Change
Address		Date	Price	Change	Months	/Year
4102 Willowview	Blvd	3/7/2022	\$242,500	19.46%	23	9.95%
4102 Willowview	Blvd	3/23/2020	\$203,000			
4208 Willowview	Blvd	8/4/2023	\$290,000	10.27%	24	5.12%
4208 Willowview	Blvd	8/2/2021	\$263,000			
4220 Willowview	Blvd	5/16/2022	\$286,700	26.08%	20	15.28%
4220 Willowview	Blvd	8/31/2020	\$227,400			
4407 Renaissance	Dr	3/21/2024	\$445,000	14.10%	19	8.97%
4407 Renaissance	Dr	8/25/2022	\$390,000			
4520 Stony Brook	Dr	6/17/2024	\$326,000	18.55%	32	6.86%
4520 Stony Brook	Dr	10/4/2021	\$275,000			
4614 Stony Brook	Dr	9/13/2021	\$280,000	4.67%	6	9.58%
4614 Stony Brook	Dr	3/19/2021	\$267,500			
4702 Nottinghamshire	Dr	5/2/2024	\$257,500	5.32%	17	3.69%
4702 Nottinghamshire	Dr	11/23/2022	\$244,500			
4804 Clarmar	Rd	4/27/2021	\$270,000	10.66%	9	13.55%
4804 Clarmar	Rd	7/14/2020	\$244,000			
4808 Chenwood	Ln	12/1/2021	\$389,000	34.14%	21	19.20%
4808 Chenwood	Ln	2/21/2020	\$290,000			
4823 Napa Ridge	Way	2/17/2023	\$395,000	9.72%	11	10.29%
4823 Napa Ridge	Way	3/9/2022	\$360,000			
5003 Stony Brook	Dr	7/12/2024	\$237,700	24.45%	40	7.36%
5003 Stony Brook	Dr	3/18/2021	\$191,000			
5006 Flora Springs	Cir	4/10/2024	\$359,600	30.76%	43	8.49%
5006 Flora Springs	Cir	8/27/2020	\$275,000			
5007 Stony Brook	Dr	9/22/2021	\$255,000	13.84%	13	12.92%
5007 Stony Brook	Dr	8/27/2020	\$224,000			
5101 Jonar	Ct	7/6/2023	\$300,500	21.66%	24	10.97%
5101 Jonar	Ct	7/15/2021	\$247,000			
5112 Fairwood	Ln	4/11/2024	\$215,000	30.30%	50	7.28%
5112 Fairwood	Ln	2/12/2020	\$165,000			
5113 Stony Brook	Dr	8/31/2023	\$295,000	10.07%	23	5.34%
5113 Stony Brook	Dr	10/12/2021	\$268,000			
5120 Stony Brook	Dr	4/7/2023	\$275,000	30.33%	33	11.02%
5120 Stony Brook	Dr	7/6/2020	\$211,000			
5306 Idlewood	Ln	11/22/2023	\$261,000	3.16%	4	9.78%
5306 Idlewood	Ln	7/27/2023	\$253,000			

		Sold	Sale	%		% Change
Address		Date	Price	Change	Months	/Year
8412 Michael Edward	Dr	7/11/2022	\$315,000	25.95%	21	14.76%
8412 Michael Edward	Dr	10/7/2020	\$250,090			
8503 Image	Way	8/1/2022	\$294,900	16.10%	23	8.58%
8503 Image	Way	9/15/2020	\$254,000			
8600 Ivinell	Ave	7/24/2023	\$275,750	30.38%	35	10.43%
8600 Ivinell	Ave	8/25/2020	\$211,500			
8601 Chipstone	Ct	7/24/2024	\$285,000	18.75%	46	4.90%
8601 Chipstone	Ct	9/25/2020	\$240,000			
8605 Chipstone	Ct	8/28/2023	\$294,400	15.00%	25	7.19%
8605 Chipstone	Ct	7/28/2021	\$256,000			
8704 Waltlee	Rd	8/29/2022	\$273,000	10.98%	20	6.50%
8704 Waltlee	Rd	12/21/2020	\$246,000			
8909 Michael Edward	Dr	3/23/2022	\$252,000	5.00%	8	7.45%
8909 Michael Edward	Dr	7/21/2021	\$240,000			
9208 Morgan Jaymes	Ct	12/13/2021	\$310,000	25.00%	23	13.24%
9208 Morgan Jaymes	Ct	1/24/2020	\$248,000			
9308 Justine	Ct	7/5/2023	\$276,000	33.27%	37	10.84%
9308 Justine	Ct	6/10/2020	\$207,100			
10117 John Ashley	Ct	7/1/2022	\$307,500	3.54%	2	17.44%
10117 John Ashley	Ct	4/18/2022	\$297,000			
10203 Westwego	Pl	3/17/2023	\$275,000	14.58%	21	8.27%
10203 Westwego	Pl	6/11/2021	\$240,000			
10205 Westwego	Pl	1/5/2024	\$285,000	35.71%	47	9.13%
10205 Westwego	Pl	2/7/2020	\$210,000			
10502 Monticello Fores	t Cir	9/13/2023	\$293,000	7.96%	12	7.94%
10502 Monticello Fores	t Cir	9/12/2022	\$271,400			
10511 Bayport	Rd	8/15/2023	\$266,500	2.90%	14	2.48%
10511 Bayport	Rd	6/15/2022	\$259,000			
10514 Firview	Ct	4/21/2023	\$240,000	6.71%	17	4.76%
10514 Firview	Ct	11/22/2021	\$224,900			
10727 Vine Hill	Dr	2/9/2024	\$355,000	2.54%	27	1.12%
10727 Vine Hill	Dr	11/5/2021	\$346,200			
10907 Conti	Ln	5/20/2024	\$243,100	33.13%	36	10.93%
10907 Conti	Ln	5/10/2021	\$182,600			
11601 Locust View	Ct	1/8/2024	\$272,000	7.09%	31	2.74%
11601 Locust View	Ct	6/9/2021	\$254,000			
11612 Chinook	Ct	10/27/2023	\$334,000	17.19%	38	5.47%
11612 Chinook	Ct	9/4/2020	\$285,000			

#### Case Study 1 Reconciliation

The sale evidence represents sales and resales of residential properties in a neighborhood containing a high voltage electric overhead transmission power lines with lattice construction towers. The tower facility existed prior to construction of homes in the neighborhood. There is volume sale evidence for analysis between 2020 and 2024. The proximity sales show a slightly higher average rate of appreciation, and a similar median rate. The price per square foot of living area is also similar.

The difference between all indications is negligible and not statistically significant. Comparing proximity sales to non-proximity sales in the neighborhood, both categories show a consistent trend of value change, and price based on dwelling size per square foot. In summary, there is no negative value impact from the tower facility.

#### Case Study 2 – Group 1 (Proximity Sales)

• Facility: Wireless Communications Facility, self-support construction, 219' height, residential single-family detached and condominium subdivision location

• Address: 8400 Bardstown Road, Louisville, Jefferson County, Kentucky

FCC Registration: 1232839Year of installation: 03/7/2002

• Information source: FCC recordings, maps and individual research

• Neighborhood location: Fern Creek

• Property Group Identification: Inside 500' proximity to facility installation

• Reconciliation: The data represents sale activity beginning 01/01/2014. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is 0.64% to 3.29%. The average annual appreciation is 2.25%, and the median or middle point of the range is 2.67%.

		Sold	Sale	%		% Change	% Change
Address		Date	Price	Change	Months	/Month	/Year
8503 Missionary	Ct	9/27/2018	\$302,000	12.48%	50	0.25%	3.02%
		8/12/2014	\$268,500				
8505 Missionary	Ct	8/25/2017	\$239,000	6.22%	28	0.22%	2.67%
		4/28/2015	\$225,000				
8931 Gentlewind	Way	5/15/2018	\$280,000	1.82%	34	0.05%	0.64%
		7/13/2015	\$275,000				
8937 Gentlewind	Way	3/15/2019	\$282,000	5.22%	38	0.14%	1.64%
		1/8/2016	\$268,000				
10619 Glenmary Springs	Dr	11/14/2016	\$244,900	6.50%	24	0.27%	3.29%
		11/24/2014	\$229,950				
		_		Ave	rage	0.19%	2.25%
				Me	dian	0.22%	2.67%

#### Case Study 2 – Group 2 (Non-Proximity Sales)

• Facility: Wireless Communications Facility, self-support construction, 219' height, residential single-family detached and condominium subdivision location

• Address: 8400 Bardstown Road, Louisville, Jefferson County, Kentucky

FCC Registration: 1232839Year of installation: 03/7/2002

• Information source: FCC recordings, maps and individual research

• Neighborhood location: Fern Creek

• Property Group Identification: Outside 500' proximity to facility installation

Reconciliation: The data represents sale activity beginning 01/01/2014. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is -0.25% to 3.60%. The average annual appreciation is 2.26%, and the median or middle point of the range is 2.22%.

		Sold	Sale	%		% Change	% Change
Address		Date	Price	Change	Months	/Month	/Year
8607 Sanctuary	Ln	3/30/2016	\$245,000	6.06%	20	0.30%	3.60%
		7/25/2014	\$231,000				
8622 Sanctuary	Ln	12/21/2017	\$265,000	2.91%	29	0.10%	1.19%
		7/13/2015	\$257,500				
8627 Sanctuary	Ln	10/31/2018	\$279,300	-0.57%	27	-0.02%	-0.25%
		8/5/2016	\$280,900				
8728 Broadwood	Ct	6/11/2019	\$204,000	22.89%	40	0.57%	6.90%
		2/16/2016	\$166,000				
8737 Broadwood	Ct	4/29/2019	\$188,900	16.25%	59	0.28%	3.31%
		6/6/2014	\$162,500				
8819 Gentlewind	Way	5/18/2018	\$255,000	4.94%	36	0.14%	1.65%
		5/22/2015	\$243,000				
8903 Gentlewind	Way	9/30/2016	\$307,500	6.03%	26	0.23%	2.78%
		8/1/2014	\$290,000				
10105 Cedar Garden	Dr	11/1/2019	\$299,900	4.81%	17	0.28%	3.38%
		5/30/2018	\$286,130				
10500 Parkhurst	Ct	8/27/2018	\$220,000	0.23%	13	0.02%	0.20%
		7/14/2017	\$219,500				
10502 Gentlewind	Ct	2/29/2016	\$270,000	0.93%	24	0.04%	0.46%
		2/19/2014	\$267,500				
10504 Providence	Dr	10/19/2017	\$254,000	2.13%	40	0.05%	0.65%
		7/3/2014	\$248,700				
10614 Providence	Dr	9/20/2019	\$290,000	18.37%	67	0.27%	3.28%
		2/18/2014	\$245,000				
				Ave	rage	0.19%	2.26%
				Me	dian	0.18%	2.22%

#### Case Study 2 Reconciliation

The evidence represents sales and resales of residential properties in a neighborhood containing a wireless communications tower facility. The tower existed prior to construction of homes in the project. There is volume sale evidence for analysis between 2014 and 2020. The rates of value change between the two categories are consistent. The non-proximity sales show a slightly higher average rate of appreciation, and the proximity sales show a slightly higher median rate.

Additionally, the average sale price per square foot of gross living area and total living area for each proximity category is illustrated in the following table.

Category	In Proximity	Outside Proximity	
Price Per Square Foot Gross Living Area	\$111	\$116	
Price Per Sq. Foot Total Finished Area	\$99	\$108	

The difference between all indications is negligible and not statistically significant. Comparing proximity sales to non-proximity sales in the neighborhood, both categories show a consistent trend of value change, and price based on dwelling size per square foot. In summary, there is no negative value impact from the tower facility.

#### Case Study 3 – Group 1 (Proximity Sales)

• Facility: Wireless Communications Facility, monopole construction, 140' height, residential single-family detached location

• Address: 7200 Woodhaven Road, Louisville, Jefferson County, Kentucky

• FCC Registration: 1298049

• Year/Date of installation: 05/13/2016

• Information source: FCC recordings, maps and individual research

• Neighborhood location: Woodhaven

• Property Group Identification: Inside 750' proximity to facility installation

• Reconciliation: The data represents sale activity beginning 01/01/2011. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is 2.79% to 9.47%. The average appreciation is 5.73%, and the median or middle point of the range is 5.58%. Note that sales of 5900 Woodhaven Ridge Court, 5921 Woodhaven Ridge Court, and 6005 Hurstview Road occur before and after the facility installation, and the sales of 5914 Woodhaven Ridge occurred prior to the installation. The rates of value change are consistent.

Street			Sale	Adj Sale	Percent		% Annual
#	Street	St	Date	Price	Change	Months	Change
5900	Woodhaven Ridge	Ct	8/22/2011	\$180,000			
5900	Woodhaven Ridge	Ct	10/19/2017	\$211,000	17.22%	74	2.79%
5914	Woodhaven Ridge	Ct	12/14/2012	\$155,000			
5914	Woodhaven Ridge	Ct	8/1/2014	\$172,675	11.40%	20	7.00%
5921	Woodhaven Ridge	Ct	12/20/2011	\$125,000			
5921	Woodhaven Ridge	Ct	1/24/2013	\$138,000	10.40%	13	9.47%
5921	Woodhaven Ridge	Ct	10/22/2014	\$148,000	7.25%	21	4.16%
5921	Woodhaven Ridge	Ct	7/25/2018	\$187,400	26.62%	45	7.08%
6005	Hurstview	Rd	7/30/2013	\$124,900			
6005	Hurstview	Rd	4/20/2018	\$148,000	18.49%	57	3.91%
				·	Annual	Average	5.73%
					Annual	Median	5.58%

#### Case Study 3 – Group 2 (Non-Proximity Sales)

• Facility: Wireless Communications Facility, monopole construction, 140' height, residential single-family detached and condominium subdivision location

• Address: 7200 Woodhaven Road, Louisville, Jefferson County, Kentucky

• FCC Registration: 1298049

• Year/Date of installation: 05/13/2016

• Information source: FCC recordings, maps and individual research

• Neighborhood location: Woodhaven

• Property Group Identification: Outside 750' proximity to facility installation

• Reconciliation: The data represents sale activity beginning 01/01/2011. Each property transferred two or more times in the period. The price difference between transfers of each property is value change due to market conditions. The range of annual value change is 2.31% to 7.99%. The average appreciation is 4.97%, and the median or middle point of the range is 5.21%. Note that sales of 7118 Ridge Creek Road, 7102 Ridge Creek Road, and 7403 Covey Place occurred before and after the tower facility installation. The rates of value change are consistent.

Street			Sale	Adj Sale	Percent		% Annual
#	Street	St	Date	Price	Change	Months	Change
5904	Bluffington	Ct	7/28/2011	\$124,000			
5904	Bluffington	Ct	11/21/2012	\$130,685	5.39%	16	4.08%
7102	Ridge Creek	Rd	10/3/2011	\$135,500			
7102	Ridge Creek	Rd	5/6/2016	\$149,900	10.63%	55	2.31%
7118	Ridge Creek	Rd	3/28/2011	\$119,000			
7118	Ridge Creek	Rd	3/25/2016	\$150,000	26.05%	60	5.21%
7215	Chestnut Tree	Ln	6/10/2011	\$131,000			
7215	Chestnut Tree	Ln	11/1/2013	\$140,000	6.87%	29	2.87%
7403	Covey	Ρl	2/26/2014	\$135,500			
7403	Covey	Ρl	10/31/2016	\$156,000	15.13%	32	5.65%
7404	Covey	Ρl	2/8/2013	\$109,000			
7404	Covey	Ρl	12/30/2015	\$130,000	19.27%	35	6.67%
7405	Stone Bluff	Ct	3/28/2017	\$190,000			
7405	Stone Bluff	Ct	8/27/2018	\$211,500	11.32%	17	7.99%
					Annual <i>i</i>	Average	4.97%
					Annual	Median	5.21%

#### Case Study 3 Reconciliation

The evidence represents sales and resales of residential properties in a neighborhood containing a wireless communications tower facility. Tower installation occurred after homes were constructed in the neighborhood. There is volume sale evidence for analysis between 2011 and 2020. The non-proximity sales show a slightly higher median rate of appreciation, and the proximity sales show a slightly higher average rate. As noted, properties with sales both before and after the installation date illustrate consistent values trends.

Additionally, the average sale price per square foot of gross living area and total living area for each proximity category is illustrated in the following table.

Category	In Proximity	Outside Proximity	
Price Per Square Foot Gross Living Area	\$116	\$115	
Price Per Sq. Foot Total Finished Area	\$93	\$88	

The difference between all indications is negligible and not statistically significant. Comparing proximity sales to non-proximity sales in the neighborhood, both categories show a consistent trend of value change, and price based on dwelling size per square foot. In summary, there is no negative value impact from the tower facility.

#### **EXHIBIT B**

## STATEMENT OF NETWORK NEED FOR A NEW COMMUNICATIONS TOWER BY ANTONIO RAMOS – VERIZON RADIO FREQUENCY ENGINEER



#### Statement of Network Need for a New Communications Tower

Antonino Ramos, RF Engineer

- 1. My name is Antonino Ramos and I am a radio frequency (RF) engineer for Verizon Wireless ("Verizon"). I have been employed as an RF engineer for 24 years in the telecommunications industry, the last year with Verizon.
- 2. The primary duties of my job as an RF engineer include the design and management of Verizon's wireless communications network in its Michigan/Indiana/Kentucky Market, which includes the area in and around Symsonia, Kentucky. In this role, I am also responsible for identifying and correcting substantial service gaps that present themselves in Verizon's wireless network. These service gaps can be caused by lack of coverage or insufficient system capacity, or both. Service gaps are identified through the use of internal Verizon network monitoring tools and analysis showing the capacity and/or coverage need in a particular area.
- 3. In the course of my employment at Verizon, I have become aware of a significant service gap in Verizon's wireless communications network in the area near south eastern Symsonia, Kentucky (the "Gap Area"). As a result of this significant service gap, Verizon customers using their devices in and around the Gap Area are likely to experience diminished call quality, slow and unreliable data transmission speeds, call drops, and blocked calls. Verizon's service gap in the Gap Area has existed for several years.
- 4. This significant service gap will remain and cannot be resolved unless a communications tower is constructed within the Gap Area. Verizon must remedy this service gap in order to provide high-speed wireless broadband access to the communities in and around Symsonia, Kentucky, to fill in coverage gaps where wireless services are not reliable, and to provide enhanced E911 services.
- 5. Verizon identified a search area in which tower would need to be located in order to resolve the service gap. Before proposing a new communications tower, Verizon first considered whether any existing towers in the area could be used to resolve the coverage gap in the Gap Area. There are no other existing towers in the search area on which Verizon could collocate its communications equipment to resolve the service gap. For this reason, Verizon Wireless began looking for available properties in the search area that would be suitable for a tower.
- 6. Verizon and Vertical Bridge have worked together to identify a property in the Gap Area that could accommodate a communications tower to correct the significant service gap in Verizon's wireless communications network. Vertical Bridge has proposed to build a new tower on 1429 JB Copeland Road, Symsonia, Kentucky ("Proposed Tower").
- 7. By co-locating its communications equipment on the Proposed Tower, Verizon will resolve the current significant service gap and will be able to provide improved service to residents, businesses, and emergency service providers in and around the Gap Area. If Vertical Bridge is unable to construct the new telecommunications tower, and Verizon is therefore unable to collocate its equipment on the proposed tower, the significant service gap in Verizon's wireless communications network will remain, and Verizon will be prohibited from providing reliable wireless service to its customers in the Gap Area.

Dated this 27 day of August 2024

[Antonino Ramos]
RF Engineer

Verizon

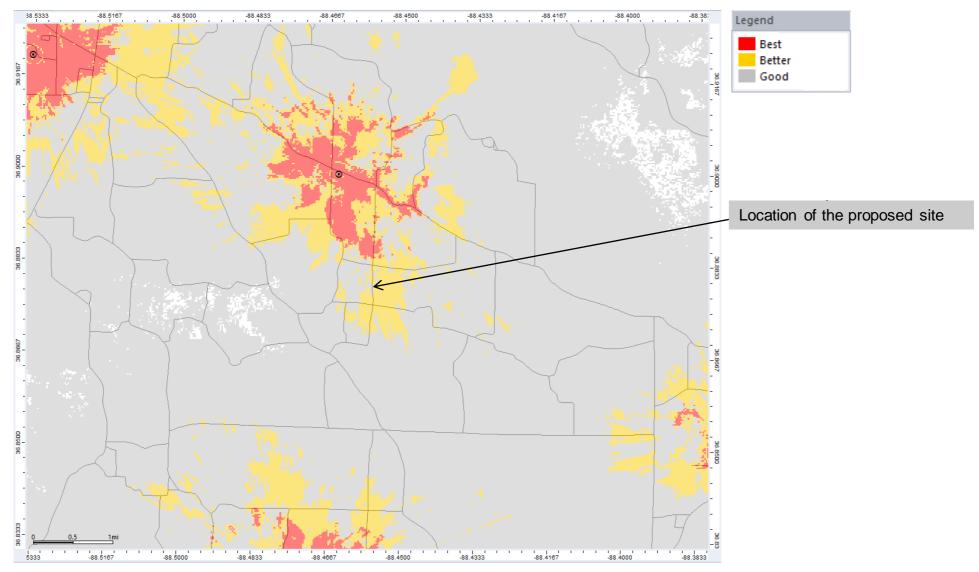
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# Verizon

# **EV Tim Road Zoning Coverage Plots**

Market 232, RF Systems August 27, 2025

### **Current Coverage Without Proposed Site**





### **New Coverage Including Proposed Site**

