

# The Appraisal Journal

Volume 91, Issue 4 | 2023



◀ Valuation of the Leased Fee and Leasehold Interests of Senior Housing and Health Care Enterprises

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The Appraisal of an Appraisal Company

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# The Appraisal Journal

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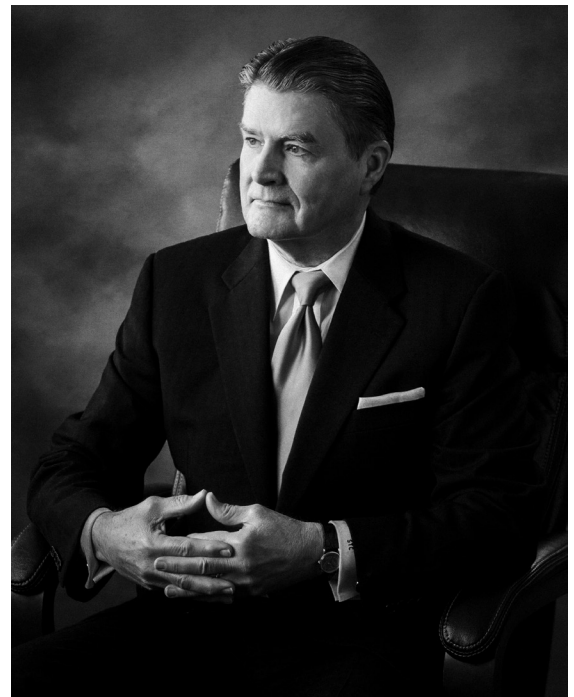
# Special Considerations in Assignments

Dear Readers:

Welcome to the latest edition of *The Appraisal Journal*. This issue addresses special aspects in valuation assignments that may affect the appraisal methodology.

In this issue's peer-reviewed section, you will find the cover article, "Valuation of the Leased Fee and Leasehold Interests of Senior Housing and Health Care Enterprises," an excerpt from the Appraisal Institute's new text *The Appraisal of Senior Housing, Nursing Home, and Hospital Properties*. Appraisal assignments for senior housing, nursing home, and hospital properties often present challenges around allocating the market value of the going concern between real estate and personal property, and leased fee and leasehold interests. Further complicating these assignments is the often-fragmented ownership of senior housing and health care enterprises. This article discusses valuation of leasehold interests and the appropriate application of capitalization rates.

The second peer-reviewed article, "The Problem of Ground Leases," discusses recent dramatic increases in ground rent reappraisals of office buildings in New York City that have caused leasehold mortgage lenders to avoid financing ground leases with any sort of reappraisal provisions. The issue often turns on whether the land underlying the project is to be valued at its highest and best use as if vacant and unencumbered, or as presently



**Stephen T. Crosson, MAI, SRA, is stepping down after serving for nearly twenty years as *The Appraisal Journal's* editor-in-chief.**

improved and used, an issue with a long history in rent reset reappraisal proceedings. Proposed tactics to address such situations include inflation indexing and rent resets utilizing use valuation to satisfy financing concerns in new ground leases.



The next article, “Regression Promises and Aggregation Bias Illusions: The Application of Market Delineation to Land Valuation Models,” examines potential statistical bias in regression models. Regression is one of the best tools for consistently deriving market-based adjustments in the appraisal of real estate; however, the potential for misleading results must be recognized. There is a pervasive misunderstanding that a large data sample will homogenize and minimize the negative impact of inappropriate or incorrect data points (comparables). This article shows how aggregation bias may creep into a regression model, and how professional appraisers are equipped to avoid it with the tools of market delineation and segmentation. Only after a data set has been delineated and segmented in accordance with the market can issues related to modeling be effectively addressed.

Finally, rounding out this issue is “The Appraisal of an Appraisal Company.” At some point, many real estate appraisers may consider selling their firm, buying another, or bringing in or buying out partners. At these moments, appraisers will want an appraisal of their appraisal company. The appraisal of an appraisal company is a business valuation exercise that differs from real property appraisal in important ways. This article examines the appraisal of appraisal companies from the perspective of business valuation, explains

the methodologies and procedures that represent best business practices, and discusses a range of valuation inputs.

On a personal note, this is my final issue as editor-in-chief as I have decided to step aside from that role with *The Appraisal Journal*. It has been a great honor to serve as the *Journal*’s Editorial Board chair and editor-in-chief since 2005. Throughout this period, the Board and the Review Panels have worked to improve the publication in many ways. I believe we have succeeded. I humbly thank all who have participated in this work, with an especially warm thanks to Managing Editor Nancy Bannon. She deserves the appreciation of *The Appraisal Journal*’s team as well as the valuation profession as a whole for her diligence and wise leadership.

*The Appraisal Journal* welcomes the contributions of its authors, and we encourage you to consider becoming a contributor as well.

Stephen T. Crosson, MAI, SRA  
Editorial Board Chair and Editor-in-Chief  
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# Recent Court Decisions on Real Estate and Valuation

## Property taxes still owed during condemnation proceedings

In October 2005, the City of Joliet, Illinois (City), filed a condemnation complaint seeking to acquire, through eminent domain, a low-income apartment complex known as Evergreen Terrace. The property was owned and managed by a collection of entities, including MB Financial Bank and Burnham Management Company (collectively, the Owners).

Because the US Department of Housing and Urban Development had an interest in the property, the condemnation action was removed to federal court, where the case was in litigation for nearly twelve years. While the case was in litigation, the apartment complex remained in operation, and the Owners continued to pay the property taxes that were due without filing any protest. Ultimately, the City acquired fee simple title to the property on August 25, 2017.

In August 2018, the Owners filed a tax objection complaint in Will County Circuit Court against the county treasurer. The complaint sought a refund of over \$6 million in property taxes paid between the date the City filed its condemnation complaint and the date the City acquired the Owners' property. The Owners asserted that under Illinois law, once title to a property acquired by condemnation vests with the condemning authority—here the City—it vests retroactively to the date of filing the condemnation petition and, therefore, the landowner is entitled to a refund for any taxes paid after the date of the filing.

The county treasurer filed a motion to dismiss, which the trial court granted. It read the Owners' complaint as alleging that because the City's acquisition of the property was effective retroac-

tive to the date the condemnation complaint was filed, the property was retroactively exempt from taxation from that date. The trial court then concluded that the Owners lacked standing because only the City itself could seek tax-exempt status.

The Owners appealed to the appellate court. The appellate court found that the trial court had misinterpreted the Owners' complaint. Rather, the Owners were seeking a refund because they had overpaid their taxes. On that claim, the appellate court found for the Owners. The court concluded that once the condemnation proceedings were complete and title to the property was conveyed to the City, the title "related back" to the date the condemnation complaint was filed. And because the City owned the property during that 12-year period, the City was retroactively responsible for the property taxes during that time. The treasurer appealed to the state supreme court.

Illinois law states that the owner of property on January 1 of each year is liable for the taxes for that year. The key elements for defining ownership are control and the right to enjoy the benefits of the property. Although the Owners had enjoyed the benefits of their property during the pendency of the litigation, the appellate court concluded that the Owners were not the owners of the property during that 12-year period, relying on a 1942 case from the Illinois Supreme Court, *City of Chicago v. McCausland*.

In *McCausland*, the court held that a lien for unpaid taxes could not be deducted from the property owner's just compensation award. When the compensation award is actually paid—which is the event that completes the taking—the title acquired relates back to the point when the condemnation action was filed; thus, only liens that existed at that time are liens against

the fund. Hence, although property taxes continued to accrue while the condemnation action was being litigated, the property owner could not be held responsible for those taxes because the taking effectively took place on the date the action was filed.

Here, the appellate court determined that it would be nonsensical to hold that a condemnee who failed to pay taxes during the pendency of the proceedings is not liable for the taxes but find a condemnee who continued to pay taxes liable. The Illinois Supreme Court disagreed, expressly finding that *McCausland* is no longer good law.

*McCausland* was based on the proposition that a taking occurs on the date the government deposits a compensation award to the property owner and acquires the title. It was also based on the proposition that the valuation of the property is fixed at the time the condemnation action is filed. But neither of those points is true under current Illinois law. The relation back rule cannot stand because, under current law, there is no taking to relate back to. The legal rationale underlying *McCausland* has thus been eliminated.

Because title no longer “relates back” during condemnation proceedings, the Owners remained liable for all taxes owed during the period of the condemnation proceedings. The Owners also argued that the mere act of filing a condemnation complaint burdened their property, but the court found this argument unpersuasive. Further, the Owners did not appeal their annual taxes, nor had they argued that their annual taxes should be reduced because of the impact of the condemnation complaint on their property’s value.

Accordingly, the decision of the appellate court in favor of the Owners was reversed, *McCausland* was overturned, and the trial court’s dismissal of the Owners’ claims was affirmed.

*MB Financial Bank NA v. Brophy*  
Illinois Supreme Court  
September 21, 2023  
2023 WL 6153041

## Reducing access from road is not a compensable taking

Barham Investments LLC (Barham) owns a car dealership in northern Indianapolis, on the border with neighboring Carmel, Indiana, near the intersection of Keystone Avenue and 96th Street. The City of Carmel (City) used its power of eminent domain to convert that intersection into a roundabout interchange.

Barham’s dealership was positioned toward its main entrance on Threel Road, which was a frontage road running alongside Keystone Avenue. In an earlier case (the County Line Action), the City had been granted the total acquisition of Threel Road in April 2018. The City then filed a condemnation complaint against Barham, claiming it needed to acquire three separate property interests from Barham: 0.017 acres in fee simple, an access-control line, and 0.0111 acres as a temporary right-of-way during construction (collectively, the Property).

Barham objected to the City’s complaint, claiming that the City had failed to properly identify all the ownership interests being extinguished in the taking, namely the easement rights of Barham to access and use Threel Road. The trial court denied Barham’s objection, and the parties entered into an agreed order authorizing the City’s acquisition of the Property. The agreed order set the access-control line as the new western property line of the Property, with the intent to limit any access to the west of that line toward Keystone Avenue.

Following the appointment of appraisers to value the Property, Barham disputed their determination of total compensation due—an award of \$163,000—because the damages from the taking of access to Threel Road were substantial. The City moved for partial summary judgment, arguing that Barham was not entitled to compensation for its loss of access to Threel Road. The trial court denied the City’s motion, explaining that the City had cited no law that definitively fore-

closed Barham's arguments for compensation for the elimination of the ingress and egress easements or the diminution of value to Barham's property. A jury subsequently awarded Barham \$2.4 million in damages. The City appealed.

Although Indiana law was silent  
on the issue, other states have held  
that the taking of real property by  
eminent domain extinguishes any  
easements burdening the property.

Whether a taking has occurred is a question of law. When considering that question, a threshold question is whether the plaintiff landowner has a property interest in the property that is being acquired by the state. In the context of property owners abutting public roads, two principles are well settled in Indiana: first, the right of an abutting landowner to ingress and egress over the public roads is a cognizable property right, and interference with that right is a compensable taking (the "ingress-egress rule"); second, an abutting landowner has no cognizable property right in the free flow of traffic past its property (the "traffic-flow rule").

The City argued that in this case it did not acquire Threel Road or an easement in Threel Road, so the traffic-flow rule applies. Barham argued, in contrast, that the case involves an easement and a substantial change in how its Property is used. The court of appeals agreed with the City that it did not acquire Barham's easement in this case, and even if it had, Barham's easement granted it only a right to ingress and egress over Threel Road, not a curb cut.

The court analyzed the agreed order, which appropriated an area adjacent to Threel Road,

but which was silent as to any alleged interest of Barham in Threel Road itself. Easements are limited to the purpose for which they are created, and they convey no other rights beyond those necessary for the enjoyment of the easement. Barham's deeded easement did not expressly reserve a curb cut right; it simply reserved an easement "over, across, and under Threel Road for pedestrian and vehicular traffic, sewer lines, and other utilities." Based on the language of Barham's deeded easement, Barham had ingress and egress rights in Threel Road but not to any specific curb cut onto Threel Road or in the Property that the City was acquiring.

Furthermore, the City had already appropriated Threel Road in the County Line Action, which had resulted in the permanent closure of the road. With its total acquisition of Threel Road, the City acquired all of the interests therein, including Barham's easement. Although Indiana law was silent on the issue, other states have held that the taking of real property by eminent domain extinguishes any easements burdening the property. The default rule in federal eminent domain cases, for example, is that a taking in fee simple establishes new title and extinguishes all possessory and ownership interests not specifically excepted. Adopting this rule, the court concluded that the City extinguished Barham's easement in Threel Road when the City acquired it in its entirety in the County Line Action. Therefore, there was no easement to take in the current case.

To the extent the parties were arguing whether a compensable taking occurred in this case, rather than in the County Line Action, they characterized it as one of traffic flow versus ingress-egress. But the court held that under either analysis, Barham would lose. Under the ingress-egress rule, interference with those rights is only compensable if it is substantial or material; but here the interference is neither, because Barham maintained sufficient access to another road to run its business. And under the traffic-flow rule, the mere reduction in traffic flow is not a compensa-

ble property right, which would make Barham's loss of access non-compensable since it maintained two other access points.

The court of appeals found that the trial court erred when it denied the City's motion for partial summary judgment on the issue of whether Barham was entitled to compensation for loss of access to Threel Road. The trial court's judgment was reversed.

*City of Carmel v. Barham Investments LLC*  
Indiana Court of Appeals  
October 30, 2023  
2023 WL 7119594

### Department's failure to record and index plan invalidated easement

In 2015, the Pennsylvania Department of Transportation (PennDOT) began constructing a diamond interchange and installing a drainage system on property abutting Interstate 70 in Washington County, Pennsylvania. The property was owned by Donald Bindas, who filed a petition seeking compensation for the encumbrance on his land. PennDOT asserted that its predecessor, the state Department of Highways (DOH) had secured a highway easement for the land in question in 1958.

The state legislature enacted the State Highway Law in 1945, which included a provision empowering the state Secretary of Transportation to establish or change state highways, but which required first the submission and recording of a plan of the proposed change (Section 210). Once the plan is approved by the governor, the plan becomes a condemnation of an easement for highway purposes.

Thirteen years later, in 1958, the governor approved a plan providing for the expansion of Interstate 70. The prior owners of the property now owned by Bindas signed quitclaim deeds to DOH, which were not recorded. The chain of

title for subsequent deeds included an exception and reservation for the portion condemned by the state for highway purposes.

Nevertheless, when Bindas hired a title searcher to investigate PennDOT's claim, the title searcher found no encumbrances on the property. Only when PennDOT's counsel alerted the title searcher to its existence did she find a copy of the 1958 plan on microfilm, in an unlabeled and unindexed drawer at the county recorder's office. Bindas then petitioned for the appointment of a board of viewers, and PennDOT filed preliminary objections.

Bindas argued that Section 210 required not only recording the 1958 plan but indexing it within a locality index. Because it was PennDOT's duty to ensure the plan was properly indexed, the DOH's failure to do so left it without an enforceable interest in the property. PennDOT, in contrast, argued that the fact that the 1958 plan was not properly indexed does not void the condemnation action so long as it was properly filed and recorded.

The trial court granted PennDOT's objections, finding that the lack of indexing was the fault of the county recorder. The trial court therefore refused to divest PennDOT of its property interest because of a third party's error. The court pointed to the fact that several deeds expressly referenced the easement, and PennDOT's employee was able to locate the document at the county recorder's office in a matter of minutes.

Bindas appealed, and the commonwealth court affirmed. It found that the recording of the 1958 plan provided Bindas with constructive notice of the easement. It is a purchaser's duty to investigate its title and exercise due diligence, so Bindas should have known to examine the extent of PennDOT's interest in the property. Bindas appealed again to the state supreme court.

On appeal, Bindas argued that the commonwealth court ignored Section 210's use of the mandatory "shall," and that the court considered improper factors, such as the payment of compensation and whether he had actual or constructive

notice of the plan. While there may have been evidence of the plan in the chain of title, it did not reveal itself in a title search, “lending further credence to the importance and necessity of proper recording and indexing required by Section 210.” According to PennDOT, though, all the actions necessary for the condemnation of the property occurred in 1958, including the payment of just compensation to the property’s prior owners. To PennDOT, the governor’s approval of the plan effectuated the condemnation.

The state supreme court began by finding that DOH, and now PennDOT, had a duty to ensure that the 1958 plan was properly recorded and indexed. The purpose of statutes mandating the indexing of mortgages and other encumbrances is to give notice to intended purchasers that the conveyance or encumbrance stands in the line of title to the property that is described. Here, while it is true that the statutory language imposes a duty upon the county recorder, and not PennDOT, to maintain an adequate locality index and plan book, that language does not pass PennDOT’s burden onto the county recorder. Rather, the county recorder “is simply responsible for offering Section 210 filings a home with the appropriate documents.”

Having found that PennDOT and DOH had a duty to ensure proper recording and indexing, the court was left with the question of whether the condemnation of Bindas’s property was effective. The 1958 plan at issue here was not recorded in a plan book, nor was it indexed in a locality index. Section 210’s requirements were not met. Had they been, Bindas’s title searcher would have had no trouble locating evidence of the plan in the county recorder’s office; it would have been in the plan book as opposed to an unlabeled drawer in a filing cabinet, and such proper filing would have relieved the public of the burdens associated with hunting for items the legislature intended to be matters of public record.

The court held that DOH’s failure to comply with the requirements of Section 210 renders the

1958 plan invalid insofar as it purported to establish an easement upon Bindas’s property. To hold otherwise would endorse a reading of Section 210 that reduces its explicit references to recording and indexing to mere superfluity. The order of the commonwealth court was vacated, and the case was remanded to the trial court for further proceedings.

*Bindas v. Pennsylvania Dept. of Transportation*  
 Pennsylvania Supreme Court  
 August 22, 2023  
 302 A.3d 644

### **Subsequent purchaser rule prohibits inverse condemnation claims for damage occurring prior to ownership**

The Box Canyon Hydroelectric Project is a run-of-river facility located on the Pend Oreille River in northeastern Washington State. The Box Canyon Dam was built in 1955 to generate low-cost electricity and is owned and operated by the Pend Oreille Public Utility District (PUD). The dam’s turbine and spillway gates control the water surface elevation of the river. Before the dam was constructed, the natural high-water elevation at the Cusick Gage was 2,028 feet above sea level; it is now 2,030.6 feet.

The PUD operates the dam within the constraints of its Federal Energy Regulatory Commission (FERC) license. To comply with its operational parameters, the PUD monitors the river’s elevation and adjusts the gates on a daily and sometimes hourly basis. The dam’s FERC license has been amended several times. A 1999 amendment included the full extent of lands inundated by the project reservoir up to 2,041 feet and noted that the proposed changes would keep the dam “continuing operating as it had been under the 1963 license amendment.”

In July 1993, Brock and Diane Maslonka (Maslonkas) purchased 535 acres of pastureland

bordering the Pend Oreille River upstream from the Box Canyon Dam. Prior to the sale, Herbert Cordes, the then-current owner of the property, and the Maslonkas discussed the flood hazards on the property. Cordes specifically informed them that the lower part of the river flooded periodically in abnormally wet years.

When the dam was constructed, the Maslonkas' predecessors-in-interest sold express easements to the PUD. The easements allowed the PUD to intermittently or continuously overflow, flood, or submerge the land with river water in the operation of the dam. The easements covered most flooding up to an elevation of 2,041 feet.

In 2016, the Maslonkas filed a complaint against the PUD for a governmental taking, statutory trespass, and nuisance. The PUD counter-sued to quiet title to a prescriptive easement. The PUD alleged it had continuously used the Maslonkas' property above elevation 2,035.5 feet since it began operating the dam in 1955, and the Maslonkas and their predecessors knew this but failed to timely assert or enforce any right they may have had.

After the parties filed various dispositive motions, the trial court issued a ruling in the PUD's favor. Noting that an inverse condemnation claim is actionable only by the property owner at the time of the taking, the court ruled that the Maslonkas' claim was foreclosed by the "subsequent purchaser doctrine." The court also dismissed the trespass and nuisance claims.

An appeal ensued. The court of appeals reversed the dismissal of the inverse condemnation, trespass, and nuisance claims. It held that the subsequent purchaser rule did not bar the inverse condemnation claim, because the burden was on the PUD to prove that it had reduced the value of the property before the Maslonkas' purchase. It also held that the Maslonkas' alternative theory of recovery in tort was not subsumed in the inverse condemnation action. The PUD appealed to the state supreme court.

Under constitutional eminent domain principles, the government cannot take or damage private property for public use without just compensation. An inverse condemnation action seeks to recover the value of property affected by a governmental taking that occurred without a formal exercise of the power of eminent domain. But not all landowners can recover damages caused by governmental conduct through an inverse condemnation action. The

Noting that an inverse condemnation claim is actionable only by the property owner at the time of the taking, the court ruled that the Maslonkas' claim was foreclosed by the "subsequent purchaser doctrine."

subsequent purchaser rule prohibits landowners from suing for property damage caused by governmental conduct that occurred prior to their ownership. Because the right to damages for an injury to property is a personal right belonging to the property owner, the right does not pass to a subsequent purchaser unless expressly conveyed. No damages should be awarded to plaintiffs who acquired property for a price commensurate with its diminished value.

In reversing the trial court's inverse condemnation ruling, the court of appeals reasoned that the subsequent purchaser rule is a defense, so the PUD must prove that it reduced the value of the property before the Maslonkas' purchase—a burden which the PUD failed to carry. The PUD argued that the subsequent purchaser rule is not a defense, but is instead a doctrine of standing. Standing requires a party to have a real interest in the litigation and generally prohibits a litigant from asserting the legal rights of another.



Washington case law does not expressly characterize the subsequent purchaser rule as one of standing, but it limits who may sue for inverse condemnation by prohibiting a subsequent purchaser from asserting the legal rights of the owner at the time of the alleged taking. The state supreme court thus agreed with the Maslonkas that standing refers to a party's right to bring a legal claim and that it is not intended to be a high bar. But the court disagreed that the subsequent purchaser rule was a high bar to overcome; it simply requires the proper plaintiffs to bring suit. The court of appeal opinion flipped the standing burden by requiring the PUD to show that the Maslonkas lacked standing.

Here, the taking occurred when the dam was built in 1955; thus, the proper inverse condemnation claimants were the owners of the land at that time. The PUD's dam operations have flooded the property since 1955, well before the Maslonkas purchased the property in 1993. The supreme court "assume[d] the Maslonkas' purchase price reflected this known seasonal flooding." The Maslonkas therefore had no inverse condemnation claim unless they established a new taking occurring after 1993.

While the Maslonkas offered speculative evidence about increases in flooding, the PUD's evidence firmly rebutted that evidence. The 1999 FERC license amendment, for example, included lands already being flooded up to an elevation of 2,041 feet. And while there may have been occasions when flooding occurred above that level since 1993, they produced no evidence that the dam's operations changed in any way after 1993 to cause that increased flooding. Thus, without evidence of a new taking, the Maslonkas' inverse condemnation claim could not survive summary judgment.

On the Maslonkas' tort claims, the supreme court also disagreed with the court of appeals. Generally, when the government takes private property for public use, eminent domain principles apply. Takings claims have long been distin-

guished from tort claims. The court of appeals held that inverse condemnation claims do not foreclose tort recovery. And it is true that tort actions are unnecessary where the defendant is a governmental entity and the recovery sought is only for loss of property rights, not personal or other injuries.

Here, however, the parties agreed that a taking has occurred. Even though the Maslonkas were precluded from filing an inverse condemnation claim, the theory is available to them. They sought damages from loss of property rights against a defendant to which eminent domain principles apply. They simply could not show that the taking occurred after their purchase. Under these facts, the Maslonkas are not disadvantaged if they are denied recourse to a tort cause of action.

In sum, there is no authority that inverse condemnation claimants barred by the subsequent purchaser rule are entitled to alternative tort recovery. The Maslonkas alleged one governmental action—the continuous flooding caused by the dam's construction in 1955—as the basis for both their tort and inverse condemnation claims. If tort claims could exist as a backup theory of recovery for otherwise barred inverse condemnation claims, subsequent purchasers could endlessly sue governmental entities in tort. The Maslonkas cannot maintain a tort action for conduct that undisputedly constitutes a taking.

Accordingly, the supreme court reversed the court of appeals' decision and remanded to reinstate the trial court's order granting summary judgment to the PUD and dismissing the Maslonkas' trespass and nuisance claims.

*Maslonka v. Public Utility Dist. No. 1  
of Pend Oreille County*  
Washington Supreme Court  
August 3, 2023  
533 P3d 400

### **Airport property leased to fixed-base operators entitled to tax exemption**

The Hillsborough County Aviation Authority (Authority) owns regional and international airports in Hillsborough County, Florida. For several years, the Authority has applied for an ad valorem property tax exemption for fifteen properties located within those airports and leased to private entities. The lessees use the properties for fixed-based operations (FBOs) and related activities, including aircraft maintenance and repair, fueling, flight instruction, and air cargo transport.

In its exemption applications, the Authority claimed these properties were exempt because their uses met the statutory definition of “governmental purpose”; for several years, the then-elected county property appraiser approved those exemptions. But in 2019, the Hillsborough County Property Appraiser, Bob Henriquez (Henriquez), changed course and denied the exemption applications, in whole or in part, on all fifteen properties. In the denial notice, Henriquez explained that the properties no longer met the statutory criteria for government use.

The Authority appealed this decision to the county Valuation Adjustment Board, which overturned Henriquez’s denial and reinstated the exemptions. Henriquez then filed suit in circuit court, seeking to tax the properties. Both parties filed for summary judgment, with the Authority arguing that its tenants’ uses of the properties fell squarely within the statutory definition of a governmental purpose, and Henriquez arguing that for an exemption the property must serve a “governmental-governmental” purpose—that is, be owned by the government and used for administration of some phase of government.

The trial court agreed with Henriquez. The court found that “while the activities undertaken by the tenants are useful to the public and the users of the airports in particular, the uses are not the administration of some phase of government,”

and thus were not exempt. The Authority appealed to the district court of appeal.

In Florida, various statutes control property tax exemptions. Of relevance here, Sections 196.199(2) and 196.012(6) exempt leasehold and other interests in government property if they meet certain criteria. The lessee must serve or perform a governmental, municipal, or public purpose or function in order for the property to be exempt. Among the functions included in the statutory definition is activity “undertaken by a lessee which is permitted under the terms of its lease of real property designated as an aviation area on an airport layout plan... and which real property is used for the administration, operation, business offices and activities related specifically thereto in connection with the conduct of an aircraft full service fixed base operation.” Such activities are deemed to be activities “which serve a governmental, municipal, or public purpose or function.” These code provisions were first adopted in 1971, in an act seeking to tighten exemption requirements, and then expanded in 1993 to include the sentence deeming FBOs to serve a governmental purpose.

The trial court, though, found that the Authority’s properties did not serve a governmental purpose under the statutes because their uses did not satisfy a judge-made “governmental-governmental test.” This test began shortly after the 1971 legislation, when a case involving airport property leased for use as a for-profit racetrack was decided by the state supreme court, which held that such a use was not exempt. As a result, the court developed the so-called governmental-governmental test. Under the governmental-governmental test, an exemption is constitutionally permitted only if the use by the private entity could properly be performed or served by a governmental unit serving the administration of some phase of government. A governmental-proprietary function, in contrast, occurs when a nongovernmental lessee uses government property for proprietary and for-profit

aims; though such a use might serve the public, it does not fit the definition of a public purpose.

The question here is whether FBOs and comparable aviation activities undertaken by private lessees on airport property serve a governmental purpose. It was undisputed that the properties at issue were operated as FBOs, which expressly fall within the legislative definition of governmental purpose. By statute, then, the lessee's interests in the properties are exempt from property taxation. While the trial court looked beyond the plain language of the statutes and found that the properties did not satisfy the governmental-governmental test, the court held that that ruling—and Henriquez's arguments in support of it—directly contravenes the plain language of the statute that expressly and mandatorily deems FBOs to serve a governmental purpose.

Because courts lack the power to construe an unambiguous statute in a way that would extend, modify, or limit its express terms or its reasonable and obvious implications, the trial court's ruling could not stand. The court of appeal reversed and remanded the case to be decided in the Authority's favor.

*Hillsborough County Aviation Authority v. Henriquez*  
Florida District Court of Appeal, 2nd District  
July 7, 2023  
370 So.3d 334

### **Transfer to state was a fee simple transfer and a public road dedication**

The Scotland Beach subdivision was established in the early 1920s on a peninsula that borders and extends on the shore of the Chesapeake Bay in St. Mary's County, Maryland (County). In the 1940s, the State Roads Commission of Maryland, a predecessor to the State Highway Administration (collectively, the State), proposed a series of road projects to construct a seven-mile-long highway, which was intended to follow along the northern

and eastern boundaries of the Scotland Beach subdivision, eventually turning south toward Point Lookout. In addition, the State and County agreed to extend and improve an internal road, renamed Bay Front Drive, through the middle of the subdivision.

In October 1944, the State prepared and recorded two plats to lay out, establish, and construct Bay Front Drive. To construct the road, the State acquired property through conveyances and condemnation proceedings from Scotland Beach lot owners, including Joan Brady. In July 1945, Brady deeded portions of her property to the State for construction of the highway and the extension of Bay Front Drive. The deed granted and conveyed to the State "forever in fee simple, all our right, title, and interest, free and clear of liens and encumbrances" in order to construct a public highway and bridge.

In 1954, severe storms and Hurricane Hazel resulted in severe erosion along the Scotland Beach shoreline. Large portions of the peninsula and subdivision became submerged into the bay. Accordingly, construction of the southern portion of Bay Front Drive was not completed, and the State never completed its highway project. In September 1988, the State conveyed its interest in the land to the County, which the County used as public access to the beach.

In 1995, John and Susan Wilkinson (Wilkinsons) purchased three lots in the subdivision, and in 2004, Barbara and Christopher Aiken (Aikens) purchased undeveloped lots to the south of the Wilkinsons' property. Disputes eventually arose between the Aikens and the Wilkinsons concerning the Aikens' right to use a 0.196-acre property (the Property) for ingress and egress. The Property was part of the Brady deed.

In 2007, the Wilkinsons placed barriers on the Property to prevent the Aikens from crossing it, and then petitioned the County to close the Property as a road. In 2017, the County adopted an ordinance stating that the public interest would be served by closing that portion of Bay Front Drive.

In 2018, the Wilkinsons filed suit against the County asserting ownership of the Property based on theories of adverse possession, abandonment, and estoppel. The County countersued, seeking a declaration that it owned the Property in fee simple, and the Aikens intervened, asserting a right to use Bay Front Drive to access their property. The trial court eventually determined that (1) the County owns the Property in fee simple; (2) neither the Wilkinsons nor the Aikens have any private property interest in the Property; and (3) the Property is not a public road as a matter of law.

The Wilkinsons and the Aikens appealed. The appellate court held that the trial court did not err in determining that the County owns the Property in fee simple absolute, but it erred in determining that there was no public road. In doing so, the appellate court rejected the Wilkinsons' argument that the Brady deed conveyed the Property to the State in fee simple determinable rather than fee simple absolute, but agreed with the Aikens that a public road exists on the Property by virtue of it being dedicated for that purpose. The County appealed to the state supreme court.

On appeal, the County argued that the Brady deed conveyed the Property to the State in fee simple absolute, but that the appellate court misconstrued the 1988 deed as dedicating the Property for a transportation purpose. The Wilkinsons argued that the Brady deed conveyed an easement for a specific purpose that was later made impossible. They also argued that even if it was a fee simple transfer, it was a fee simple determinable rather than fee simple absolute, because it was for a purpose later abandoned. The Aikens largely agreed with the appellate court.

In interpreting deeds, the language of the deed is of foremost importance. If a deed is unambiguous, then courts construe it without examining extrinsic evidence. On appeal, the state supreme court's first task was to determine the type of interest conveyed by the Brady deed to the State.

Under Maryland law, unless a contrary intention appears by express terms or is necessarily

implied, every grant of land passes a fee simple estate. A fee simple interest in land is the broadest possible interest allowed by law, and the owner of a fee simple estate has absolute and exclusive control and dominion over the property. An estate in fee simple absolute is an estate of indefinite or potentially infinite duration. An estate in fee simple determinable, on the other hand, is created by any limitation that provides the estate shall automatically expire upon the occurrence of a stated event. Thus, the grantor retains a possibility of reverter, to reacquire the land by reason of the occurrence of the named contingency.

**In interpreting deeds, the language**

**of the deed is of foremost importance. If a**

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**it without examining extrinsic evidence.**

Here, the language of the Brady deed clearly and unambiguously intended to convey the entire interest in the Property in fee simple absolute. It clearly did not convey an easement, as the Wilkinsons contended. And although the conveyance was specifically for the purpose of constructing Bay Front Drive—an event which never occurred—the “mere expression of a purpose will not of and by itself debase a fee.” Nothing in the Brady deed suggested that the parties intended to create a reversionary interest or conveyance other than a fee simple absolute. That portion of the appellate court's decision was affirmed.

The state supreme court then turned to the question of whether a public road was established on the Property by dedication. In Maryland, public roads can be established in one of three ways: by public authority, by dedication, or by prescriptive easement. The first category addresses roads created through condemnation proceedings pur-

suant to public authority, i.e., eminent domain. This case does not involve condemnation proceedings because Brady conveyed the Property to the State in fee simple absolute. As a result, no road was established by public authority. The case also did not involve a prescriptive easement. Thus, this case involves a question of common law dedications.

Generally, common law dedications are voluntary offers to dedicate land to public use, and the subsequent acceptance by a public entity. Thus, dedication requires (1) an offer to dedicate, and (2) an acceptance of that offer. No particular form or ceremony is necessary; the key ingredient is the landowner's intent to dedicate the property to public use. Following the landowner's offer, acceptance may be evidenced by deed or by the public's continued use of the land, among other actions.

The court first concluded that the Brady deed reflected evidence of an offer. The deed was sufficient to establish Brady's intent because it expressly stated that her property would be used for public convenience and for a public highway, without any limiting language. The court further held that the State accepted Brady's offer to dedicate the Property for public use. The State recorded the instrument, which effected the acceptance.

The County contended that the 1988 deed from the State to the County did not convey a public road because the deed sought to accomplish something that was no longer feasible due to storm damage and erosion. But the court held that this argument ignored the plain language of the 1988 deed and failed to consider the statutory authority granted to the State to convey title to public roads and the County's authority to close them. The relevant statutes contemplate a transfer of property no longer needed for a State transportation purpose could be conveyed to a local government for a local transportation purpose. The 1988 deed stated it was made under that statutory authority. Thus, the 1988 deed conveyed a public road for further local transportation purposes. The 2017

ordinance closing the road served as public notice of when the road was closed.

Accordingly, the court agreed with the appellate court's analysis and affirmed its judgment. The County owns the Property in fee simple absolute, the Brady deed and its recording effected a dedication of the Property for public road purposes, and it was not until the 2017 ordinance that the public road over the Property was closed.

*Bd. of County Comm'rs  
of St. Mary's County v. Aiken*  
Maryland Supreme Court  
June 20, 2023  
296 A.3d 933

### **Owner of property abutting a newly constructed controlled-access highway has no compensable right of access**

William and Elise Wood (Landowners) own farmland in Blue Earth County, Minnesota. The farmland abuts the Mankato city limits. In 2016, Blue Earth County (County) filed a quick-take petition in district court to condemn a portion of the Landowners' property to construct a new section of County Highway 12. No road previously existed when the new section of Highway 12 was planned, and the new section of highway crossing the Landowners' property was designated a "controlled access highway."

The district court granted the petition and appointed commissioners to determine the compensation due to the Landowners resulting from the taking. Both parties offered appraisals. The Landowners' appraisal was higher because it included compensation for loss of access to Highway 12; the County's appraisal did not include any amount of damages for loss of access to the highway. The commissioners awarded the Landowners compensation consistent with the County's appraisal, including severance damages because the property was bisected by the highway.

The Landowners appealed the award to the district court, which affirmed the award. The court reasoned that, because the new highway did not previously exist, the Landowners had not been deprived of any right of access for which they should be justly compensated. The Landowners appealed next to the court of appeals, and then ultimately to the state supreme court.

A right of access is an independent property right that must be compensated for if taken or impaired, and it must be taken separate from the land to which it is appurtenant. The fundamental question before the court—a matter of first impression, meaning the court had never been asked to answer the question before—was whether a person who owns property abutting a newly constructed controlled-access highway has a right of access thereto.

Under Minnesota law, a government generally must provide to an abutting landowner a reasonable means of access to either a newly constructed highway or a relocated or reconstructed highway. But the statute also defines a particular class of highway called a controlled-access highway, which is a highway “over, from, or to which owners or occupants of abutting land or other persons have no right of access, or only a controlled right of the easement of access, light, air, or view.” Here, the County designated the portion of Highway 12 through the Landowners’ property as a controlled-access highway, and that decision was not at issue.

The court noted that a separate statute provided that no person has any rights of ingress or egress to, from, or across controlled-access highways to or from abutting lands except that the road authority, in its discretion, may provide such access. Taken in conjunction with the other statutory provisions, the court held that—unlike the general rule for highways and roads—abutting landowners have no right of access to a controlled-access highway.

Finally, the court noted that another statute specified that “in the case of any elimination of

existing access... or other compensable property rights, the owner shall be compensated for the loss by purchase or condemnation.” Thus, when a road authority converts an *existing* highway to which an abutting property has access to a controlled-access highway, the road authority must compensate the owner for the loss of that access. But when a road authority constructs a *new* controlled-access highway, it is not eliminating existing access and thus no compensation is owed.

Accordingly, because Highway 12 did not previously exist, the Landowners were not deprived of any right of access for which they should be justly compensated. The district court’s judgment in favor of the County was affirmed.

*Wood v. County of Blue Earth*  
Minnesota Supreme Court  
August 23, 2023  
994 N.W.2d 309

### **HOA authority ratified by repeated conduct of HOA members over time**

In 1973, Charles Lewton signed and recorded protective covenants and a certification of incorporation for Hi-Country Estates Homeowners Association, Phase II (HOA). The documents established the HOA and included within its boundaries about 2,000 acres of land near Herri-man, Utah. The 1973 protective covenants stated that the owners of the described property “hereby subject said property to the following covenants, restrictions, and conditions,” including that each lot owner would be a member of the HOA and would pay annual assessments for the costs to maintain roads and common areas.

The HOA’s governing documents were revised and amended over the years, including amended protective covenants in 1980 and bylaws in 1988, all of which were enacted at annual meetings of the HOA members. All the original and current governing documents were duly recorded with



the Salt Lake County Recorder. There are currently hundreds of HOA members, most of whom have paid their annual assessments to the HOA.

In 2009, Robbie Frank, as the trustee of two trusts, bought two lots within the HOA's boundaries (Trust Lots). The prior owners of the Trust Lots paid the HOA's annual assessments. But Frank refused to pay the assessments levied by the HOA, although he participated and voted in HOA meetings on behalf of the trusts.

In 2012, the HOA sued the trusts to obtain the past-due assessments. Meanwhile, in 2015, other lot owners sued the HOA claiming that they had discovered evidence that when Lewton established the HOA in 1973, he owned less than 1% of the property he included in the HOA's boundaries. Those lot owners sued to quiet title against the HOA, moving for a declaration that the governing documents signed by Lewton were void, because it violated public policy for Lewton to encumber property that he did not own. That case was eventually decided by the Utah Supreme Court, against the lot owners and for the HOA.

In 2016, the HOA filed another suit against Frank on behalf of the trusts for past-due assessments. Frank's defense focused, in part, on the allegation that the HOA does not legally exist and therefore has no right to make any assessments. The district court granted partial summary judgment in favor of the HOA. The court determined that even assuming that the HOA's founding documents were faulty, the HOA still had authority to assess the Trust Lots because the members of the HOA had subsequently ratified the HOA's authority, including Frank himself by voting in HOA meetings. Frank appealed.

On appeal to the state supreme court, Frank argued that the district court erred in granting judgment to the HOA because the governing documents are "absolutely void and therefore incapable of ratification." He also argued in the alternative that even if the documents are merely voidable, the court incorrectly concluded that ratification had occurred here because the governing

Restrictive covenants, like those here,  
that are recorded without the signature  
of the affected landowner are voidable, not  
absolutely void, and are therefore ratifiable.

documents can only be ratified through a signed writing of the owner of the property at issue.

The court first addressed Frank's argument that the HOA had no authority to assess the Trust Lots because the governing documents that established the HOA are void, and therefore not ratifiable. The distinction between "void" and "voidable" is important because a contract or deed that is void cannot be ratified or accepted, and anyone can attack its validity in court. In contrast, a contract or deed that is voidable may be ratified at the election of the injured party, and once ratified, the voidable contract or deed is deemed valid. There is a presumption that contracts are voidable unless they clearly violate public policy.

Restrictive covenants, like those here, that are recorded without the signature of the affected landowner are voidable, not absolutely void, and are therefore ratifiable. Frank did not overcome the presumption that the governing documents were merely voidable. The result is judicial deference to the HOA members' collective decision to either reject or ratify the HOA's authority, rather than a judicial determination that the members cannot ratify the HOA's authority as a matter of law. And here, the covenants have existed for decades, so the reliance interests of hundreds of other owners in the HOA may be especially substantial.

Having determined that the governing documents were only voidable, not void, the court proceeded to analyze whether the district court correctly concluded that the HOA's members had collectively ratified the HOA's authority to assess

property within its boundaries. Frank contended that because the governing documents encumber real property, the statute of frauds requires that any ratification must be in writing, signed by the affected property owners, who must have known of the defect and had an intent to subject the property to the governing documents despite the defect. The court disagreed.

The court began by clarifying that the question in this case is whether the HOA's members have ratified the HOA's authority in general, and its authority to assess the property within its boundaries. Frank's analysis focused on ratification of the governing documents, but that was not the relevant question. The court focused its analysis on whether the HOA members have collectively ratified its authority.

Where property owners have treated a homeowner's association as one with authority to govern and impose assessments contemplated under the terms of a duly recorded governing declaration, they ratify its authority to act. As the district court found here, decades have passed since the HOA's governing documents were recorded, and the members of the HOA have since acted as though the HOA was a legitimate governing entity for decades. Frank himself implicitly acknowledged its authority by voting on the Trust Lots behalf at HOA meetings. He also provided no evidence that any prior of the Trust Lots objected to the HOA's authority or did anything other than acquiesce to Lewton's actions.

Utah law is clear that even if there is some technical deficiency with an HOA's governing documents, the fact that the HOA has existed for forty years, conducting meetings and elections, making and enforcing assessments, all with the cooperation and participation of its members, means that the authority to act as such has been ratified by the members as a matter of law. Even where real property is involved, Utah's courts do not require that ratification be evidenced in a writing, or that the writing demonstrate an intent to ratify the relevant

defect. Rather, repeated conduct of homeowner association members over time, including treating the association as one with authority to govern, can evidence ratification.

Accordingly, because the district court did not err in its analysis, the state supreme court affirmed its judgment for the HOA and against Frank.

*Hi-Country Estates Homeowners  
Association, Phase II v. Frank*  
Utah Supreme Court  
May 4, 2023, amended July 20, 2023  
533 P3d 1142

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### **Demand for appraisal under insurance policy was not time-barred**

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On February 5, 2010, the residence owned by Raymond Romeo in Cranston, Rhode Island, suffered a water loss followed by ice and flooding. At the time, the property was insured under a homeowner's policy issued by Allstate Property and Casualty Insurance Company (Allstate). Romeo made a claim for the loss under the policy, and Allstate made a partial payment toward the damages.

Although the parties agreed that the loss was covered by the terms of the policy, they were not able to agree to the extent of the loss and the cost of remediation. The policy mandated that should the parties disagree as to the amount of the loss, either party could make a written demand for appraisal, which would begin a process of retaining appraisers and an impartial umpire to determine the amount of loss.

Romeo initially sought to invoke the appraisal provision within two years after the loss. Allstate refused to proceed to appraisal because it contended that the disagreement involved mixed issues of both valuation and coverage such that appraisal was not appropriate. As a result, Romeo filed suit against Allstate for breach of contract. Based on a then-recent Rhode Island Supreme

Court decision, Allstate took the position that appraisal was a mandatory precondition to plaintiff's suit.

Allstate filed for summary judgment, arguing that the terms of the policy required the dispute to be resolved via appraisal rather than litigation. Allstate then filed an amended answer and counterclaim, alleging that it had made a demand for appraisal in accordance with the policy. During the summary judgment hearing, both parties agreed that the loss was covered but disagreed as to the amount of the loss. Thus, at the end of the hearing, the parties were in agreement that appraisal was the proper forum for resolution of the dispute. Based on this agreement, the trial justice granted summary judgment to Allstate, after the point at which two years had already passed from the date of the loss.

After summary judgment was granted,  
Romeo alleged he experienced difficulty  
finding an appraiser who would  
undertake the appraisal due to the  
uniqueness of his home.

More than four years later, in March 2017, Romeo designated an appraiser and requested that Allstate do the same. Allstate refused to appoint an appraiser and move forward with the appraisal process based on its assertion that Romeo's demand for appraisal was not timely filed. According to Allstate, this second demand for appraisal was subject to the same two-year limitation period, which had long since passed.

Eventually, in September 2017, Romeo filed suit again, seeking to vacate the earlier judgment and alleging that Allstate breached the insurance contract by refusing to designate an appraiser and

proceed to appraisal. Romeo sought a judgment ordering Allstate to designate an appraiser to complete the appraisal process. In response, Allstate argued that summary judgment was granted in the first action in December 2012, and Romeo never demanded appraisal until March 2017. Following another motion for summary judgment, the trial justice granted Allstate's motion, and Romeo appealed to the state supreme court.

The court noted that it was confronted with a case in which both parties were in agreement in 2012 that this insurance coverage dispute should be resolved by way of the appraisal process. Unfortunately, an appraisal never occurred. After summary judgment was granted, Romeo alleged he experienced difficulty finding an appraiser who would undertake the appraisal due to the uniqueness of his home—a home with custom bricks from England, custom tile from Italy, and gumwood, which was now illegal to import. An appraiser was eventually found but only after four years. Allstate insisted that the two-year limitation in the insurance contract had expired years earlier.

The rights and liabilities of the parties in an insurance contract are to be ascertained in accordance with the terms as set forth therein. A limitations period in an insurance policy is a term to which the parties are specifically bound. Several cases relied on by Allstate suggested that Romeo's demand for appraisal in 2017 was not timely. The state supreme court found Allstate's reliance on those cases misplaced, though. Unlike the cases cited by Allstate, Romeo in fact made a timely demand for appraisal prior to 2017. Both parties acknowledged that the loss occurred in February 2010, and plaintiff demanded an appraisal shortly thereafter. Allstate refused to proceed to appraisal, and plaintiff sued in 2011. Thus, both Romeo's original demand for appraisal and his initial action were timely, as they fell within the requisite limitation period. Thus, neither was time barred; the clock did not begin to run again.

In the first action, there was a clear understanding that the appraisal process would be, or

already was, ongoing. Indeed, Allstate asserted, in both its motion for summary judgment and its counterclaim, that appraisal was required. The court held that those assertions amounted to a binding judicial admission—a deliberate, clear, unequivocal statement of a party about a concrete fact which is considered conclusive and binding as to the party making it.

Because the court concluded that Romeo's initial demand for appraisal was not time-barred and because Allstate's original motion for summary judgment was granted with the clear understanding that the claim would undergo appraisal, the court concluded that the trial court erred in granting summary judgment to Allstate in the second case. The case was remanded to the trial court with direction to vacate the earlier judgment and order the parties to proceed to appraisal.

*Romeo v. Allstate Property and Casualty Ins. Co.*  
Rhode Island Supreme Court  
May 3, 2023  
292 A.3d 1190

### Granting of water rights is exercise of police power, not a taking

In 2017, the City of Oklahoma City (City) applied for a permit from the Oklahoma Water Resources Board (OWRB) to divert stream water from the Kiamichi River in Pushmataha County, southeast of the City. Eighty-five individuals and entities protested the City's stream water permit application.

Before taking final action on a stream water permit application, the OWRB must determine from the evidence the so-called Four Points of Law: (1) unappropriated water is available in the amount requested; (2) the applicant has a present or future need for the water, and the applicant intends to put the water to a beneficial use; (3) the proposed use does not interfere with domestic or existing appropriative uses; and (4) if the appli-

cation is for the transportation of water for use outside the stream system where the water originates, various statutory provisions are met. If the OWRB determines that the Four Points of Law are met, then the OWRB shall approve the application and issue the permit.

After a hearing, the OWRB found the Four Points of Law were met and issued an order granting the permit. Some of the affected individuals (Petitioners) filed a Petition for Judicial Review in the county district court alleging several purported failures by the City in filing its permit application. After several procedural motions, the district court eventually affirmed the OWRB's order granting the City the stream water permit, and the Petitioners filed an appeal to the Oklahoma Supreme Court.

One of the issues raised by the Petitioners in their appeal was that the OWRB's granting of the City's stream water permit constituted an unconstitutional taking of the Petitioners' water rights. They argued that the City's use of water effected a taking of their water rights. The court disagreed.

Appropriative and riparian rights are coexistent under Oklahoma water law. An appropriative right means the right to take a specific quantity of water by direct diversion and to apply such water to a specific beneficial use. A riparian right, on the other hand, is the right of an owner of land adjoining a stream or waterway to use water for reasonable purposes. Riparian rights are limited to domestic use and pre-1963 vested rights.

The state supreme court held that, when the OWRB granted the City's permit, it was a proper exercise of the state's police power, not a taking. The granting of a permit does not abolish the domestic riparian and appropriative uses of others. Indeed, the evidence before the OWRB showed that the unappropriated water in the Kiamichi River exceeded the City's request, even after considering all existing appropriative and domestic riparian uses were considered. None of the Petitioners offered evidence that their water rights would be or might be harmed by the grant-

ing of the stream water application; rather, they argued general harm without any supporting evidence, which the court found to be insufficient.

Furthermore, the legislature provided a judicial remedy to adjudicate water rights disputes. Under that regime, domestic riparian and existing appropriate users can seek remedy for interference with their water rights. Therefore, if the City's use of the water under the granted permit interferes with their water rights, the Petitioners have recourse. That process, however, is not a prerequisite to granting a water use permit.

The Petitioners also argued that the OWRB should have considered an additional element of environmental issues and impacts on economic activity as part of the beneficial use analysis in the Four Points of Law. They attempted to present evidence of the environmental impacts of the City's water application, but the OWRB's hearing officer excluded that evidence.

The court disagreed with the Petitioners. Under Oklahoma water law, beneficial use is a factor that must be determined before a permit can be issued. A beneficial use is defined as "the use of such quantity of stream or groundwater when reasonable intelligence and reasonable diligence are

exercised in its application for a lawful purpose and is economically necessary for that purpose."

While an applicant may apply for a permit to appropriate water for a fishing pond or to water wildlife, general protection of environmental flows is not one of the statutory elements to be determined by the OWRB. Thus, the hearing officer committed no error in excluding evidence of the purported environmental impacts. Furthermore, even if environmental impacts were a statutory element, the Petitioners offered no evidence to show that granting the City's application would impact the area.

Ultimately, the state supreme court concluded that the district court properly affirmed the OWRB's order. The OWRB correctly applied the Four Points of Law, and its decision to grant the stream water permit was based on substantial evidence containing no clear error that prejudiced the Petitioners. The denial of the Petitioners' challenge to the permit was affirmed.

*Leo v. Oklahoma Water Resources Board*  
Oklahoma Supreme Court  
October 3, 2023  
536 P.3d 939

### About the Author

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# Valuation of the Leased Fee and Leasehold Interests of Senior Housing and Health Care Enterprises

by James K. Tellatin, MAI, Vic Cremeens, MAI, Bradley J. Schopp, MAI, and Hollis Crosby Taggart Jr.

## Abstract

Often, appraisal assignments for senior housing, nursing home, and hospital properties will involve valuing only the real estate or a partial interest, such as a leased fee or leasehold interest. Such assignments present challenges around allocating the market value of the going concern between real estate and personal property, and leased fee and leasehold interests. The ownership of the senior housing and health care enterprises is often fragmented. In appraisal assignments where the parties to the ownership of the fee interest in the real estate are different than the ownership of the operating entity (the lease), the value of the leased fee interest is generally needed. There are occasions where an appraiser may need to provide a value opinion for the leasehold interest, and that leasehold interest is likely to have considerable non-realty value. The income capitalization approach is generally applied to the valuation of the leased fee interest, and both direct capitalization and discounted cash flow methods are very useful. The value of the leasehold interest is developed by capitalizing or discounting the tenant's profit. Capitalization rates derived from leased fee transactions, rather than capitalization rates from going-concern transactions involving fee simple interests, are applied to leased fee valuation. The capitalization rate or earnings multipliers for a leasehold interest should be derived from leasehold transactions. Fee simple going-concern capitalization rates do not match the investment risks of a leased fee or a leasehold interest.

## Introduction

The ownership of senior housing and health care enterprises is often fragmented, with an operating entity (OpCo or operating company) controlling the licenses and operations while a separate and sometimes unrelated party holds title to the real estate (PropCo or entity owning the real estate interest). In this legally complex and litigious business environment, the division of control and ownership can minimize some types of liabilities that the asset-rich realty entity or PropCo is exposed to through a landlord-tenant structure, while the OpCo, which is the lightning rod for litigation claims, can hold little net worth. Apprais-

ers must properly identify the interest appraised and identify the entity or entities that control the assets of the going concern. There may be other entities, related or not, that contribute to the market value of the going concern, such as a management company, therapy, pharmacy businesses, physician practices, and other entities that may provide services to the property, yet siphon off profits from the property and operations ownership platforms. In a sale or lease of a senior housing or hospital going concern, the market will fold back the value of these other entities into the going-concern price, often without allocating price to the various assets of the purchase. Often in an asset sale involving the going concern, the

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PropCo receives 100% of the purchase price consideration, and separately there is an operations transfer agreement (OTA) that separately conveys the operating rights and functions and specified intangible assets without price consideration.

Real estate appraisers are typically involved in asset valuation rather than stock or business appraisals. Asset appraisals typically exclude the consideration of financial and other assets and liabilities on a seller's balance sheet that will not transfer to a new ownership upon the sale of the property assets. Note that most appraisal engagements and sales transactions exclude current assets (working capital, cash, accounts receivable, etc.) from the purchase price consideration. Similarly, seller liabilities stay with the seller, and the buyer or successor in the business typically gains indemnity from seller liabilities. It is important for appraisers to confirm what current assets and liabilities, if any, are included in the consideration specified in a sale transaction and what assets are to be included in the appraisal assignment.

### Leasehold Interests

Typically, when the PropCo and OpCo entities are owned by the same parties, an appraiser's assignment will be to value the going concern, with a fee simple premise. In appraisal assignments where the parties to the ownership of the fee interest in the real estate are different than the ownership of the operating entity (the lease), the value of the leased fee interest is generally needed. There are occasions where an appraiser may need to provide a value opinion for the leasehold interest. That leasehold interest is likely to have considerable non-realty value. The income capitalization approach is generally applied to the valuation of the leased fee interest, and both direct capitalization and discounted cash flow methods are very useful. To assess the landlord's risk, the net operating income (NOI) and contract rent are compared. Most lease rents are set at a level that allows the operators to earn some profit for their efforts, skills, and invested capital.

The value of the leasehold interest is developed by capitalizing or discounting the tenant's profit. Capitalization rates derived from leased fee transactions, rather than capitalization rates from going-concern transactions involving fee simple interests, are applied to leased fee valuation. Sim-

ilarly, the capitalization rate or earnings multipliers for a leasehold interest should be derived from leasehold transactions. The use of fee simple going-concern capitalization rates does not match the investment risks of a leased fee or a leasehold interest. In a leasehold interest valuation, discounting the anticipated profits (tenant NOI less contract rent) to present value is considered more reliable than capitalizing a single year's profit because the lease term is finite.

Most senior housing property<sup>1</sup> and hospital leases involve absolute net terms and extend from five to more than 20 years. Typically, the entire facility is leased to a single tenant. In fact, in many cases multiple properties are contained in a single master lease. In exchange for rent, a typical lease contract conveys the right to occupy the real estate, the right to use any lessor-owned equipment at the property, and the use of transferable operating rights that were under the control of the landlord prior to the lease, to the extent that the landlord controls these intangible assets. Generally, the intangible assets that pass from one operator to the next include the requisite licenses, permits, and certifications, assembled workforce, patient and resident records, and other operational assets.

The transfer of the intangible assets is typically conveyed through the directions within the lease or a separate operations transfer agreement (OTA). Upon termination, most leases require the cooperation of the terminating tenant to convey the necessary operating rights to a succeeding operator. The absence of an OTA or instructions in the lease regarding tenant responsibilities upon the lease termination can lead to a wide range of disputes with economic consequences for the landlord and the tenant with risk considerations in the valuation of a leased fee or leasehold interest.

When compared to the going-concern value under a fee simple premise, a leased fee value of the same property is likely to have a larger percentage of its value attributed to tangible assets. A leasehold value in the same property is likely to have a greater proportion of its value attributable to intangible assets. The leaseholder is responsible to the employees, management, and obligations under licensure and certification agreements, and these business operational responsibilities align more closely with intangible value.

1. The appendix at the end of this article lists terms and acronyms for related property types.

Typical leases for the health care and senior housing properties covered here are long term and absolute net, meaning the tenant is responsible for all operating expenses and capital replacement. Also, the tenant is typically required to carry a significant amount of general and professional liability insurance. The tenant must maintain all licenses and certifications during the lease term. Most contemporary leases will require the tenant to provide the landlord with financial and operating statements regularly. Moreover, many leases require minimum *EBITDAR*<sup>2</sup>-to-rent-coverage ratios and may provide specific definitions for revenue and expense items, in addition to lease guaranties, balance sheet covenants, and rent deposits.

Lease terms are often for 10 years or more. This allows tenants more time to recapture their investment in the business operations.

For conventional real estate, the values of the leased fee and leasehold interests are typically subsets of the fee simple value. While this is not necessarily true in all cases, the sum of the leased fee and leasehold values often, but not always, approximates the hypothetical fee simple value of the property. More discussion on leasehold value issues is presented later in this article.

The cost approach and, if there are enough sales of reasonable comparable leased fee properties, the sales comparison approach are optional in appraising the leased fee interest of hospitals, nursing facilities, and senior housing properties. The income capitalization approach is often the singular approach used to appraise the market value of the leased fee interest. Direct capitalization and discounted cash flow analysis techniques can be applied. The direct capitalization approach uses the current contract rent and an overall capitalization rate derived from market evidence. Yield and value change are implied but not identified in direct capitalization, unless yield capitalization techniques are applied.

In discounted cash flow analysis, the expected rents over the anticipated term of the lease (or the holding period) and the value of the property at the termination of the lease (or holding period) are discounted to present value using a market-derived discount or yield rate. Generally, the market will rely heavily on direct capitalization for leases that have steady rental increases. Discounted cash flow analysis may be better employed

when there is irregular or flat rent in the lease, a large, determinable rental change, or a short remaining lease term.

To perform a leased fee valuation using the income capitalization approach, the following steps are applied:

1. Analyze salient issues within the lease agreement
2. Compare market rent to contract rent, and measure these rents to the tenant's net operating income (*EBITDAR*)
3. Determine the likelihood of lease extensions or renewals, or the exercising of a purchase option, per terms and conditions of the lease
4. Capitalize contract rent by applying the appropriate rate developed from the analysis of comparable sales and other market data
5. Develop an internal rate of return through forecasts of lease term, rent, and reversionary value

## Lease Contracts

Lease contracts can be more involved than purchase and sale agreements for the same property because the parties will "live" with each other over the lease term for better or worse, whereas with a sale transaction the parties go their separate ways after the sale closes. For many leases that have been in effect for years, it is likely that lease amendments have occurred. Appraisers should request and review the original lease and all lease amendments. It is important to read and understand the lease beyond the rent and lease terms. The following is a list of critical issues to glean from the subject lease when valuing a leased fee interest of a hospital, nursing home, or senior housing property:

- Lessee
- Lease term
- Rental rate
- Rental increases
- Landlord expenses
- Lease deposit
- Lease guaranty
- Financial requirements or restrictions placed on the tenant
- Lease termination clarity
- Tenant purchase option
- Master lease or cross defaults

2. Earnings before interest, taxes, depreciation, amortization, and rent.

## Lessee

Important issues regarding the tenant include

- Credit quality: For hospitals, they often have a credit rating, and that is very useful information. That information should be requested.
- Name recognition: Well-branded operators tend to sell “better.”
- Quantifiable delivery of care, overall star rating, and care issues across a company’s coverage area.
- Issues with Medicare Recovery Audit Contractor (RAC) risks and regulatory transgressions.

## Lease Term

Initial lease terms will often run five to 20 years with extensions. The tenant needs years to establish its business and recover its investment. Shorter remaining lease terms require greater speculation from appraisers regarding tenant transition issues, possible substantial change in rent (move to a market rent), and meaningful changes in lease terms of a new lease that tie down loose ends from a prior lease.

## Rental Rate

Does the contract rent match market rent? Appraisers should confirm the actual, in-place rent, rather than rely on the stated rent amount in the lease document. Rental payments may have changed through separate lease amendments or other causes that are not apparent in the lease material provided to an appraiser.

## Rental Increases

Annual rental increases are the norm, but some leases call for occasional rent step-up, say, every five years. Leases may have rent reset provisions moving rent to market levels, which will require appraisers to speculate about future rent. Rent resets often require an appraisal process should the parties not agree on the new rent. Rent reset language providing instruction to appraisers may be vague, causing two or more appraisers involved in the reset process to make different interpretations, resulting in very different rent conclusions. Some leases have provisions for additional rent based on the tenant’s EBITDAR or EBITDARM (EBITDAR plus management expenses).

## Landlord Expenses

Typically, the lessee is responsible for all expenses and costs associated with the leased property through the term of the lease. Generally, real estate investment trusts and some more sophisticated landlords will require tenants to maintain a reserve for replacement of short-lived items and require tenants to fund this reserve from operations in some manner.

## Lease Deposit

The amount of the deposit is a key element of the lease agreement. Does the deposit change (e.g., increase or get partially or fully refunded) over time or when certain operational or financial thresholds are achieved?

## Lease Guaranty

Is there a guaranty, and does that extend to the parent company? Often a tenant is a single-asset entity, and a guaranty with just that entity is considered weak.

Usually, appraisers will not have clear insights into the strength of a lease guaranty. Discussions with the client regarding the lease guaranty can add better insight.

## Financial Requirements or Restrictions Placed on the Tenant

In many leases, tenants are required to maintain a minimum EBITDAR-to-rent-coverage ratio, a positive net worth in the leasing entity, or other thresholds prior to being able to take distributions. Failure to achieve these minimums may result in a tenant contributing a greater cash deposit, letters of credit, or other forms of security in escrow in favor of the landlord. The absence of such a financial covenant is noteworthy. Without these structures, a tenant could take large distributions, leaving the leasehold operating entity in poor financial condition. In theory, the absence of operating covenants should translate into higher rent.

## Lease Termination Clarity

Is there an operations transfer agreement or requirements in the lease that provide for a smooth transition relating to the operation of the facility upon termination of the lease? Is the tenant required to cooperate with transferring Medicare, Medicaid, and managed care provider

agreements and certifications? Licensing? Patient records? Employee matters? Vendor agreements? Noncompete agreements? Often there is a separate agreement to the lease known as the operations transfer agreement. Either through the lease or an OTA, most landlords want to be fully protected from the tenant as it is nearing lease termination from damaging the business for the next operator by requiring the tenant to cooperate with transfer operations and prohibiting the tenant from encouraging employees and residents or patients to move to other properties operated by the tenant.

### **Tenant Purchase Option**

The existence of a purchase option is often impactful on the value of the leased fee interest. The purchase option period might extend over a number of years, and judgment is necessary in determining when the purchase will occur. Purchase options may involve an appraisal process that uses an average of a few appraisals. The lease instructions for appraisers can be vague relative to critical valuation points, like property rights to be valued (leased fee, subject to the lease, or fee simple), or the lease may be unclear regarding the valuation of intangible assets. Having the parties in agreement regarding property rights and assets to be appraised before starting the appraisal process is ideal.

### **Master Lease or Cross-Defaults**

Generally, a master lease with multiple properties or a lease with a cross-default structure provides diversification that reduces risk. An assumption may be necessary that keeps the cross-default in place if only one property in the master lease or otherwise cross-defaulted lease is being appraised. Elevated risk consideration will need to be considered should the leased fee interest be somehow separated from the cross-defaulted properties.

While these comments pertain to the subject property lease, they also stress vital facts to know about lease comparable data. Comparable lease data for hospitals and nursing facilities, and possibly assisted living facilities, can be researched through nearly the same sources as those used to gather comparable sales data, although lease data will not show up in most recorder of deeds offices. A change in tenant usually involves a change of operator, which is recognized as a change in ownership (CHOW) that typically requires a review and approval by the state's health department or

other licensing agency. Most states provide varying levels of information regarding their review of the change of license application. This could include making available, under the Freedom of Information Act, a copy of the actual lease and operation information. Property transactions that are subject to a lease when the lease and operator remain in place may or may not be reviewed. Of course, the appraiser will have access to Medicaid and Medicare cost reports for nursing facilities and hospitals. That cost report data provides detailed operating data, and, if the cost report covers a period after the lease commenced, it is likely that the cost report will contain useful lease information.

## **License Ownership Issues**

Licensure ownership issues can arise during the lease termination. Increasingly, more contemporary long-term net leases will have an operations transfer agreement within the lease. Alternatively, the lease may include a separate agreement that requires the tenant terminating the lease to cooperate with the landlord and the next operator. The next operator may be taking over in a variety of ways:

- Via another lease
- Via a purchase of the fee simple estate of the real property
- Through a management company acting on behalf of the landlord or another party
- Through the transfer of business operations, which include the transfer of licenses, certifications, employees, patient and resident records, and other elements of the business

The presence or lack of an operations transfer agreement or similar set of agreements presents risks to the landlord's interest. Its absence should result in higher rent to cover the additional back-end risk, everything else being equal. Many leases—particularly older leases—are silent or vague regarding the transfer of operations issues.

### **Subordination**

A tenant may need to provide consent to subordinate its rights over a property to the rights of a lender, usually the senior mortgagee. Most lenders forbid the real property (and possibly personal property assets of a going concern) to serve as security for a loan unless their mortgage interest is

in a higher position than any leasehold interests of tenants. Typically, a lender will have the option to terminate a tenant's lease in the event of commercial foreclosure. Most leases will also have a nondisturbance clause so that the lender will not disturb the tenant's possession in the event of a foreclosure.

## Estimating Market Rent

A comparison of the estimated net operating income to rent provides insight into the potential duration of the lease, the ability of the lessee to pay rent (risk to the leased fee position), and the reversionary value.

A market rent estimate can be developed using several methods, with each method borrowing from one of the three approaches to value. Techniques for estimating market rent include the following:

- Cost approach
- Market comparison
- Income capitalization

The cost approach technique involves estimating the depreciated cost of the leased assets and land value and multiplying the cost by a market rent factor. The market rent factor is derived by dividing the initial full-first-year absolute net rent by the contracted development cost when the tenant, often a hospital, contracts with a real estate developer to deliver a completed ready-to-license-and-certify building. This rent is generally not used for valuation purposes, for many of the same reasons that the cost approach is not heavily relied upon in appraising the fee simple interest of health care properties, but the technique is useful when more market-oriented approaches are not available. This approach cannot be totally disregarded because rent on newly developed properties is often based on actual costs. The use of cost to established rent does tie the cost approach with the income capitalization approach.

The market comparison technique involves comparing the rent per unit/bed or building square footage (for hospitals) of comparable leases in a process that is similar to the sales comparison approach and that considers the same elements of comparison. Another method involves (a) applying the sales comparison approach to develop a

value of the fee simple estate and then (b) applying a market rent factor derived from sale-leaseback transactions. Rent comparable data can be obtained through news releases and Securities and Exchange Commission reporting by real estate investment trusts in the hospital and senior housing sectors announcing their recent lease transactions. Through EMMA<sup>3</sup> (Electronic Municipal Market Access), the Municipal Securities Rule-making Board publishes information that provides in-depth details for transactions using bond financing. Change of ownership applications filed and reviewed by state licensing departments are another source of comparable lease data.

The income capitalization technique involves developing *EBITDAR* or *NOI* in the same way that it would be developed in a direct capitalization or discounted cash flow analysis for a fee simple valuation. In leased fee and leasehold valuation, the data and analysis to reach the operator's *EBITDAR* are identical to the fee simple going concern. Next, the first-year or stabilized *EBITDAR* is divided by a market lease- or market rent-coverage ratio. This reciprocal of the ratio is the percentage of *EBITDAR* allocated to rent. The market expresses this relation as a ratio; for example, a nursing facility might have a 1.5:1.0 coverage ratio, which would be the same as 66.7% of *EBITDAR* equaling market rent.

The coverage ratio or rent percentage is derived from recent lease transactions for comparable property.

The rent-per-unit process is similar to estimating market rent for other commercial real estate. Units of comparison may include beds, dwelling units, and square feet. For hospitals, other units of comparison may be considered, such as rent per discharge and adjusted discharge, and patient day and adjusted patient day. The degree of adjusting a rent comparable for an element of comparison may differ from the same property being used as a sale comparable because the rent comparable is for a finite period while ownership takes a long-term perspective. Elements of rental comparison include typical lease factors:

- Type of lease (gross to absolute net)
- Physical qualities
- Location
- Rent increases
- Capital expenditure contributions

3. See <https://emma.msrb.org/>.



Specific considerations for health care and senior housing properties include rent coverage and other financial covenants, operations transfer agreements, and very importantly, census levels, payor mixes, reimbursement and rate levels, and other factors that ultimately drive NOI.

These techniques are the most used approaches for estimating market rent. Appraisers are often engaged to appraise market rent per terms in a rent reset provision of a lease, to establish rent for a new lease, and for other reasons. In the development of an estimate of market rent, it is critical to understand and accommodate all the provisions of the lease. Market rent can differ for the same property for the different lease provisions discussed earlier in this article. For example, rent will be affected by the amount of deposit or the presence of operating covenants that restrict cash distributions until net worth and rent coverage ratios are attained or a capital expenditures account is funded. Rent would be expected to be less when the lease requires a minimum rent coverage and regular contribution to a cap-ex account, as compared to the lack of those provisions. If the market rent assignment does not provide a lease, an appraiser should reach an agreement with the client or clients to define the key valuation terms of the lease.

### **Comparing Market Rent and EBITDAR to Contract Rent**

The market does not necessarily develop an estimate of market rent when assessing an opportunity to invest in senior housing or a hospital leased fee interest with a lengthy remaining lease term. For a shorter lease term, the market rent is more important because investors will be facing a possible different rent. In long-term leases, a key valuation factor is the anticipated EBITDAR coverage. The coverage ratio provides risk assessments—including the likelihood that the tenant will be profitable, pay rent timely and fully, and exercise lease extensions—and predicts rent levels after rent reset events.

An EBITDAR-to-rent coverage ratio that equals or exceeds initial market ratios provides the landlord with greater certainty that the tenant will perform under the terms of the lease because the tenant has a sufficient economic incentive to comply with the lease. If the EBITDAR is less than market, there is a greater risk that the tenant will not adhere to the terms of the lease. The selection of the leased fee capitalization rate or

internal rate of return places substantial emphasis on the EBITDAR-to-rent coverage ratios across the anticipated lease term. Other factors influencing the rate selection include property and competitive market qualities, guarantees, and the creditworthiness of the lessee.

The estimation of the tenant's EBITDAR is an essential exercise for most leased fee assignments unless the tenant quality is extremely strong. Usually, the operating tenant will be leasing the property through a single-asset entity to minimize liabilities. The landlord might have personal and or corporate guaranties from the tenant, but one of the greatest assurances for the landlord receiving full rent is to see that the tenant, a single-asset entity, is achieving enough cash flow so that the business will continue to operate with sound financial management and that it will comfortably cover contract rent.

Market EBITDAR-to-rent-coverage ratios vary with property type. Coverage ratios increase with the amount of human endeavor employed to achieve the EBITDAR. Research performed by the investment banking firm Stifel Nicolaus on lease coverage ratios for health care real estate investment trusts (REITs) illustrates this point in Exhibits 18.1 and 18.2. The analysis uses First Quarter 2019 information. Coverage analysis from the pandemic period is less reliable because many REIT tenants experienced significant drops in occupancy and increases in operating expenses caused by labor shortages. The coverage ratios reflect actual trailing EBITDAR and EBITDARM results.

REITs focus on two operating coverage ratios: before and after management fees. Because many REIT leases have provisions that will prohibit their tenants/operators from paying a management fee to their related-party management entities if coverages fall below prescribed minimums, the EBITDARM coverage becomes an important measure. Having this type of management fee provision increases the landlord's ability to receive full rent. Health care REITs will typically publicly report aggregate coverage information on a quarterly basis.

However, in recent years, REITs have been increasingly holding back lease coverage information for their announced property transactions for several reasons, including keeping their deals confidential for competitive reasons and avoiding issues that come with providing more granular details.



**Exhibit 18.1** Health Care REIT Coverage Ratios by Asset Type

Company	Symbol	EBITDAR Coverage		
		SNF	AL / IL	Hospitals
CareTrust REIT	CTRE	1.80	1.22	–
Physicians Realty Trust	DOC	–	–	4.10
Welltower, Inc.	WELL	1.24	1.05	–
HCP, Inc.*	HCP	1.68	1.02	3.15
LTC Properties	LTC	1.28	1.21	–
Medical Properties Trust†	MPW	–	–	2.25
National Health Investors	NHI	2.07	0.99	1.52
Omega Health Investors	OHI	1.31		–
Sabra Health Care REIT	SBRA	1.24	1.07	2.89
Senior Housing Properties Trust	SNH	1.46		–
New Senior Investment Group	SNR	–	1.23	–
Ventas	VTR	1.20	0.96	1.64
Median		1.31	1.14	2.57

Company	Symbol	EBITDARM Coverage		
		SNF	AL / IL	Hospitals
CareTrust REIT	CTRE	2.34	1.44	–
Physicians Realty Trust	DOC	–	–	5.47
Welltower, Inc.	WELL	1.55	1.21	–
HCP, Inc.*	HCP	2.06	1.19	3.49
LTC Properties	LTC	1.77	1.43	–
Medical Properties Trust†	MPW	–	–	3.00
National Health Investors	NHI	2.76	1.15	2.02
Omega Health Investors	OHI	1.67		–
Sabra Health Care REIT	SBRA	1.72	1.25	3.18
Senior Housing Properties Trust	SNH	1.52		–
New Senior Investment Group	SNR	–	1.40	–
Ventas	VTR	1.50	1.10	2.19
Median		1.72	1.33	3.09

Data as of March 31, 2019, lags by a quarter

\* Same-store for senior housing assets

† Estimate: assumes a 5.0% management fee: 35% operating margin for AL/IL, 20% for SNF, 15% for hospitals

Source: Stifel Nicolaus, estimates from company SEC filing

**Exhibit 18.2** Typical Lease-Coverage- or Rent-Coverage-Ratio Minimum Targets

Property Type	NOI-to-Rent Coverage
Senior housing	1.1:1.0 – 1.25:1.0
SNFs	1.25:1.0 – 1.50:1.0
Hospitals	Not enough data

**Exhibit 18.3** Comparison of Senior Housing Rent and *EBITDAR/EBITDARM*

Year	Contract Rent	<i>EBITDAR</i>	<i>EBITDAR</i> Coverage	<i>EBITDARM</i>	<i>EBITDARM</i> Coverage
1	\$1,250,000	\$1,562,500	1.25	\$1,785,714	1.43
2	\$1,281,250	\$1,620,000	1.26	\$1,851,429	1.45
3	\$1,313,281	\$1,685,000	1.28	\$1,925,714	1.47
4	\$1,346,113	\$1,700,000	1.26	\$1,942,857	1.44
5	\$1,379,766	\$1,750,000	1.27	\$2,000,000	1.45
6	\$1,414,260	\$1,625,000	1.15	\$1,857,143	1.31
7	\$1,449,617	\$1,745,000	1.20	\$1,994,286	1.38

REITs investing in senior housing have been migrating to deals where they take ownership of the going concern and retain the seller under a management agreement. These RIDEA-type deals<sup>4</sup> generally transact at lower going-in capitalization rates than net lease deals, but REITs feel that they have greater upside in the long run. They also are getting competition from other institutional investors for senior housing who are willing to accept lower returns.

A comparison of senior housing rent and *EBITDAR(M)* is simply presented in Exhibit 18.3. In this case, the *EBITDAR*-to-rent coverage is initially at market levels and remains within the market range through the remaining forecast. In this example, there is economic incentive for both parties to extend or renew the lease at the same rent level. A new lease might be desired to “modernize” the lease.

#### **Remaining Term of the Lease Including Option Periods and Purchase Options**

Most senior housing and health care facility leases extend over many years to allow the tenant time to establish a business and recover investments in personal property assets, including FF&E, working capital, the assembled work force, and management skills. Most leases grant one or more multiple-year lease extensions or renewal options,

provided all terms and conditions are being met to the satisfaction of the landlord.

Renewals and purchase options are critical considerations in valuing a leased fee interest. If the contract rent is significantly above or below market, potential leased fee investors adjust their valuation modeling to account for rent bumps. Also, investors need to predict when a tenant will exercise a purchase option.

From the tenant’s perspective, the purchase options should be examined closely when purchase points arise. As an example illustrating the considerations that tenants make in assessing a purchase opportunity, consider a tenant who has an option to purchase the leased fee interest at the end of year seven for \$20 million. Based on that price and using the in-place *EBITDAR*, the overall capitalization rate is 8.7%. If the market capitalization rate is 7.0%, the tenant has real incentive to purchase because there is significant equity present. The examination of the purchase option will follow the basic steps shown in Exhibit 18.4.

In this example, the tenant has nearly \$5 million in potential equity and can realize that by borrowing 70% of the \$20 million purchase option and producing \$2,799,000 in cash. The debt service would be \$339,073 less than the contract rent. That capital cost savings of \$339,073 annu-

4. RIDEA (typically pronounced Rye-Dee-Uh, or Rye-Day-Uh) is an acronym that stands for the REIT Investment Diversification and Empowerment Act. This legislation was enacted in a REIT reform act of 2007 and allowed REITs to change the way they accounted for health care real estate income. Prior to this act, health care real estate investments had to be structured as leases (typically triple-net leases) with annual rent payments and escalations. The RIDEA act allowed REITs to participate in the actual net operating income, as long as there was an involved third-party manager. The legal structuring includes creating Taxable REIT Subsidiaries (TRS), with an in-place lease between the landlord and tenant entities (both owned by the REIT). See Scott McCorvie (CEO of Vita Senior Living), “What Is the RIDEA Structure?” Senior Living Growth Advisors (May 3, 2017), [www.srgrowth.com/news/2017/5/3/what-is-the-ridea-structure-2](http://www.srgrowth.com/news/2017/5/3/what-is-the-ridea-structure-2).

**Exhibit 18.4** Analyzing a Purchase Option from the Tenant's Perspective

EBITDAR	\$1,745,000
Fee simple going-concern capitalization rate	7.0%
Market value, fee simple	\$24,930,000
Less purchase option price	(20,000,000)
Tenant's equity as fee simple owner	\$4,930,000
Mortgage financing available to tenant (70% loan-to-value)	\$17,451,000
Amount of cash required by tenant to purchase ((\$20,000,000 – \$17,451,000), plus \$250,000 cost to purchase & finance)	\$2,799,000
Annual debt service, using a 4.25%, 25-year amortizing loan	(1,146,784)
Contract rent in final lease rent, plus 2.5%	\$1,485,857
Difference between new rent and mortgage payment	\$339,073
First year cash-on-cash return if purchase option is exercised	12.1%

**Exhibit 18.5** Leased Fee Cash Flow Forecast

Lease Year	Rent/Sale
1	\$1,250,000
2	\$1,281,250
3	\$1,313,281
4	\$1,346,113
5	\$1,379,766
6	\$1,414,260
7	\$1,449,617
Year-7 Purchase	\$20,000,000

ally equates to a cash-on-cash return of 12.1%. The purchase opportunity appears attractive and becomes even more attractive if the tenant can raise the equity from investors that accept less than the cash-on-cash yield of 12.1%, which might be possible if the market is indicating equity capitalization rates of around 10% for property similar to the subject.

If EBITDAR is expected to fall below the typical market rent-coverage ratio, the prospect that the purchase option declines, and a new lease at a lower amount seems likely. This will be considered in the overall capitalization and discount rate selections.

Staying with this example, the leased fee cash flow forecast is shown in Exhibit 18.5. With this analysis, the leased fee valuation can proceed through direct income capitalization or dis-

counted cash flow analysis. The market generally considers direct capitalization to be reliable when the rent is expected to be steady and will be received for many years. The discounted cash flow analysis becomes more important when there is an expected purchase event or a foreseeable, substantial rent change (up or down).

**Direct Capitalization of a Leased Fee Interest**

As with any direct capitalization procedure, sales of the leased fee interests involving similar properties are preferred. Investor surveys for leased fee capitalization for senior housing, nursing facilities, and hospitals are not widely available. Capitalization rate surveys for net leased commercial real estate are available through several sources, such as the popular *PwC Investor Survey* published quarterly, and can be used as proxies. Sales for absolute net-leased properties covered in this book are scarce, and the search may necessitate casting a wide geographic net to gather a meaningful number of comparables. Leased fee capitalization rates are typically lower than going-concern rates for similar property because the landlord's income is insulated from the operational and business risks.

Sale-leaseback transactions by health care REITs provide accessible capitalization rate evidence. In sale-leaseback transactions, the capitalization rate is effectively the lease rate. In most cases, the lease rate is the first-year net lease divided by the purchase price. An argument can be made that a sale-leaseback transaction that

involves the seller remaining in the property as the tenant and operator is a financial transaction, not a third-party sale. But there is substantial evidence that the REIT's rent and lease rate would be the same whether the purchase kept the seller in place as the tenant/operator or a new, unrelated party became the lessee and operator.

REITs generally express their rates without making deductions for vacancy or operating expenses. It is important to treat the market data used to derive capitalization rates in a manner that is consistent with the treatment of the NOI of the subject property. If the subject property and the comparable sales involve absolute net leases, then deducting for vacancies and operating expenses from the rent of a comparable sale but not from the rent of the subject property will produce an inaccurate value. Most REITs will report capitalization rates based on full rent when the lease is absolute net, without deductions for vacancy risk, management fees, or other potential expenses. For absolute net leases, the possibility of vacancy and expenses associated with the property in a premature tenant transition can be incorporated into the capitalization rate.

A simple technique used to ballpark a leased fee capitalization is to work with better-known facts such as going-concern capitalization rates and *EBITDAR*-to-rent-coverage ratios. Knowing those two, the leased fee capitalization rate can be approximated with this formula:

$$\frac{\text{Going-concern Overall Capitalization Rate}}{\text{Market } EBITDAR \text{ Rent Coverage Ratio}} = \text{Leased Fee Capitalization Rate}$$

Examples for skilled nursing (SN) and assisted living (AL) properties are as follows:

$$\begin{aligned} \text{SNF: } & \frac{12.5\% (\text{going-concern } R_o)}{1.5} = 8.33\% \\ \text{ALF: } & \frac{7.5\% (\text{going-concern } R_o)}{1.2} = 6.25\% \end{aligned}$$

The indicated capitalization rates from this formula represent rate floors. If the *EBITDAR* were capitalized at the going-concern capitalization rate, that value would equal the rent capitalized at the leased fee capitalization, leaving no value to the operator. Certainly, the tenant will have some intangible value resulting from the cash

flow from the *EBITDAR* above the 1.0:1.0 coverage. Therefore, it is reasonable to expect that leased fee capitalization should be slightly higher than expressed in this formula.

One interesting observation to note when rent is being set between a developer and the operating tenant is that the rent is typically based on the developer's total costs to deliver a completed project. The cost basis for the rent usually excludes the entrepreneurial incentive to the delivery point. The rent is set at a negotiated "rent" rate. Often the rent rate or rent factor is greater than the ultimate leased fee capitalization rate when the developer elects to sell the leased fee interest. If there has been no change in interest rate, capitalization rate, and other economic factors between the time the lease and development agreements are set and the developer sells the leased fee interest, the developer intends to earn a profit by selling the leased fee interest at a capitalization rate that is less than the cost-based rent rate. For example, if a developer delivers a new orthopedic hospital to the tenant with a 20-year lease and a rent based on 9.0% of total cost and then sells the leased fee interest to real property investors at an 8.0% capitalization rate, the developer's entrepreneurial profit is 12.5% of the cost  $[(9.0/8.0) - 1]$ .

While REIT transactions offer considerable insight into leased fee capitalization rates, more desirable rate evidence comes from sales that involve leased fee transactions in which the lease was in place prior to the most recent sale, where the leased fee seller had an established leased fee interest. These transactions are difficult to identify.

Exhibit 18.6 presents typical relationships of lease rates, *EBITDAR*-to-rent coverages, and going-concern capitalization rates for senior housing and skilled nursing properties. Hospitals have a different set of rate considerations that tie closely to their credit quality.

Exhibit 18.7 illustrates issues that warrant consideration in the selection of an appropriate lease rate or internal rate of return. Many leases will lack items in the lease level factors.

### Leased Fee Capitalization Rate Data from Surveys

Several popular surveys that publish information on triple net lease capitalization rates can be used as a starting point for developing senior housing and health care property rates. The quarterly *PwC*

**Exhibit 18.6** Rate Relationships

Property Type	Lease Rate	NOI-to-Rent Coverage	Implied Going-Concern Capitalization Rate
Senior housing	5.5% to 7.0%	1.05:1.0 – 1.30:1.0	6.0% to 8.75%
SNFs	8.0% to 10.0%	1.25:1.0 – 1.50:1.0	10.0% to 15.0%

**Exhibit 18.7** Factors in the Selection of a Leased Fee Capitalization Rate**Factors at the Lease Level**

- Amount and frequency of scheduled rental increases
- Minimum *EBITDAR*-to-rent coverage, operator net worth requirements, management fee holdbacks, and other provisions to ensure that positive coverage is achieved
- Cross-defaulting multiple property leases between the same tenant and landlord
- Remaining term of the lease and prospects and cost of transitioning the property to the next operator
- Credit quality of the tenant and guarantees
- Atypical lease terms or unconventional leases that are unacceptable to investors (equity and lenders)
- Tenant's ability or inability to compete with the existing leased facility after the termination of the lease, assuming the tenant might develop a replacement facility in the same market area

- Clearly define responsibility at lease termination or well-defined operations transfer agreement, etc.
- Operator transparency (i.e., the lease should make operating and financial statements available to the tenant)

**Factors at the Property (Asset) Level**

- Building condition
- Remaining economic life
- Location
- Anticipated reversion value, relative to the current value
- *EBITDAR*-to-rent-coverage ratio (i.e., high rent coverage reduces risks and rates)
- Barriers to entry (e.g., high land costs, difficult regulatory environment for new developments, and strong certificate of need rules)

*Investor Survey* includes a triple net capitalization rate and internal rate of return (IRR) survey. The spread between the overall rate and the IRR offers interesting insights for IRR development too. The Fourth Quarter 2021 report showed a 101-basis point spread between the average IRR and overall rate for the “national net lease market.” The report showed that the spread was consistent for several years. A distinction should be made between internal rates of return and discount rates. While these two rates can be the same, the internal rate of return generally refers to looking back historically to calculate an actual yield rate, whereas the discount rate is a prospective rate, involving future cash flow treatment.

The Boulder Group publishes net lease capitalization rates (not IRRs) for a number of property types, including medical properties. Their medical properties include dialysis centers, urgent care properties, and physician offices, not the property types included in this article.

With any rate survey, many critical points that drive the rates are not disclosed, and differences

are somehow averaged. For example, are capitalization rates based on pro forma or trailing NOI? Maybe more important for leased fee capitalization rates is that the data used to develop rate averages probably includes leases with irregular rent increases (from flat to annual increases), lease terminations, and other inconsistencies with the general terms of the subject property lease.

According to the National Association of Real Estate Investment Trusts (NAREIT), the average dividend yield for health care REITs as of September 30, 2021, was 4.22% or 130 basis points greater than NAREIT's “All Equity REITs” category for the same period. Historical dividend yield rates for health care properties have run 100 to 150 basis points greater than the “All Equity” grouping. NAREIT's health care companies essentially include all those profiled in the Stifel Nicolaus lease coverage survey shown in Exhibit 18.1. The health care grouping includes senior housing, skilled nursing, hospital, medical office, medical research, and other related properties.

Overall, these REITs have a greater concentration in senior housing and skilled nursing than other health care assets.

Exhibit 18.8 shows a way to bridge national real estate investment data with leased fee capitalization rates for health care properties in general. The steps undertaken to arrive at this are summarized in the exhibit.

This analysis produces an average health care leased rate of 7.52%. From this point, the analysis should consider the property type being appraised and the relative risks for the leased fee interest of the subject property. As with fee simple going-concern capitalization rates, senior housing rates are less than skilled nursing facility rates. In this type of analysis, it is reasonable to conclude that skilled nursing facility capitalization rates will be greater than the implied rate shown above and that senior housing would be less.

Part of the going-concern capitalization rate spread between these two property types is the fact that senior housing receives the bulk of its revenues monthly, in advance, whereas nursing facilities often see a 30- to 90-day lag in payments and thus require the use of more working capital. If the average working capital were added to the

purchase price investment, the capitalization spread between the two property types would tighten between 50 and 100 basis points. That difference does not exist for leased fee interests, so the spread between skilled nursing and senior housing rates tightens up somewhat.

If the capitalization rate is being measured through sales comparables, surveys, and rate build-up methods, then a reconciliation process that weights the accuracy of each technique should be performed. Direct capitalization is most appropriate when there is a lengthy remaining lease term and rental increases are similar to the comparable transactions used to establish the capitalization rate. The effectiveness of direct capitalization breaks down with a short remaining lease and likely changes in rent or with an impending purchase option.

Developing a leased fee capitalization rate using a band-of-investment or yield capitalization technique is certainly another option. Supporting the equity yield rate may prove challenging because of the scarcity of leased fee market data. But with explicit, linear period rent changes, yield capitalization can produce reliable value indications.

Leased Fee Discounted Cash Flow (DCF) Analysis

As an adjunct to direct capitalization or as the primary method of capitalization, discounted cash flow is a viable method. It is the preferred technique when rent will be irregular, the lease will expire in less than, say, 10 years, and a sale of fee interest (either leased fee or fee simple) is within that 10-year horizon.

Judgment calls may be necessary to set the cash flow forecast for the following events:

- What is the probability that the tenant will exercise an extension or renewal?
- What is the likely rent in a rent reset event, including rent involving a lease with a new tenant/operator or a reset triggered by the existing lease?
- When and at what price will the tenant exercise a purchase option?
- Will the existing lease be canceled, and will a new lease, and rent, or a sale of a fee interest occur as a result?
- What are other predictable events?

The discount rate often has a close relationship with the overall capitalization rate. According to

**Exhibit 18.8** Steps Used to Develop a Leased Rate or Rent Factor from National Rate Data

<b>Step 1:</b>	
<ul style="list-style-type: none"> <li>• Health care REIT annual dividend yield rate</li> <li>• Less all equity REIT dividend yield rate</li> <li>• Equals health care REIT dividend yield premium</li> </ul>	
<b>Step 2:</b>	
<ul style="list-style-type: none"> <li>• Health care REIT dividend yield premium</li> <li>• Plus PwC triple net lease capitalization rate</li> <li>• Equals implied leased rate for health care property, overall</li> </ul>	
<b>Step 1: NAREIT dividend yields</b>	
Health care REIT annual dividend yield rate (September 2021)	4.22%
All equity REIT dividend yield rate (September 2021)	- 2.92%
Health care REIT dividend yield premium	1.30%
<b>Step 2: Next add the average PwC triple net capitalization rate to the average health care REIT premium.</b>	
Health care REIT dividend yield premium	1.30%
Plus PwC triple net lease capitalization rate (Fourth Quarter 2021)	6.22%
Implied leased rate for health care property, generally	7.52%



*PwC Investor Survey*, the spread between national net lease overall capitalization rates and internal rates of return run about 100 basis points. Terminal values in national net lease commercial real estate may have turnover vacancy, whereas senior housing and nursing facilities will not experience vacancy, but maybe some period of collection losses. With hospitals, there is a greater likelihood that the vacancy will be experienced after the lease expiration. The prospects of greater vacancy risk at lease termination will have the effect of lowering the spread between the overall rate and the discount rate, all other things equal, as shown in Exhibit 18.9. The lower terminal value in the vacancy after lease termination suggests that a higher overall capitalization should be applied in a direct capitalization of first-year rent.

If the leased fee capitalization rate is well evidenced and supported—say, 7.0%—and the change in rent and value is expected to be, say, 2.0% annually, then the approximate discount rate would be 9.0% (7.0% + 2.0%), or slightly less, accounting for depreciation. This concept is based on the formula that  $Y = R + A$ , where  $Y$  is the yield rate,  $R$  is the overall capitalization rate, and  $A$  is the adjustment rate reflecting changes in income and value. This rate development can be a starting point for estimating a market discount rate when cash flows and terminal value will not follow a steady line of change.

Since discount rates comprise a combination of risks and some components of a leased fee cash flow can be predicted more accurately than others, different discount rates can be applied. For example, suppose a lease has five remaining years at a below-market rent, followed by an automatic rent reset to market year for five additional years before terminating. In this case, the first five years are known and certain and are considered low risk. The rent for the next five years (the rent reset period) involves more speculation, but the existence of the lease is still certain. There is considerable uncertainty that in 10 years the property might be released or it might sell. Using different discount rates is referred to as a *split-rate method* or a *bifurcated rate method*.

As an example of split-rate discounting, consider an inpatient rehabilitation hospital that has five years remaining on the initial lease with an annual absolute net lease of \$1.2 million. The market rent based on lease comparable data, market lease rate applied to depreciation cost, and lease coverage all suggest that the contract

### Exhibit 18.9 Calculation of Discount Rate Spread

Lease Year	No Vacancy at Termination	Vacancy after Expiration
1	\$1,250,000	\$1,250,000
2	\$1,281,250	\$1,281,250
3	\$1,313,281	\$1,313,281
4	\$1,346,113	\$1,346,113
5	\$1,379,766	\$1,379,766
6	\$1,414,260	\$1,414,260
7	\$1,449,617	\$1,449,617
Year 7 Purchase	\$20,000,000	\$16,500,000
NPV @ 10.0% discount rate	\$14,694,055	\$13,061,279
Indicate capitalization rate	8.51%	9.57%
Capitalization and discount rate spread	149	43

rent is substantially below market. In Year 6, the rent is increased to market through a rent reset process involving the average of two or three appraised values. At that point, rent increases 2.0% annually. The required \$100,000 in annual capital expenditures should return the improvements to the landlord in good condition at lease termination. After 10 years, there is considerable uncertainty regarding the property. It will either be released or sold, with the present value at that time resulting in the same terminal value at that point in time. Exhibit 18.10 profiles the calculations and value indication. (Consult chapter 26 of *The Appraisal of Real Estate*, 15th edition, to learn more about discounted cash flow methods.)

An interesting appraisal problem arises when contract rent is significantly higher than EBITDAR and the prospect for the existing tenant or another operator to improve cash flows is bleak because of fundamental changes in the market, such as new dominating competition or a major change in reimbursement. One way to treat this leased fee valuation problem would be to value the “as is” fee simple interest, estimate the market rent, and subtract the market rent from the contract rent. The difference between the contract and market rent could be discounted over the estimated period that the contract rent is expected to be received. In many cases, the contract rent will be paid because (1) personal and corporate guaranties are in place with funds to pay the contract rent saved

**Exhibit 18.10** Split Discount Rate in Leased Fee Valuation

Year	Cash Flow	Discount Rate	PV Factor	Present Value
1	\$1,200,000	6.5%	0.93897	\$1,126,761
2	1,200,000	6.5%	0.88166	1,057,991
3	1,200,000	6.5%	0.82785	993,419
4	1,200,000	6.5%	0.77732	932,788
5	1,200,000	6.5%	0.72988	875,857
6 (reset year)	1,800,000	8.5%	0.61295	1,103,301
7	1,836,000	8.5%	0.56493	1,037,205
8	1,872,720	8.5%	0.52067	975,068
9	1,910,174	8.5%	0.47988	916,654
10	1,948,378	8.5%	0.44229	861,739
10 (terminal)	20,000,000	10.0%	0.38554	7,710,866
Total value				\$17,591,648
Indicated overall capitalization rate				6.82%
Implied <i>IRR</i> or discount rate				8.64%

through the security deposit and other operating covenants and (2) the tenant will experience greater economic harm by forfeiting substantial deposits than by paying the contract rent. The discount rate for the excess rent will be very substantial in many cases, and finding market evidence will be difficult.

**Leasehold Interest**

A leasehold interest may exist when the contract rent is less than market rent and the lease has provisions that permit the tenant to transfer its interest to another. Since market rent is often set by using an *EBITDAR*- or *EBITDARM*-to-rent-coverage ratio, the rent is set at a level that permits the tenant to earn a profit or experience positive *EBITDA*. There is an argument that the cash flow between *EBITDA* and *EBITDA*+MR (market rent) represents intangible value because that portion of the earnings is not achieved through a positive rental advantage.

Exhibit 18.11 displays an example as to when a leasehold interest has positive value. In this example, there are three situations, with each having the same tenant *EBITDAR* and the same market rent. The significant difference involves the contract rent. In Premise 1, the contract rent exceeds market rent, and thus there is no leasehold interest. However, in Premise 1, the tenant is experiencing positive cash flow, so it probably has business value. In Premise 2, market and contract

rent are the same, thus there is no leasehold value by the traditional measure, but there is business value. Premise 3 has both leasehold and business value. The leasehold value exists because contract rent is less than market rent.

In the example in Exhibit 18.11, the discount rate used to estimate the business value is 25% for each scenario. However, the discount rate is likely higher in Premise 1 because the “profit” or *EBITDA* margin is thin. As this margin increases, the discount rate probably decreases because the margin improves. Even with an exhaustive search for leasehold discount rates, it is likely that no direct market data or rate comparable data will be found. Leasehold sales are typically private transactions with little public knowledge or no recording with county or town deed recorders. A leasehold transaction can be picked up in Medicaid and Medicare cost reports filed by a new tenant and identified as a change in ownership at the state licensing office only if the party participates in Medicaid or is licensed.

The following example illustrates a technique to extract a discount rate from information used in Premise 2 in Exhibit 18.11. Under the premise that the fee simple value is being appraised, the value of the going concern is estimated using the facility *EBITDAR* and market capitalization rate. Then the market value of the leased fee interest is estimated using the contract rent, which in this example is also the market rent. The leased fee

**Exhibit 18.11** Calculating Leasehold and Business Values

Premise	1	2	3
<i>EBITDAR</i>	\$1,200,000	\$1,200,000	\$1,200,002
Market rent coverage ratio	1.20	1.20	1.20
Market rent	\$1,000,000	\$1,000,000	\$1,000,000
Contract rent	\$1,120,000	\$1,000,000	\$900,000
Tenant <i>EBITDA</i>	\$80,000	\$200,000	\$300,000
<i>EBITDAR</i> -to-contract-rent coverage	1.07	1.20	1.33
Rental advantage (market rent minus contract rent)	(\$120,000)	\$0	\$100,002
Remaining lease term (years)	6.0	6.0	6.0
Leasehold value (market - contract rent)	Negative?	\$0	\$295,147
Tenant's going-concern or business value	\$236,114	\$590,285	\$885,433

**Assumptions:**

Rent remains unchanged over duration of lease

*EBITDAR* remains unchanged over duration of lease

Market discount rate of leasehold value: 25.0%

Market discount rate of tenant's going-concern value: 25.0%

capitalization applied to the contract rent is based on research into leased fee transactions involving comparable property. There is no "rental advantage" (i.e., market and contract rent are the same), so the difference between the fee simple and the leased fee value is assumed to be the business value. The tenant's after-rent cash flow for the remaining six years of the lease (\$200,000 annually) and the business value of \$550,000 are then used to calculate the IRR. The IRR is calculated through an iterative process, as shown in Exhibit 18.12.

The resulting IRR of 28.0% is a proxy for the discount rate used to calculate the business value. This technique is simplified because rents are likely to increase on an annual basis and *EBITDAR* will likely change too. The estimated business value is not complete until current assets and liabilities are considered. It should be mentioned that, assuming the tenant owns the management company providing those services to the property, the profits and perks associated with this property have value. That value is likely value in use. There are other facets in appraising the value of this business and management company. This type of valuation is steering away from the type of valuation assignments most real estate appraisers will encounter or have the competency to accept. Using this process of deducting

**Exhibit 18.12** Calculation of *IRR*

<i>EBITDAR</i>	\$1,200,000
Going-concern capitalization rate, fee simple	7.250%
Market value of the going concern, fee simple	\$16,550,000
Market rent (also contract rent)	\$1,000,000
Leased fee capitalization rate	6.250%
Leased fee value	\$16,000,000
Difference between fee simple and leased fee value	
– Value of the tenant's business value	\$550,000
Tenant's annual <i>EBITDA</i> , for 6 years	\$200,000
Implied <i>IRR</i> for the tenant's business value	28.0%

the leased fee value from the fee simple value to arrive at a leasehold value is not widely accepted and certainly does not fit all leasehold valuation situations.

**Allocation of Leased Fee and Leasehold Value**

Depending on the definition of leased premises and the operations transfer agreement, the leased fee value for hospital, nursing facility, and senior housing property may also include tangible assets and some of the intangible assets. Therefore, it may be improper to claim that the entire rent and value

are attributable to the real property furniture, fixtures, and equipment (FF&E). Likewise, it is possible that the value of the leasehold interest includes both tangible and intangible components.

It is extremely unlikely that the market will provide any meaningful evidence regarding the allocation of value to these partial interests. The cost approach may provide some insight into the value of the real property and FF&E for the leased fee interest, provided that the leased fee value exceeds the land value and the depreciated costs of the

improvements and FF&E. If the leasehold value is represented as the capitalized difference between EBITDAR and market rent, then an argument can be made that this value has a significant intangible component. The capitalized difference between the market rent and contract rent may have a greater proportion of value allocated to real property and FF&E. In fact, as the tenant continues to add and replace FF&E over the term of the lease, this asset group could represent increasing proportions of the leasehold value.

### About the Authors

**James K. Tellatin, MAI**, serves as senior managing director of Integra Realty Resources—Healthcare & Senior Housing. He has been an MAI since 1984 and specializes in appraising senior housing, nursing homes, and hospital property, performing appraisals on these properties in every US state and beyond. He has testified as an expert witness on valuation matters concerning these property types in over twenty states, ranging from municipal, county, state, and federal courts. He is the author of *The Appraisal of Nursing Facilities*, published by the Appraisal Institute in 2009. He developed and presented a seven-hour Appraisal Institute seminar covering nursing homes in 1995. He provided significant assistance with developing HUD's "lean" appraisal and market study guidelines. He was a codeveloper, owner, and operator of a group of Arizona post-acute short-stay rehabilitation facilities (Sante). His clients include over 100 US and international banks, several public health care REITs, property ownerships of all sizes and locations, and numerous law firms and government entities. He was the chair of the Missouri Health Facilities Planning Committee, which issued certificates of need for hospitals, nursing homes, and assisted living communities. **Contact:** [jtellatin@irr.com](mailto:jtellatin@irr.com)

**Vic Cremeens, MAI**, serves as managing director for hospital valuation services of Integra Realty Resources—Healthcare & Senior Housing. He has exclusively appraised health care and senior housing properties since 2000 and has directed the hospital valuation service segment since 2009. He has performed more than 175 hospital valuation assignments. Those appraisals are a mix of real estate-only and going-concern valuations. Clients include traditional and agency lenders (USDA and HUD programs), operators, assessors, and consultants. He recently participated as a consultant to the American Hospital Association for their *Estimated Useful Lives of Depreciable Hospital Assets*, 2023 edition, and to the General Accounting Office on its study exploring the expansion of the Federal Housing Administration Hospital Mortgage Insurance Program to types of hospitals that are not presently allowed to participate. He also has extensive experience appraising nursing homes and senior housing properties.

**Bradley J. Schopp, MAI**, is a highly experienced national practice leader of Integra's Healthcare & Senior Housing group, with over two decades of expertise in the appraisal and consultation of senior housing and health care assets. Schopp has valued senior living communities, skilled nursing facilities, hospitals, and medical offices across thirty-seven states with nearly \$100 billion in property value. Schopp has testified as an expert witness and is quoted in publications such as *The Wall Street Journal*, *Senior Housing News*, and *McKnight's Senior Living* on senior housing and skilled nursing topics. Schopp serves as treasurer for the Greater St. Louis Chapter of the Appraisal Institute. His clientele includes large and small banks, law firms, property owners, health care providers, and government entities.

**Hollis C. Taggart** has been employed by the Integra Realty Resources—Healthcare & Senior Housing specialty practice since 2018. He has been involved in valuing skilled nursing, independent living, assisted living, memory care, and life plan communities and hospitals. He also performs market studies for developers of senior housing properties. He has performed valuations in nearly every US state for various clients, including regional and national lenders, law firms, assessors, property owners, and developers. He is a certified general real estate appraiser working toward his MAI designation.

SEE NEXT PAGE FOR APPENDIX AND ADDITIONAL RESOURCES >

## **Appendix** Health Care Industry Property Type Terms and Acronyms

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<b>AA</b>	Active adult communities
<b>AL</b>	Assisted living residences or assisted living facilities (may include other nomenclature, such as personal care, residential care, or supportive care)
<b>CCRC</b>	Continuing care retirement communities
<b>IL</b>	Independent living communities or independent living facilities
<b>IPF</b>	Inpatient psychiatric facilities
<b>IRF</b>	Inpatient rehabilitation facilities
<b>LPC</b>	Life plan communities
<b>LTAC</b>	Long-term acute care facilities
<b>MC</b>	Memory care residences or memory care facilities
<b>SNF</b>	Skilled nursing facilities, more commonly known as nursing homes

### **Additional Resources**

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Suggested by the Y. T. and Louise Lee Lum Library

#### **American Hospital Association (AHA)—*Estimated Useful Lives of Depreciable Hospital Assets***

<https://bit.ly/3NIGxbl>

#### **Appraisal Institute**

##### **Lum Library, Knowledge Base Information Files [Login required]**

Special Use Properties/Healthcare Facilities

<https://www.appraisalinstitute.org/insights-and-resources/resources/lum-library>

#### **American Seniors Housing Association (ASHA)—Publications**

<https://www.ashaliving.org/bookstore/view-all-publications/>

#### **Barnes Reports—Industry Reports**

<https://www.barnesreports.com/>

#### **National Investment Center for Seniors Housing & Care (NIC)—Research and Analytics**

<https://www.nic.org/assisted-living-industry-analysis-research/>

# The Problem of Ground Leases

by Jerome D. Whalen, JD

## Abstract

Recent dramatic ground rent reappraisals of office buildings in Midtown Manhattan in New York City have caused many leasehold mortgage lenders to avoid financing ground leases with any sort of reappraisal provisions. The issue often turns on whether the land underlying the project is to be valued at its highest and best use as if vacant and unencumbered, or as presently improved and used, an issue with a long history in rent reset reappraisal proceedings. Inflation indexing and “modern” ground leases have been proposed to replace traditional ground lease structures, with limited success. Some version of rent resets utilizing “use valuation” might satisfy financing concerns in new ground leases.

Recently, there have been some dramatic reappraisals of Manhattan ground-leased properties that have upset traditional ground lease markets. As a result, many leasehold mortgage lenders, which are essential to the financing of ground-leased properties, are avoiding leases with reappraisal clauses. This is affecting the negotiation, financing, and economics of projects in New York and throughout the country and threatens to bring an end to traditional ground lease practice.

The types of issues that have arisen with ground lease reappraisals can be illustrated in the following cases involving Midtown Manhattan landmark office buildings.

**Lever House.** A January 1, 2017, article in *Crain's New York Business* led with the statement “building owners are facing huge rent increases as ground lease resets loom.” The article goes on to explain “the issue is the fine print in [ground] leases that allow landowners to jack up the prices as city land values continue to soar...[due to] ambiguous language that allows rent increases to be calculated based on the value of a property as

if it were ‘unimproved and unencumbered’—essentially a vacant parcel of land.”<sup>1</sup> This situation can be seen in the circumstances of Lever House, a twenty-one-story landmark office building at 390 Park Avenue, built on a ground lease in the 1950s. A reappraisal proceeding threatened an increase in the ground rent from \$6.15 million to more than \$20 million in 2023, more than the entire net income produced by the property. As a result of the looming ground rent increase, the then-ground-lease tenant was unable to refinance the existing leasehold mortgage. The mortgage, in default, was sold at a reported \$68.3 million loss.<sup>2</sup> A new tenant emerged with a new ground lease in 2020.<sup>3</sup>

**Chrysler Building.** The iconic art deco Chrysler Building has towered over Manhattan since the 1930s, built on land owned by the Cooper Union school. Following a loan default by the ground lease tenant in the 1990s, the school and a successor tenant entered a new 150-year lease that included “a rent clause prevalent in New York City that allows for a market-based reset.”<sup>4</sup> In 2008, the tenant sold a 90% interest in the lease-

1. Daniel Geiger, “Ground Wars: Surging Property Values Are Upending Commercial Landlords’ Ground Leases,” *Crain's New York Business*, January 1, 2017, updated January 3, 2017.
2. Lois Weiss, “Park Avenue’s Lever House CMBS Loan Lost \$68.3M: Report,” *New York Post*, February 19, 2019.
3. Lois Weiss, “Aby Rosen Hands Over Lever House to Tod Waterman and Brookfield,” *The Real Deal*, May 27, 2020, <https://bit.ly/3tEsTtp>.
4. Kurt Pollem, Steve Jellinek, and Erin Stafford, *Ground Leases and Leasehold Interests in CMBS: When the Value of the Parts Doesn’t Equal the Whole*, DBRS Morningstar Commentary, February 10, 2021, <https://bit.ly/4aK4wve>.



hold to an investment fund for \$800 million.<sup>5</sup> In 2018, the ground lease reset provision resulted in an increase in the annual ground rent from \$7.5 million to \$32.5 million, with additional increases reportedly set for 2028 and 2038.<sup>6</sup> In 2019, the tenant and the investment fund sold 100% of the leasehold to a new buyer for \$150 million, an enormous loss for the fund.<sup>7</sup> (Apparently, there was no material leasehold mortgage.) The new buyer attempted to renegotiate the ground lease in 2020 and 2021, but no lease revisions have been reported.<sup>8</sup>

More recently, reports cite a complicated legal battle over a rent reset involving the landowner and a real estate investment trust that owns the office building at 625 Madison Avenue, after an arbitrator ordered an annual ground rent increase from \$4.6 million to \$20.25 million.<sup>9</sup> Another dispute has involved One Penn Plaza at 330 West 34th Street, where a reappraisal was expected to increase the annual rent from \$2.5 million to more than \$25 million.<sup>10</sup>

## Reset Appraisal Practice

Some versions of the troublesome rent reset reappraisal clauses have been included in ground leases since at least the 1930s. In the seminal New York case *Ruth v. S.Z.B. Corp.*,<sup>11</sup> a clause appeared in a 1935 lease providing for renewal rent equal to 6% of “the full and fair value of the land demised which the same would sell for as one parcel con-

sidered as vacant and unimproved, in fee simple, by private contract, free of lease and unencumbered.”<sup>12</sup> In the ground lease, the critical elements for the reappraisal are “vacant and unimproved,” “unencumbered,” and “free of this lease.” Most such lease clauses also set valuation procedures for the determination of the new rent (usually arbitration) that involve professional appraisers in some capacity, as arbitrators, witnesses, or experts, so that the rules of appraisal take a hand. If a professional appraiser is asked to establish the value of a piece of land, a key consideration will be determining highest and best use.<sup>13</sup>

Highest and best use represents the reasonably probable legal use that is physically possible, is financially feasible, and results in the highest value.<sup>14</sup> Highest and best use may be viewed in either of two ways: the use “based on the presumption that the parcel of land is vacant” or “the use that should be made of the real estate as it exists”<sup>15</sup>—that is, as improved. This is frequently the key issue in rental reset value disputes. Much of the angst associated with Midtown Manhattan office building reappraisals comes from the fact that the land, if vacant and unimproved, would be more valuable for other uses, such as luxury residential, rather than office space.<sup>16</sup>

## Select Case Law History

Most of the case law regarding rent reset reappraisals for land leases has turned on the same issue: should the land be valued as currently used or for some other higher and better use.

5. Pollem, Jellinek, and Stafford, *Ground Leases and Leasehold Interests in CMBS*.

6. TDR Staff, “Aby Rosen Seeks to Rework Chrysler Building Ground Lease,” *The Real Deal*, May 6, 2020.

7. Pollem, Jellinek, and Stafford, *Ground Leases and Leasehold Interests in CMBS*.

8. TDR Staff, “Aby Rosen Seeks to Rework Chrysler Building Ground Lease.”

9. SkyscraperPage.com Forum, “S. L. Green Moves to Push Ashkenazy out of 625 Madison,” June 9, 2023.

10. Kathryn Brenzel, “Rethinking the Ground Lease,” *The Real Deal*, June 8, 2022, 6. That estimate was later said to be “quite a bit lower” based on market conditions. Kate King, “Office Turmoil Roils Ground-Lease Negotiations,” *The Wall Street Journal*, July 4, 2023, <https://bit.ly/47r8buS>.

11. 2 Misc.2d 631 (N.Y. Sup.Ct. 1956), aff’d 2 A.D. 970 (1956).

12. *Ruth v. S.Z.B. Corp.* at 634.

13. Appraisal Institute, *The Appraisal of Real Estate*, 15th ed. (Chicago: Appraisal Institute, 2020), 34–35 (hereinafter, *The Appraisal of Real Estate*).

14. *The Appraisal of Real Estate*, 305–306.

15. *The Appraisal of Real Estate*, 307–308.

16. Geiger, “Ground Wars.” The appropriate “use valuation” in the context of ground lease rental resets might be something of a hybrid: that is, the land would be valued as if vacant but with the hypothetical condition that the permitted use is the current use or, perhaps, any uses to which the existing improvements can be efficiently adapted.

In *Ruth v. S.Z.B.*,<sup>17</sup> the land at 61st and Third Avenue in Manhattan held a retail building and some brownstones, but it was more valuable for office or residential uses.<sup>18</sup> The lease restricted any change in use by the tenant or modification of the improvements, so the tenant argued the valuation should be limited to the current uses and improvements.<sup>19</sup> However, the lease's reappraisal clause included the phrase "free of lease," so the court concluded that restrictions in the lease did not apply and other hypothetical uses should be considered.<sup>20</sup> The court noted that similar clauses had been in use for years in long-term leases, but there was little authority on their meaning.<sup>21</sup>

In *United Equities v. Mardordic Realty*,<sup>22</sup> the land at 64th and Third Avenue was improved only with a garage, but it was more valuable for other uses. The reappraisal clause did not state that value should be determined "free of this lease," nor did the lease restrict use of the property by the tenant.<sup>23</sup> The court concluded that the appraisers should consider whatever uses might be best made of the property, subject to the applicable terms of the lease, including the remaining 21 years of the term and the one renewal term of another 21 years, holding that the "only limitation on value, if any, is the number of years the most advantageous use of the land can be enjoyed under the lease."<sup>24</sup>

In the 1967 case *Plaza Hotel Associates v. Wellington Associates*,<sup>25</sup> the lease limited the land to

use as a hotel, although the land was much more valuable for use as a high-rise office building.<sup>26</sup> The reappraisal clause did not include the clause "free of this lease," and the court held the property must be valued as restricted to hotel use.<sup>27</sup>

From these and subsequent cases, it might be said that the "New York Rule" is that absent a clear indication to the contrary, the rent reset valuation of land must take into account any restrictions on use and any other relevant provisions of the lease.<sup>28</sup>

On the other coast, the "California Rule" can be described as presuming that references to the "value" of the land mean fair market value in a standard appraisal at its highest and best use, not limited by any use restrictions in the lease or by the nature of the existing improvements, unless a clear intention to the contrary appears from the lease.<sup>29</sup> This rule grew out of two cases where there were no applicable use restrictions in the leases and no requirement that value should be determined "free of this lease." In the 1958 case *Bullock's, Inc. v. Security-First Nat'l Bank of L.A.*, involving a Los Angeles department store, the lease called for rent equal to "five percent of the appraised value of the leased land."<sup>30</sup> The court held that "value" meant fair market value and not use value, and that if the parties had meant anything else, then "they would have said so expressly."<sup>31</sup> In a second decision, *Eltinge & Graziadio Dev. Co. v. Childs*,<sup>32</sup> the California courts held that the lease's reappraisal language stating there

17. 2 Misc.2d 631. This conflict has manifested in American law for at least 150 years. See Jerome D. Whalen, "A Brief History of Ground Rent Resets," *PLI Chronicle*, September 2023, <https://bit.ly/48mfmFZ>.

18. 2 Misc.2d 633.

19. *Ruth* at 634.

20. *Ruth* at 635–637.

21. *Ruth* at 635.

22. 8 A.D.2d 398 (1959), *aff'd* 7 N.Y.2d 911 (1960).

23. *United Equities* at 399–400.

24. *United Equities* at 401–402.

25. *Plaza Hotel Associates v. Wellington Associates*, 55 Misc.2d 483 (Sup. Ct.), *aff'd* 2 A.D.2d 1209 (1967), 22 N.Y.2d (1968).

26. *Plaza Hotel Associates* at 486.

27. *Plaza Hotel Associates* at 487–488.

28. Jerome D. Whalen, "Reappraisal of Ground Rentals," *Probate & Property* 30, no. 3 (May/June 2016): 44, 46.

29. Whalen, "Reappraisal of Ground Rentals."

30. *Bullock's, Inc. v. Security-First Nat'l Bank of L.A.*, 160 Cal. App. 2d 277, 281, n. 1 (Cal. App. 1958).

31. *Bullock's, Inc.* at 188–189.

32. *Eltinge & Graziadio Dev. Co. v. Childs*, 49 Cal. App. 3d 294 (Ct. App. 1975).

shall be periodic appraisals of the demised premises (exclusive of improvements)” called for “appraisals of the fair market value...in accordance with its highest and best use as if vacant and without regard to the terms and conditions of the subject ground lease.” Here, the California court specifically rejected consideration of the *New York Plaza Hotel* decision.<sup>33</sup>

### Appraisal Issues

A highest and best use appraisal either as vacant or as improved should consider the *financial feasibility* of any alternative uses.<sup>34</sup> An appraisal of the property as it exists should presumably include the cost to obtain new entitlements, resolve existing, continuing leases, the cost of demolition and the loss of income during reconstruction as well as consideration of the alternatives of renovation or redevelopment of the existing structures. *The Appraisal of Real Estate*, fifteenth edition, states, “For any of [the] alternatives to be financially feasible...the value after conversion, renovation, or alteration less the costs of the modification (including entrepreneurial incentive) must be greater than or equal to the value of the property as is.”<sup>35</sup> The lease language “vacant and unimproved” seems to obviate most of those considerations, requiring the appraisers instead to imagine bare land ready for redevelopment of the highest and best use. (Of course, any reappraisal would need to specifically exclude the value of the ground lease tenant’s improvements for purposes of determining the new rental.)

One could conclude that the problem with ground lease reappraisal provisions is not reappraisals per se but rather the terms and the language of these provisions—usually written by lawyers and, in litigated cases, interpreted by

judges. It seems odd that this language has been accepted until recently by so many attorneys for tenants and their leasehold mortgagees, notwithstanding more than sixty years of litigation. Today, however, many lenders seem to be rejecting any reappraisal clause on any terms without reference to the specific language.<sup>36</sup> This is a problem not only for ground lease tenants but for landlords as well. Prospective landlords are being told that rent reappraisals are not financeable and that they must rely on inflation indexing for rental adjustments. Even some landlords under existing ground leases are being asked by their tenants for relief from looming rent resets that are creating problems for renewing or refinancing mortgages. Eliminating value-based rent resets will likely favor ground lease tenants in the long run, not landlords.

This problem with reappraisals of ground leases has been apparent since at least the 1950s, from litigation related to Bullock’s Department Store, the Plaza Hotel, the Lever House, the Chrysler Building, and One Penn Plaza, and these ground lease reappraisals have sometimes resulted in dramatic ground rent increases. Many more of these contests are conducted in arbitration or appraisal proceedings that never become public. Still, the same conflict keeps emerging: the value of the land as used pursuant to the lease, or the value as if “vacant, unimproved, unencumbered and free of this lease.” Another way to state the issue comes from the dissent in *United Equities*, which states: “The purpose of such valuation clauses is to reimburse the owner for the value of his land, not to determine the economic rent the tenant can profitably afford to pay.”<sup>37</sup> This briefly states the economic nature of the conflict, but it also assumes the conclusion.<sup>38</sup>

33. *Eltinge & Graziadio Dev. Co.* at 298, 299.

34. *The Appraisal of Real Estate*, 313–315.

35. *The Appraisal of Real Estate*, 314.

36. DBRS Morningstar, a credit rating business that rates debt for CMBS offerings, states that it “red flags” any ground leases securing rated debt with “market-based” rent resets, “especially if not easily quantifiable.” Pollem, Jellinek, and Stafford, *Ground Leases and Leasehold Interests in CMBS*, 6. Joshua Stein, a frequent commenter on ground lease issues, has published *Model Ground Lease Criteria for CMBS and Other Lenders*, which would specifically prohibit any rental adjustments “based on any formula involving appraisal, valuation, or other contingent value-based review.” *The Practical Real Estate Lawyer* (May 2021): 11, 14.

37. *United Equities* at 404.

38. The California court in *Wu v. Interstate Consolidated Industries*, 226 Cal. App. 3d 1511, 1515 (Cal. App. 1991), assumed the opposite conclusion. The *Wu* court, distinguishing *Bullocks, Inc.*, found that “the purpose of the renewal clause is to benefit the lessee...ensuring an opportunity to continue its business and recoup its investment.”

**A Note on “Free of This Lease.”** In a reappraisal late in the term of a ground lease, with only twenty or thirty years of remaining term, it would be very difficult to finance any substantial improvement or redevelopment of a project to its highest and best use “free of this lease.” There simply would not be sufficient remaining years in the term to satisfy a leasehold mortgage lender or to provide a return on the investment to the tenant. In *United Equities*, the dissent notes that “the point, to whatever extent it may have validity, becomes almost immaterial, since there is a possible term of 42 years involved which will support the amortization of most, if not all, buildings constructed for profit, or just short of it.”<sup>39</sup> This statement almost proves its opposite: it should be an issue for the appraisers whether a 42-year term would support (in terms of available financing and return on investment), for example, a concrete and steel office or apartment building, or a low-rise retail building, or a McDonald’s. But “free of this lease” may eliminate this concern in the reappraisal.<sup>40</sup>

**A Note on “Unencumbered.”** “Unencumbered” by itself can be interpreted to mean “free of this lease,” as well as free of other “encumbrances.”<sup>41</sup> A lease is actually something more than an encumbrance; it creates an estate in land, both a contractual interest and a property interest,<sup>42</sup> and an “interest” under federal bankruptcy law.<sup>43</sup> In this context, “unencumbered” is at best equivocal. Certainly, financial liens, mortgages, labor and material liens, and other liens that can be sat-

isfied by the payment of money, that may affect equity but not the market value of the real estate, should be ignored in valuation of the land. But other title matters, that a lawyer would consider “encumbrances,” that would continue to affect the property after a conveyance, and that cannot normally be dismissed by the payment of a determinable sum of money, may need to be considered in any appraisal. Easements, for instance, may benefit or burden the property, or add or detract from its value. There does not seem to be any controversy that easements, restrictive covenants, and similar title matters, whether private or governmental, should be considered by the appraisers, even if considered “encumbrances” in some other context. That is the position of the appraisal profession,<sup>44</sup> and there does not appear to be any case law to the contrary.

Both zoning and governmental restrictions have affected determinations of value in disputed cases, without reference to whether they constitute encumbrances. Zoning is critical to the determination of any possible legal uses of the subject property.<sup>45</sup> In *New York Overnight Partners v. Gordon*,<sup>46</sup> the land under the (then) Ritz-Carlton Hotel was the subject of a ground lease providing for a rent reset by appraisal of the land value, excluding “the buildings and improvements thereon.”<sup>47</sup> Under the then-existing zoning, the property was allowed a building area of only 82,000 square feet, while the hotel comprised 152,000 square feet.<sup>48</sup> The court held that the land only should be valued without reference to the existing (legal, nonconforming) building.<sup>49</sup> A

39. *United Equities* at 404.

40. If “free of this lease” is not in the ground lease, at least in New York, that has the effect of imposing restraints on the tenant for purposes of the reappraisal, depending on the terms of the lease, including time restraints, i.e., the length of the remaining term, any use restraints set in the lease, and potentially others, resulting in a “restricted highest and best use” analysis for the appraiser. Tony Sevelka, “Ground Leases: Rent Reset Valuation Issues,” *The Appraisal Journal* (Fall 2011): 314, 316.

41. *Evans v. Faught*, 231 Cal. App. 2d 703, 709–710 (Cal App. 1965), holding a lease as a breach of a covenant against “encumbrances”; Sevelka, “Ground Leases,” 318, n. 11 and 320, n. 20.

42. Cornell Law School, Legal Information Institute, “leasehold,” <https://bit.ly/3HulzUJ>.

43. *Precision Industries, Inc. v. Qualitech Steel SBQ, LLC*, 327 F. 3d 537, 545 (7th Cir. 2003).

44. *The Appraisal of Real Estate*, 5, 11, 64–65.

45. *The Appraisal of Real Estate*, 308–310, 341, 348; Sevelka, “Ground Leases,” 318.

46. 88 N.Y.2d 716 (1996).

47. *New York Overnight Partners*, 718–719.

48. *New York Overnight Partners*, 720.

49. *New York Overnight Partners*, 722.

California case,<sup>50</sup> applying the California Rule, rejected an existing use valuation for market value, but also held that the appraisal must consider the effect of restrictive laws and ordinances on the conversion of the tenant's mobile home park to any other use.<sup>51</sup>

Of course, the lease can require valuation of the property on any basis to which the parties agree. For example, a ground lease for a McDonald's restaurant in Canada provided for periodic reappraisals of the land value based on its hypothetical use for a modern single-story warehouse containing 20,000 square feet of usable space.<sup>52</sup> Such a valuation might be required in the ground lease without regard to any restrictions on use in the lease or under applicable laws, including zoning ordinances and other restrictions affecting the property. But if that is the parties' intent, it needs to be explicit.

### Alternative Approaches

Prospective ground lease tenants and leasehold mortgagees have lately been seeking alternative means to satisfy landowners who will not enter long-term ground leases without some protection against inflation. One such approach has been indexing.

**Inflation Indexing.** There are a variety of indexing schemes that have been proposed to protect landlords against the devaluation of the rental income due to inflation; these are also designed to protect tenants and leasehold lenders from unpredictable and potentially unlimited rent increases. One typical provision might be for a fixed rent for the first five or ten years of the term, with an inflation

adjustment after year five or ten employing the Consumer Price Index (CPI), subject to a cap—maybe 2% or 3% a year compounded, or 20% or 30% after ten years not compounded, and similar adjustments every five or ten years after that. Another fairly common suggestion is 2% per annum each year after year one, without regard to actual inflation, relying on the Federal Reserve's target rate for inflation.<sup>53</sup> Actual average annual inflation since 1913 (when the CPI was first issued) has been 3.14%,<sup>54</sup> and since 1971, 3.92%,<sup>55</sup> so that sometimes 3% or 3.5% is suggested.<sup>56</sup>

The variations are virtually infinite.<sup>57</sup> Traditionally, inflation indexing with caps or fixed-rate increases have been used for fairly short periods, five or ten or so years prior to a reappraisal or other rent adjustments, and for the years between later adjustments. Current indexing proposals would control for the entire term of 99-year ground leases. During any 99-year period there are bound to be one or two or more periods of high inflation.<sup>58</sup> For this, some propose "catch-ups," where increases denied by the cap in years when inflation exceeds the cap are credited to the landlord in later years when inflation is less than the cap.<sup>59</sup>

These are complicated provisions and at the least delay rent increases to the landlord in order to protect the tenant and the leasehold lender. The cost to the landlord depends on a number of factors: the size of the cap, the length and extent of inflation, whether high inflation occurs early in the term and with what frequency, and detailed variations in the indexing formula and the catch-up provisions.<sup>60</sup> Prospective landlords may not appreciate the degree to which various

50. *Humphries Invs., Inc. v. Walsh*, 248 Cal. Rptr. 800 (Ct. App. 1988).

51. *Humphries Invs., Inc.*, 803–804.

52. Sevelka, "Ground Leases," 315, n. 6.

53. See, for example, K. King, *Office Turmoil Roils Ground-Lease Negotiations*, July 4, 2023, 6, <https://bit.ly/47r8buS>.

54. In 2013, [dollars.com/us/1913](https://dolars.com/us/1913).

55. In 2013, [dollars.com/au/1971](https://dollars.com/au/1971).

56. See, for example, Joshua Stein, "Solving the Ground Lease Problem," *Lexology*, November 4, 2019.

57. For several indexing schemes and their possible effects over 40 or 50 years of actual inflation experience, see Jerome D. Whalen, "Indexing Ground Rents: A Closer Look," *The Practical Real Estate Lawyer*, 39 no. 5 (September 2023): 11, <https://bit.ly/3twloUp>.

58. Whalen, "Indexing Ground Rents," Chart 1, 17.

59. Whalen, "Indexing Ground Rents," 13–15.

60. Whalen, "Indexing Ground Rents," 13, "Catch Up to What?"



elements of indexing proposals will affect the value of their rental income; the caps, periodic rather than annual rent adjustments, and non-compounding rather than compounded increases will each reduce future rent increases. The 2% per year formula is justified by the Fed's stated policy for an inflation target, now adjusted to "2% over the long run," and may be up for reconsideration in the foreseeable future.<sup>61</sup> It would be prudent to treat the 2% target as a floor on inflation rather than a prevailing condition and rely instead on the rates of inflation over the past fifty or one hundred years as a better indicator.

It has been suggested that "landlords just have to live with the risk of hyperinflation if they want to sign modern ground leases."<sup>62</sup> Prior to 2021, inflation in the United States was low to moderate for nearly thirty years, but the recent 2021-to-2023 era has changed that dramatically. Consequently, CPI indexing with low caps over extended lease terms, or fixed-rate increases at 2%, may no longer be acceptable. The prospective landlord must decide whether the likely cost will be justified by the benefits of a ground lease, including a potentially long-term highly secure income with the eventual reversion of the real estate. Explorations of indexing over fifty years of actual inflation experience seem to indicate that with all the variations in indexing formulae and all the possible future patterns of inflation, the cost to the landlord may range anywhere from tolerable to disastrous, and with no recourse, possibly for a hundred years.<sup>63</sup>

**The "Modern" Ground Lease.** Recently there has been much exposition of the "modern" ground lease, not particularly with reference to the rental reappraisal problem but relevant to it; eliminating market-based resets is consistent, even necessary, with the modern ground lease. One academic view suggests that a better structural

approach is needed to revitalize the "antiquated ground lease industry" and describes some current modern ground lease terms to accomplish that goal: view the landlord as a passive investor seeking secure returns competitive with or better than bonds or preferred stock; with property level operating cash flow before debt service and ground rent at least three times the ground rent; initial rent priced at the ten-year Treasury rate (or equivalent) plus 1%; annual rent increases of 2.5% to 3.5% compounded; tenant purchase rights on the land at the end of the investor/landlord's investment period, at year ten, twenty, or thirty; limited landlord approval rights; and no market-based rental resets.<sup>64</sup>

This model is apparently aimed at the typical bond investor, but many features are inappropriate for or even antithetical to the traditional ground lease landlord, as discussed later. It seems that this structure would best fit completed projects with stabilized occupancy and returns, particularly in view of the pricing. As often happens, the property owner can sell the land to an investor subject to the ground lease, giving a predetermined, secure return over the landlord's investment horizon in a form that could also be financed by the landlord. The tenant retains the property operations and ultimate control. This seems a perfectly good investment vehicle for a certain type of investor, while providing the tenant with cash to reduce debt and/or equity in the project or for other purposes, at a cost, in terms of ground rent, perhaps less than the costs of additional debt or equity in current markets.<sup>65</sup> The rates of return suggested by Carr do not seem likely to attract construction financing, although others have written that this mechanism can be and is being used for that purpose, even preconstruction financing for development costs for land carry, permitting, and related expenses.<sup>66</sup> Even if the project does not go forward, the investor would own the land to protect

61. Jeff Sommer, "The Fed Has Targeted 2% Inflation. Should It Aim Higher?," *New York Times*, March 24, 2023, <https://bit.ly/3S4mT6B>.

62. Joshua Stein, "How Ground Leases 2.0 Create Value and Avoid Disaster," *Forbes Real Estate*, June 26, 2020, <https://bit.ly/48l4HeC>.

63. Whalen, "Indexing Ground Rents: A Closer Look."

64. Christopher Carr, "An Argument for the More Widespread Use of Ground Leases in the United States: How to Align Pertinent Interests and Strategically Implement on an Impactful Scale" (master's thesis, MIT, February 2023), 21–26, <https://bit.ly/3RNeO5a>.

65. See, for example, Pollem, Jellinek, and Stafford, *Ground Leases and Leasehold Interests in CMBS*, 2.

66. Danielle Ash, "The Modern Ground Lease Is a Compelling Option for Construction Financing," *Globe Street*, August 24, 2022, <https://bit.ly/47tQIYh>.



the investment. It has been observed that “while the traditional ground lease was, almost by definition, a long-term deal for the landlord, intended to protect its interest in perpetuity—modern landlords approach the deals from the perspective of an equity investor, and will look to sell or monetize their position after a few years, e.g., when the building is constructed and the lease default risk is further minimized.”<sup>67</sup> This could be a good opportunity for investors willing to assume some risk for the potential of sharing in the bonus returns of a successful development project.

**The “Traditional” Ground Lease Landlord.** Traditional ground lease landlords have always been an eccentric class in the real estate industry, an exception to the more financially oriented investors, lenders, and developers who typify the profession. They tend to be attached to the land they own. It might have been inherited, or the site of a one-time family business, or acquired through years of assemblage. They may own more property adjacent to the ground lease parcel. They do not want to sell the land. They have faith in real estate as a long-term investment, perhaps more than in the stock or bond markets, or they see real estate as an important diversification from other investment vehicles.

As investors, these landlords want leases that provide reasonable returns over distant time horizons, with protection against inflation and with reasonable approval rights regarding the operation of the real estate, especially major changes. They want stable, secure rentals and a financeable ground lease interest, with continuing ownership and eventual reversion of the land for their descendants. They want assurance that the improvements will be maintained and renovated or redeveloped over the term of the lease, as needed to stay competitive. Although they might grant a right of first offer to the tenant in the event of a sale of the land, typically they do not grant options to purchase to anyone. They are not seeking to become passive

bond investors, and their investment objectives are longer than ten, twenty, or even thirty years. The “modern” ground lease is a potentially great vehicle for those seeking certain kinds of investment opportunities; but for these landlords, it is not seen as a substitute for the traditional ground lease or a solution to the ground lease problem.

### Rewriting Reappraisal Clauses

Another approach to the ground lease problem is to rewrite the reappraisal clauses that have caused so much trouble to avoid pricing the land under existing properties that no one wants to demolish and imposing rental rates that otherwise viable properties cannot afford to pay. Rewriting the traditional reset clause may require some years to muddle through; many specific issues will need to be addressed in a manner acceptable to landowners, developer/tenants, leasehold mortgage lenders, and attorneys for all of them. Following are a few ideas that might contribute to a solution.

**Use Value.** Standard appraisal practice suggests one alternative: use value. *Use value* is the “value of property based on a specific use, which may or may not be the property’s highest and best use. If the specified use is not the property’s highest and best use, use value will be equivalent to the property’s market value based on the hypothetical condition that the only possible use is the specified use.”<sup>68</sup>

This is the obvious alternative to reappraisal clauses that, in effect, call for highest and best use valuations, whether intentionally or inadvertently. There is nothing in the case law that would prohibit use valuation as the basis for a rental reset, provided that it is spelled out clearly and unmistakably in the lease.<sup>69</sup> Use valuation is frequently employed under state and local laws that base assessed valuation on existing uses for certain protected properties, such as historic buildings and agricultural and timber lands.<sup>70</sup> In most of the cases and reappraisals previously

67. Ash, “The Modern Ground Lease,” 3.

68. Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 7th ed. (Chicago: Appraisal Institute, 2022), s.v. “use value.”

69. See, for example, *Bullocks, Inc.*, 188–189.

70. Charlie Elliott, “Value in Use Appraisal, Addressed,” Elliottco.com (March 29, 2018), <https://bit.ly/3TR6qUz>. Note, appraisals for specific purposes, like condemnation and real estate tax purposes, must satisfy applicable local laws.

discussed, a use value appraisal would have avoided some of the effects that followed.<sup>71</sup>

A use valuation should protect the tenant and the leasehold mortgagee from rental increases that the existing improvements cannot afford to pay, based on some other, hypothetical use, but still afford to the landlord a rental adjustment appropriate for the use of their property. These considerations are much the same as those that drive the initial rent agreement by the parties. When a landowner signs a long-term ground lease anticipating the construction of improvements with expected useful lives of many decades, the land has been committed to that use for at least the necessary period required to finance the development and return to the tenant the costs of the project and a return on investment; but it should not mean that the landlord has to absorb ruinous inflation over a 99-year term as the price of the deal.

### Lease Term Considerations

One issue in rethinking ground leases might be the term length of the lease. Many tenants and lenders insist on 99-year terms for new ground leases, even though there is no legal reason for the choice: 50 years or 150 years would be just as good under the laws of most states.<sup>72</sup> The choice of term often is not reasonably related to the expected useful life of the improvement. If the Plaza Hotel, the Chrysler Building, and the Empire State Building can survive for a century, certainly many of today's new buildings, constructed under modern building codes, can do so as well. Of course, these buildings all required periodic capital investment to remain economically viable.

Other projects will not last for the terms of their ground leases and are not expected to. Excessive ground lease terms are demanded for all sorts of structures—retail, lodging, entertainment, industrial, storage, and others. It may not be appropriate that use valuation be maintained throughout a 99-year ground lease regardless of the condition of the improvements. The ground lease tenant should not be permitted to drain the last cash flow from antiquated buildings, in effect subsidized by a below-market ground rent based on the use value of obsolete structures.

The lease should require sufficient maintenance, improvements, and upgrades to the improvements throughout the term; compliance with this could be a condition to continued use valuations for rent reappraisals when the current use is not the highest and best use of the land.<sup>73</sup> If the useful life of the initial improvements is materially less than the ground lease term, then at some point the tenant should redevelop the property or sell to someone who will, and the rent should be reset to reflect the value of the land as part of the redevelopment. Similarly, if the initial improvements are materially expanded or there is a material change in use, the rent should be reset on a use value basis to reflect those changes. Perhaps the continuation of use value reappraisals should be set for a limited period of years, enough to accommodate financing, subject to extension if the tenant maintains the improvements in accordance with the lease and makes improvements and upgrades as needed for the property to remain economically viable. When that is no longer feasible, then redevelopment would be required or the land would be revalued as vacant and available for redevelopment at its highest and best use.

71. There are a few decisions from states other than New York and California—no more than one in any jurisdiction—holding for valuation of the property as used by the tenant rather than highest and best use, because the landlord approved or knew of the tenant's intended use, e.g., *Certain v. Kovens*, 314 So. 2d 184, 187 (Fla. Dist. Ct. App. 1975), or based on an implied obligation of good faith and fair dealing on the part of the landlord, e.g., *Cook Assocs., Inc. v. Utah Sch. & Institutional Tr. Lands Admin.*, 243 P.3d 888, 898–899 (Utah Ct. App. 2012).

72. The reason for 99-year terms is obscure. Wahl, "Why a 99-Year Lease?," *Florida Bar Journal* 29 (1955): 548. Alabama and Nevada, at least, have statutes limiting leases to 99-year terms. AL Code Sec. 35-4-6 (2018); Nev. Rev. Stat. Sec. 111.200 (1999). In common law jurisdictions, a perpetual lease should be legal, if the lease clearly allows the tenant to renew forever. R. D. Mellem, "Perpetual Leases in Washington," *Wash. State Bar Assn., Real Property & Trust Newsletter* 29, no. 2 (Summer 2001).

73. Tenants and leasehold lenders typically resist stringent maintenance and repair clauses beyond "in compliance with applicable law." If the ground lease requires adequate maintenance and periodic capital investment to remain competitive in the market as a condition to the continuing use valuation, the inevitable disagreements likely would require arbitration or the like to resolve. Generally, see Jerome D. Whalen, "Ground Leases: The End Game (With Draft Replacement Reserve Clause)," *The Practical Real Estate Lawyer* (July 2022): 31–36.

**Probable Useful Life.** Tailoring the length of ground lease terms to the probable useful lives of the improvements might eliminate some of these complications that are the result of long lease terms. There is the opposite problem as well. Typically, after fifty years or more of the ground lease term, the tenant may possess improvements that need to be replaced or very substantially improved, but the remaining term of the lease is not sufficient to finance the work. Then the lease could provide that if the tenant (or a prospective successor) presents the landlord with a viable redevelopment plan with a request to extend the term for a reasonable period to enable the financing and a return on investment, the landlord should grant the request, or, if not, the use valuation would be extended for the existing improvements (which might still be subject to reasonable maintenance and updating).

**Zoning Changes and Transferable Development Rights (TDRs).** When highest and best use is the standard for reappraisals, changes in the applicable zoning for a property can play havoc with the valuation. Changes in zoning may allow buildings that are much larger than the existing improvements, or much smaller, or prohibit the current use altogether. Various forms of downzoning are common. Nearly four in ten buildings in Manhattan exceed existing regulations concerning density, height, setbacks, lot coverage, and the like.<sup>74</sup>

A use value appraisal should avoid most of these problems. For instance, if the existing structures are a legal, nonconforming use, that should be the basis for the reappraisal. However, if the existing buildings are materially smaller than the law allows, then even a use valuation may result in a value based on what is permissible—that is, a larger version of the same use—rather than what exists. The situation might arise from a zoning change or from the tenant's failure to fully develop the property. Normally, the landowner and tenant agree on the size of the project to be built and tailor the leased land to the appropriate size. But

it may be difficult (approaching impossible) in some jurisdictions to change lot lines. Also, the tenant may plan development in phases, and be unable for financial, market, or other reasons to pursue the later stage or stages.<sup>75</sup> The lease needs to address how any unused development rights are to be valued or revalued and, if any rights are transferable, who has the right to transfer or sell the TDRs, recognizing that the applicable law may change over time.

**Historic Structures.** Sometimes historic buildings are not amenable to dramatic structural changes or demolition that might be required to adapt the land to a more valuable use. Often, historic buildings can be changed in use. Railroad depots can become office or performance venues or art centers while preserving the historic features, but necessarily there are limits to the acceptable alterations. Use valuations may deal with this, and also create other issues. Local codes vary; some will not impose mandatory controls on certified historic structures but provide incentives such as tax credits and transferable rights, as long as certain conditions are met.<sup>76</sup> The ground lease needs to address specifically the applicable regulations. If the structure is intended or required to be preserved, the ground lease landlord will likely pay a price for the historic designation in terms of limited valuation alternatives.

## Conclusion

Use valuation is more a goal than a technique, although the concept is recognized by the appraisal profession and there has long experience in certain specialized areas. Still, the parties in a new ground lease would need to spell out in some detail what they intend, addressing the issues they can identify, such as those addressed in this discussion as well as the circumstances of their property. Each ground lease transaction is different. This would add further complications to an already complicated ground lease document.

74. Quoc Trung Bui, Matt A. V. Chaban, and Jeremy White, "40 Percent of the Buildings in Manhattan Could Not Be Built Today," *New York Times*, May 20, 2016, <https://bit.ly/3UbCtPh>.

75. Standard appraisal practice would include market analysis to determine if a larger project on the property would be financially feasible. See *The Appraisal of Real Estate*, 34, and chapters 15 and 16.

76. Emma Brandt Vignali, "Historic Districts: Preserving the Old with the Compatible New," *Wm. & Mary L. Rev.* 59 (October 2017): 345–86.

The ground lease industry has not addressed the reappraisal issues despite obvious manifestations of the problems for decades.<sup>77</sup> Inflation indexing and the “modern” ground lease are not solutions to the problem for the traditional ground lease landlord, but there are ways, with some constructive thought and careful drafting, to address these issues. The “modern”

version of the traditional ground lease will need to provide periodic reappraisals to accommodate many owners of desirable parcels who are open to ground lease proposals. Those reappraisal clauses will need to deal realistically with the landlords’ and tenants’ and leasehold lenders’ concerns regarding rental resets and related issues.

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### About the Author

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### Additional Resources

Suggested by the Y. T. and Louise Lee Lum Library

#### Appraisal Institute

- **Education**
  - Advanced Land Valuation: Sound Solutions to Perplexing Problems
  - General Appraiser Site Valuation and Cost Approach
  - Residential Site Valuation and Cost Approach
- **Lum Library, Knowledge Base [Login required]**
  - Information files—Land and site, leases and leaseholds
  - Information files—Value
- **Publications**
  - *The Appraisal of Real Estate*, fifteenth edition
  - *Land Valuation: Real Solutions to Complex Issues*

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77. In the 1950s, the first “modern” court cases appeared in New York and California when commercial ground lease financing seems to have matured. See H. A. Mark, “Leasehold Mortgages—Some Practical Considerations,” 14 *Business Lawyer*, 609 (1959). Reappraisal disputes much like those considered here go back much further in the legal reports. See Whalen, “A Brief History of Ground Rent Resets,” *PLI Chronicle*, September 2023.

# Regression Promises and Aggregation Bias Illusions

## The Application of Market Delineation to Land Valuation Models

by Matthew C. Trimble, MAI

### Abstract

Regression is one of the best tools for consistently deriving market-based adjustments in the appraisal of real estate. There are limitations in regression, however, and the potential for misleading results must be recognized. A principal violation of the validity of a regression model is aggregation bias, which has received limited attention in appraisal literature but is discussed here. This article shows how aggregation bias may creep into a regression model, and how professional appraisers are equipped to avoid it with the tools of market delineation and segmentation. There is a pervasive misunderstanding that a large data sample will minimize the negative impact of inappropriate or incorrect data points (comparables). In truth, the quality of data is as important in large regression modeling data sets as it is in small data sets in the conventional sales comparison approach. This article offers a case study of vacant industrial land to illustrate the misleading results of over aggregation (aggregation bias) and demonstrates how aggregation bias can be avoided through market delineation and segmentation. Only after a data set has been delineated and segmented in accordance with the market can issues related to model specification be effectively addressed.

### Introduction

Appraisers can readily measure distance to highways, employment, and other linkages with Google Earth and various GIS applications. Demographic, employment, and income data is available for nearly every locality. Sale and transactional data as well as parcel-specific physical data including flood, parcel, topographical, soil, zoning, and utility maps are generally available online. Regression provides a tool for processing large data sets and extracting adjustments in a consistent manner for use in the sales comparison approach. Limitations of regression include insufficient data availability for unique or non-quantifiable property features and over aggregation (aggregation bias). At a minimum, regression (as well as paired sales) requires a sample size

sufficiently larger than the number of predictor (independent) variables included in the model. A fundamental assumption of the underlying aggregated data used in regression modeling is that the modeled relationship between the economic variables is homogeneous across all market participants.<sup>1</sup> As the behaviors of economic agents across distinct real estate markets are not the same, data aggregated over different markets can produce misleading results and an invalid regression model. Misleading regression results due to aggregation bias in real estate appraising can be addressed through market delineation and segmentation, which ensure data selection is representative of the market for the parcel or parcels being appraised.

Real estate sales data is typically classified as a nonprobability sample.<sup>2</sup> The two most funda-

1. Thomas A. Garrett, "Aggregated versus Disaggregated Data in Regression Analysis: Implications for Inference," *Economics Letters* 81, no. 1 (2003): 61–65.

2. *The Appraisal of Real Estate*, 15th ed. (Chicago: Appraisal Institute, 2020), 253.

mental assumptions with regression in appraising are validity and representativeness,<sup>3</sup> which require an appraiser's professional judgment. Validity, the most fundamental assumption in valuation modeling, is the assumption that the regression model describes a real-world relationship.<sup>4</sup> The application of regression in real estate appraising should not run contrary to standard market delineation and segmentation practices of market analysis. The following case study of industrial land valuation using regression will demonstrate the misleading effects of aggregation bias, how aggregation bias can be avoided, and the critical role that market delineation and segmentation play in producing a credible and valid regression model.

## Case Study Example

### Market Delineation and Segmentation

Market delineation is the process of identifying a specific real estate market. It considers the following factors: property type, property features, market area, available substitute properties, and access to complementary properties.<sup>5</sup> Regression assumes that the modeled relationship between the independent variables (elements of comparison) and the dependent variable (price) is homogeneous across all market participants described by the model; therefore market delineation is a critical step in this assumption. In regression, the goal of market delineation is to identify the competitive market segment,<sup>6</sup> i.e., the set of sales reflective of the market for the appraised property. In some instances, different users may compete for land in a market, and using sales of land acquired for competing uses may be justified for inclusion in the regression model provided the economic behavior underlying competing sales parallels the economic behavior being modeled.

In this case study example, three tracts of land ranging between approximately 30 and 60 acres located in the Southeast Industrial Node of the Oklahoma City metro area are valued.<sup>7</sup> A summary of the pertinent characteristics of the parcels are shown in Exhibit 1.

The Oklahoma City industrial market is characterized by growth and stable demand; it contains three primary industrial areas—the Southwest, the Southeast, and the North. Other smaller industrial areas in the Oklahoma City metro serve as secondary competition to the three major industrial nodes. The North Industrial Node is influenced by a major corridor of newer retail development and the affluent suburban residential areas of north Oklahoma City. The Southwest Industrial Node is concentrated around Will Rogers World Airport, while the Southeast Industrial Node benefits from proximity to Tinker Air Force Base, the largest employer in the state of Oklahoma. Both the Southeast and Southwest Nodes are convenient to middle-income populations, interstate highways, and rail transport and have similar support services.

### Initial Data Collection and Regression with Aggregated Data

The initial search for comparable sales included the east, west, central, and southern portions of the Oklahoma City metro area and excluded the North Industrial Node due to demographic and locational differences. Other sales excluded were those with significant building improvements and those from rural type areas. The geographic search boundary is depicted in Exhibit 2. Exhibit 3 shows the twenty-one sales identified in the initial search.

Property features considered for elements of comparison were shape, topography (including drainage and flood), frontage (interior, primary road frontage, dual frontage road), highway expo-

3. *The Appraisal of Real Estate*, 15th ed., 153–154. In order of decreasing importance, the assumptions of regression analysis are validity; representativeness; additivity and linearity; independence of errors; equal variance of errors; and normality of errors. For additional discussion, see *The Appraisal of Real Estate*, 15th ed., appendix B, “Regression Analysis and Statistical Applications,” available online at [www.appraisalinstitute.org/15th-edition-appendices/](http://www.appraisalinstitute.org/15th-edition-appendices/), which addresses more complex concepts and considerations in the use of statistical applications like multiple regression analysis.

4. Andrew Gelman, Jennifer Hill, and Aki Vehtari, *Regression and Other Stories* (Cambridge University Press, 2020), 24.

5. *The Appraisal of Real Estate*, 15th ed., 139.

6. George Dell, “Regression, Critical Thinking, and the Valuation Problem Today,” *The Appraisal Journal* (Summer 2017): 217–229.

7. While based on actual parcels, some details of the valued parcels were changed or omitted for the purpose of this article.





**Exhibit 3** Initial Sales Search Results (Aggregated)

Sale	Zoning	Size Acres	\$/SF	Shape	Topography	Frontage	Highway Exposure	Distance to Interstate Hwy. System (miles)	Surrounding Development Intensity
1	I-2	22	\$1.36	Irregular	Level	Primary road	Yes	0.4	Medium
2	A-2	29	\$0.72	Highly irregular	Drainage and pond	Interior	No	0.4	High
3	R1	134	\$0.55	Highly irregular	Numerous ponds	Interior	No	2	Medium
4	A-2	57	\$1.11	Irregular	Drainage, sloping, ponds	Two primary roads	Yes	0.8	Medium
5	AA	30	\$0.52	Irregular	Level	Interior	No	3.25	Low
6	AA	38	\$0.42	Irregular due to oil pad near corner	Drainage	Two primary roads	No	2	Low
7	I-3	30	\$0.49	Generally rectangular	Level	Interior	No	0.8	Low
8	PUD-1705	74	\$0.65	Irregular	Drainage, sloping	Two primary roads	No	0.5	Medium
9	PUD-902	79	\$0.52	Generally rectangular	Level	Primary road	No	1.8	Medium
10	AA	38	\$0.39	Irregular due to oil pad near corner	Drainage	Two primary roads	No	2	Low
11	C-3, R-1	39	\$1.35	Irregular	Level	Two primary roads	Yes	1.5	High
12	I-2	22	\$1.07	Generally rectangular	Rolling (small pond drained)	Primary road	No	0.64	High
13	I-2	40	\$0.46	Highly irregular	Rolling	Primary road	No	1.2	Medium
14	R-1	17	\$0.45	Irregular	Rolling	Primary road	No	2.2	Medium
15	I-2	35	\$1.06	Generally rectangular	Level	Primary road	No	1	High
16	I-2	22	\$0.88	Highly irregular	Drainage with flood	Two primary roads	Yes	0.25	Medium
17	AA, SPUD-854	26	\$1.15	Generally rectangular	Rolling	Two primary roads	No	0	Medium
18	AA	54	\$0.43	Irregular	Rolling	Interior	No	2.3	Low
19	I-2	26	\$0.45	Irregular	Rolling	Two primary roads	Yes	0	Medium
20	R-1	117	\$0.49	Irregular	Numerous ponds	Interior	No	1.5	Medium
21	R-1	52	\$0.44	Irregular	Rolling	Primary road	No	1.25	Low

**Exhibit 4** Initial Aggregated Model Inputs

Observation	\$/SF	Highly Irr. Shape	Rolling Topo.	Extreme Topo. (Drainage, Flood, Other)	Primary Road Frontage	Dual Primary Road Frontage	Hwy. Exp.	Dist. to Int. Hwy. (sq. rt. miles)	Med. Surr. Dev.	High Surr. Dev.
1	\$1.36	0	0	0	1	0	1	0.632	1	0
2	\$0.72	1	0	1	0	0	0	0.632	0	1
3	\$0.55	1	0	1	0	0	0	1.414	1	0
4	\$1.11	0	0	1	0	1	1	0.894	1	0
5	\$0.52	0	0	0	0	0	0	1.803	0	0
6	\$0.42	0	0	1	0	1	0	1.483	1	0
7	\$0.49	0	0	0	0	0	0	0.894	0	0
8	\$0.65	0	0	1	0	1	0	0.707	1	0
9	\$0.52	0	0	0	1	0	0	1.342	1	0
10	\$0.39	0	0	1	0	1	0	1.414	0	0
11	\$1.35	0	0	0	0	1	1	1.225	0	1
12	\$1.07	0	1	0	1	0	0	0.800	0	1
13	\$0.46	1	1	0	1	0	0	1.095	1	0
14	\$0.45	0	1	0	1	0	0	1.483	1	0
15	\$1.06	0	0	0	1	0	0	1.000	0	1
16	\$0.88	1	0	1	1	0	1	0.500	1	0
17	\$1.15	0	1	0	0	1	0	0.000	1	0
18	\$0.43	0	1	0	0	0	0	1.517	0	0
19	\$0.45	0	1	0	0	1	1	0.000	1	0
20	\$0.49	0	0	1	0	0	0	1.225	1	0
21	\$0.44	0	1	0	0	1	0	1.118	0	0

**Exhibit 5** Initial Aggregated Regression Results

Regression Statistics						
Multiple R	0.816567					
R Square	0.666781					
Adjusted R Square	0.394147					
Standard Error	0.258177					
Observations	21					
ANOVA						
	df	SS	MS	F	Significance F	
Regression	9	1.467172	0.163019	2.4457	0.08199	
Residual	11	0.733209	0.066655			
Total	20	2.200381				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.7480	0.2783	2.6876	0.0211	0.1354	1.3606
Highly Irregular Shape	−0.1154	0.1976	−0.5841	0.5709	−0.5503	0.3195
Rolling Topography	−0.1758	0.1747	−1.0062	0.3360	−0.5603	0.2087
Extreme Topography	−0.1260	0.2011	−0.6269	0.5435	−0.5686	0.3165
Primary Road Frontage	0.0772	0.1849	0.4178	0.6841	−0.3297	0.4842
Dual Primary Road Frontage	0.0347	0.1857	0.1867	0.8553	−0.3740	0.4434
Highway Exposure	0.2590	0.1672	1.5486	0.1498	−0.1091	0.6271
Distance to Int. Hwy. (sq. rt. miles)	−0.1574	0.1554	−1.0133	0.3327	−0.4994	0.1845
Medium Surr. Dev.	0.1183	0.1900	0.6226	0.5463	−0.3000	0.5366
High Surr. Dev.	0.4382	0.2098	2.0888	0.0608	−0.0235	0.8998

This article primarily focuses on the fundamental assumptions of validity and representativeness. Those assumptions are violated in the aggregated model due to aggregation bias.<sup>8</sup> The aggregated model produced the following three illusory results:

1. The coefficient for drainage and other extreme topographical conditions is irrational as it indicates less of a deduction for extreme topography than for rolling topography. Industrial users are typically averse to creeks, drainage, significant water features, and other topographical features that increase the development cost of land.
2. Industrial users value efficient parcel access. The coefficients for primary and dual road frontage appear small and irrational. Greater economic significance would be expected when compared to interior parcels.
3. Industrial users value accessibility to the interstate highway system. Whether the users are warehousing or manufacturing, interstate highways are a primary mode of transporting their goods to market. Consequently, the coefficient for distance to interstate highway system appears low, as a coefficient of  $-0.1574$  translates into a price-per-square-foot-decrease of approximately \$0.11 for a half-mile distance and decrease of approximately \$0.16 for a one-mile distance when compared to immediate access.<sup>9</sup>

#### **Data Collection and Regression Results with Market Delineation and Segmentation**

The market behavior described in the aggregated model resulting from the initial data set suffers from aggregation bias, and it does not match the market behavior for industrial land that the model is attempting to describe. The initial data set excluded sales in the North submarket, but that was not sufficient for market delineation, and the applicable market segment was not sufficiently identified and isolated. A more detailed and thorough analysis of the sales was conducted and is shown in Exhibit 6. The data set in Exhibit 6 was segmented in accordance with market delineation revealing seven out of the twenty-one sales were not representative of the relevant industrial land market and should therefore be excluded.

As shown in Exhibit 6, analysis of each individual sale indicates the initial data set was commingled with land sales that have negligible, if any, competitiveness with the industrial land parcels whose value is being modeled. The residential market response to ponds, creeks, access to highways, and other features is not consistent (homogeneous) with the response of the industrial market to those features. Therefore, the assumptions of homogeneity of the economic agents being modeled and the validity of the model are violated by aggregation bias. In addition, a non-arm's-length transaction, an interior oil and gas site, and a property unable to connect to sewer services should be excluded as these unique conditions influencing price are beyond the scope of the model. After excluding seven of the twenty-one sales, the data set is reduced to fourteen sales. However, the remaining fourteen sales represent the relevant market segment. Sacrificing sample size for representativeness and validity is a necessary trade-off appraisers must be willing to make in regression modeling. The market delineated and segmented regression inputs and results are shown in Exhibit 7 and Exhibit 8, respectively.

The regression results after market delineation and segmentation have a high goodness of fit and illustrate coefficient effects consistent with the market behavior for industrial land. The prior misleading results from the aggregated model have been corrected as follows:

1. The coefficient for drainage and other extreme topographical conditions is now rational, and it indicates a greater value loss than rolling topography. This result is consistent with industrial users, which typically are averse to creeks, drainage, significant water features, and other topographical features that increase the development cost of land.
2. Results now indicate industrial users' value of efficient parcel access. The coefficients for dual and primary road frontage increased substantially compared to the aggregated model and are consistent with known market behavior.
3. Results now indicate industrial users' value of accessibility to the interstate highway system. Whether users are warehousing or

8. Garrett, "Aggregated versus Disaggregated," 61–65.

9.  $-0.15742 \times \sqrt{0.5} = -0.11131$

**Exhibit 6** Market Delineated Data Set

Observation	Market Delineation Comments	Part of Market Segment (Include in Model)
1	SE industrial land sale.	Yes
4	Zoned for agriculture. Zoning change likely. Industrial uses present in the area. Considered competitive.	Yes
7	Industrial land sale.	Yes
8	SW industrial land sale.	Yes
10	SE land sale. Area includes mix of residential and industrial. Considered competitive.	Yes
11	Purchased for self-storage development. Considered secondarily competitive.	Yes
12	SW industrial land sale with rail access.	Yes
13	SE industrial land sale.	Yes
14	SE industrial land sale. Zoned residential but acquired for materials storage.	Yes
15	SE industrial land sale with rail access.	Yes
16	SW industrial land sale.	Yes
17	SE land sale in an area of mixed residential and industrial. Considered competitive.	Yes
20	SE land sale in an area of mixed residential and industrial. Considered competitive.	Yes
21	SE industrial land sale.	Yes
2	Interior back land site acquired by an oil and gas operator reportedly for a pad site. Not representative.	No
3	Former subdivision golf course surrounded by homes. Acquired for residential infill. Not representative.	No
5	Church land sale to a school district. Surrounded by residential acreage. Not representative.	No
6	Although buyer and seller were under different corporate names, the sale was between related parties. Not representative.	No
9	Residential land purchase located between two residential subdivisions. No competing industrial uses in the vicinity. Not representative.	No
18	Residential land purchase. Surrounded by executive homes on small acreages. Not representative.	No
19	Verification revealed the railroad would not allow a sewer line crossing in this area. Not representative.	No



**Exhibit 7** Market Delineated and Segmented Model Inputs

Observation	\$/SF	Highly Irr. Shape	Rolling Topo.	Extreme Topo. (Drainage, Flood & Other)	Primary Road Frontage	Dual Primary Road Frontage	Hwy. Exp.	Dist. to Int. Hwy. (sq. rt. miles)	Med. Surr. Dev.	High Surr. Dev.
1	\$1.36	0	0	0	1	0	1	0.63	1	0
4	\$1.11	0	0	1	0	1	1	0.89	1	0
7	\$0.49	0	0	0	0	0	0	0.89	0	0
8	\$0.65	0	0	1	0	1	0	0.71	1	0
10	\$0.39	0	0	1	0	1	0	1.41	0	0
11	\$1.35	0	0	0	0	1	1	1.22	0	1
12	\$1.07	0	1	0	1	0	0	0.80	0	1
13	\$0.46	1	1	0	1	0	0	1.10	1	0
14	\$0.45	0	1	0	1	0	0	1.48	1	0
15	\$1.06	0	0	0	1	0	0	1.00	0	1
16	\$0.88	1	0	1	1	0	1	0.50	1	0
17	\$1.15	0	1	0	0	1	0	0.00	1	0
20	\$0.49	0	0	1	0	0	0	1.22	1	0
21	\$0.44	0	1	0	0	1	0	1.12	0	0

**Exhibit 8** Market Delineated and Segmented Regression Results

Regression Statistics						
Multiple <i>R</i>	0.9870					
<i>R</i> Square	0.9742					
Adjusted <i>R</i> Square	0.9162					
Standard Error	0.1056					
Observations	14					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	9.000	1.686	0.187	16.802	0.008	
Residual	4.000	0.045	0.011			
Total	13.000	1.730				
	Coefficients	Standard Error	<i>t</i> Stat	<i>P</i> -value	Lower 95%	Upper 95%
Intercept	0.873	0.132	6.621	0.003	0.507	1.239
Highly Irregular Shape	−0.272	0.109	−2.496	0.067	−0.574	0.030
Rolling Topography	−0.065	0.109	−0.595	0.584	−0.368	0.238
Extreme Topography	−0.143	0.101	−1.416	0.230	−0.423	0.137
Primary Road Frontage	0.097	0.119	0.817	0.460	−0.233	0.427
Dual Primary Road Frontage	0.109	0.108	1.007	0.371	−0.191	0.409
Highway Exposure	0.395	0.093	4.225	0.013	0.135	0.654
Distance to Int. Hwy. (sq. rt. miles)	−0.383	0.085	−4.510	0.011	−0.619	−0.147
Med. Surr. Dev.	0.185	0.097	1.910	0.129	−0.084	0.453
High Surr. Dev.	0.461	0.106	4.349	0.012	0.167	0.756

manufacturing, interstate highways are a primary mode of transporting their goods to market. Consequently, the distance to interstate highway system coefficient appears reasonable and indicates a value loss of approximately \$0.27/SF for a one-half mile distance<sup>10</sup> and \$0.38/SF for a one-mile distance from the interstate highway compared to immediate access.

### Model Specification: Regression Trade-Offs, Deficiencies, and Refinements

Aggregation bias is a common deficiency of real estate regression models, but it has received limited discussion in the appraisal literature. Aggregation bias may result in statistically significant value models that are invalid and misleading. An appraiser must ensure the assumptions of validity and representativeness are satisfied. Failing to do so results in misleading outcomes as previously shown in the aggregated model (see Exhibit 5, Initial Aggregated Regression Results). Fortunately, appraisers have a solution to aggregation bias: segmenting the data in accordance with market delineation (shown in Exhibit 6) prior to modeling market behavior using regression (shown in Exhibit 8). Only after the data set has been segmented and delineated can model specification and issues related to significance and fit be effectively addressed. This article addresses potential deficiencies of the delineated and segmented model and suggests solutions.

Economic significance considers whether a coefficient is large enough to matter and has importance in the real-world context. The relative sizes of the coefficients to the modeled price range indicate they are relevant to the market or economically significant. While the magnitude of the coefficients is indicative of their economic significance, a potential deficiency in the delineated and segmented regression model (Exhibit 8) includes generally low *statistical significance* for the individual coefficients. The low statistical

significance is partially attributable to the small sample size relative to the number of predictor variables. This is often the cost of satisfying the assumption of representativeness in real estate data. Related to this downside is the way ordinal data (qualitative data that can be ordered on a hierarchical scale) is commonly treated in regression modeling. Topography, frontage, and surrounding development are three ordinal variables used in the model. As there are three levels to each of the three ordinal variables, they are inputted into the regression model as six dummy variables since one level is represented as zero by default. In cases with a high number of dummy predictor variables representing ordinal data, it may be useful to input them as discrete numerical ratings<sup>11</sup> analogous to a typical property productivity analysis. Suggested here is a hybrid multiple regression model where ordinal ratings are regressed as a single variable in the case of linear (near constant) effects while dummy variables are retained when nonlinear effects are indicated.

An upside to regressing ratings as single variables versus numerous dummy variables is that the number of predictor variables decreases relative to the sample size. Consequently, the significance of the model and its coefficients are likely to increase, resulting in greater confidence that the modeled effects are distinguishable from chance. The downside has previously been discussed by A. Ason Okoruwa, who notes that if an ordinal variable is included in the estimated equation as any other discrete or continuous variable, then its coefficient represents a constant impact of a one-unit increase in the ordinal predictor variable.<sup>12</sup> For example, the delineated regression model (Exhibit 8) indicates a value increase of \$0.10/SF for primary road frontage and an \$0.11/SF value increase for dual primary road frontage compared to an interior parcel. This non-constant effect would not be captured in a regression model using frontage ratings. However, the

10.  $-0.38284 \times \sqrt{0.5} = -0.2707$

11. An extreme form of regressing property productivity ratings known as price-quality regression has been discussed by D. Richard Wincott; in that type of regression model all predictor variables are consolidated into a single weighted rating that is then regressed as a single variable. One of the most elegant features of multiple regression is that the contribution of each predictor variable is given by its coefficient. This feature is lost when all predictors are consolidated into a single rating as in price-quality regression. D. Richard Wincott, "An Alternative Sales Analysis Approach for Vacant Land Valuation," *The Appraisal Journal* (Fall 2012): 310–317.

12. A. Ason Okoruwa, "How to Interpret Regression Coefficients and Calculate Adjustments for Differences in Property Productivity Features," *The Appraisal Journal* (Winter 2018): 68–84.

**Exhibit 9** Market Delineated and Segmented Model Inputs  
(Using Discrete Ratings for Topography and Surrounding Development)

\$/SF	Highly Irregular Shape	Topography	Single Primary Road Frontage	Dual Primary Road Frontage	Highway Exposure	Dist. to Hwy. (sq. rt. miles)	Surrounding Development
\$1.36	0	0	1	0	1	0.63	1
\$1.11	0	2	0	1	1	0.89	1
\$0.49	0	0	0	0	0	0.89	0
\$0.65	0	2	0	1	0	0.71	1
\$0.39	0	2	0	1	0	1.41	0
\$1.35	0	0	0	1	1	1.22	2
\$1.07	0	1	1	0	0	0.80	2
\$0.46	1	1	1	0	0	1.10	1
\$0.45	0	1	1	0	0	1.48	1
\$1.06	0	0	1	0	0	1.00	2
\$0.88	1	2	1	0	1	0.50	1
\$1.15	0	1	0	1	0	0.00	1
\$0.49	0	2	0	0	0	1.22	1
\$0.44	0	1	0	1	0	1.12	0

0 = Level  
1 = Rolling  
2 = Extreme

0 = Low  
1 = Medium  
2 = High

topography and surrounding development variables indicate generally constant (linear) effects between units on the ordinal scale (Exhibit 9); therefore they are good candidates to input as ratings rather than dummy variables. The alternative delineated regression model in Exhibit 10 demonstrates the increased statistical significance when the dummy variables with near linear (constant) effects along the ordinal scale (topography and surrounding development) are replaced by singular discrete rating variables. It is important to emphasize that real estate valuation models should not be specified only by considerations of statistical significance. Models should be built and specified in accordance with market logic. The ratings model in Exhibit 10 describes the data well, has robust predictive power (see Exhibit 10 note), and shows increased statistical significance across all coefficients. These desirable model characteristics are a natural conse-

quence of comprehensive market delineation of the data set to avoid aggregation bias and the reduced number of predictor variables consistent with market logic and statistical practices.

As the comparison in Exhibit 11 illustrates, the regression model using ratings for topography and surrounding development results in greater statistical significance for all predictor variables and the overall model. The increased statistical significance increases confidence that the modeled effects are distinguishable from chance. The advantage of ratings over dummy variables is that the number of predictors relative to the data set is reduced without significant loss of economically relevant information. However, using a discrete ratings scale is only justified when the effects between one unit and the next are generally linear (constant). If the effects are nonlinear, then economically significant information will be lost and dummy variables should be used instead.

**Exhibit 10** Market Delineated and Segmented Regression Results  
(Using Discrete Ratings for Topography and Surrounding Development)

Regression Statistics						
Multiple <i>R</i>	0.9859					
<i>R</i> Square	0.9720					
Adjusted <i>R</i> Square	0.9393					
Standard Error	0.0899					
Observations	14					
ANOVA						
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>	
Regression	7	1.6820	0.2403	29.7609	0.0003	
Residual	6	0.0484	0.0081			
Total	13	1.7305				
	Coefficients	Standard Error	<i>t</i> Stat	<i>P</i> -value	Lower 95%	Upper 95%
Intercept	0.8453	0.1039	8.1320	0.0002	0.5909	0.8453
Highly Irregular Shape	−0.2710	0.0915	−2.9618	0.0252	−0.4948	−0.0471
Topography	−0.0874	0.0350	−2.4959	0.0468	−0.1732	−0.0017
Single Primary Road Frontage	0.0962	0.0898	1.0713	0.3252	−0.1236	0.3161
Dual Primary Road Frontage	0.1243	0.0783	1.5862	0.1638	−0.0674	0.3160
Highway Exposure	0.3793	0.0586	6.4774	0.0006	0.2360	0.5226
Dist. to Hwy. (sq. rt. miles)	−0.3638	0.0665	−5.4693	0.0016	−0.5266	−0.2011
Surrounding Development	0.2320	0.0450	5.1572	0.0021	0.1219	0.3421

Note: The predictive *R*-squared is a measure of how well the model predicts the responses for new observations by iteratively holding out each observation and comparing its predicted value to its actual value. A model that overfits the data by describing random noise is generally poor at prediction. The predictive *R*-squared for the Exhibit 10 model was 0.8614, indicating the model is robust for forecasting, is predicting holdout data points, and is not a result of overfitting random noise due to a high number of predictor variables relative to the size of the data set. The predictive *R*-squared of 0.8614 for the delineated model using ratings is also substantially higher than the predictive *R*-squared of 0.6588 for the delineated model using dummy variables presented in Exhibit 8.

### Exhibit 11 Comparison of the Delineated Regression Results: Exhibit 8 Dummy Variables vs. Exhibit 10 Discrete Ratings

Coefficient Comparison			P-Values Comparison		
Model	Exhibit 10 (Ratings)*	Exhibit 8 (Dummy)	Model	Exhibit 10 (Ratings)	Exhibit 8 (Dummy)
Intercept	0.8453	0.8730	Regression (F)	0.0003	0.0077
Highly Irregular Shape	-0.2710	-0.2718	Highly Irregular Shape	0.0252	0.0670
Rolling Topography	-0.0874	-0.0649	Rolling Topography	0.0468	0.5836
Extreme Topography	-0.1749	-0.1428	Extreme Topography	0.0468	0.2298
Single Primary Road Frontage	0.0962	0.0970	Single Primary Road Frontage	0.3252	0.4600
Dual Primary Road Frontage	0.1243	0.1090	Dual Primary Road Frontage	0.1638	0.3707
Highway Exposure	0.3793	0.3947	Highway Exposure	0.0006	0.0134
Dist. to Hwy. (sq. rt. miles)	-0.3638	-0.3828	Dist. to Hwy. (sq. rt. miles)	0.0016	0.0107
Med. Surrounding Development	0.2320	0.1845	Med. Surrounding Development	0.0021	0.1288
High Surrounding Development	0.4640	0.4615	High Surrounding Development	0.0021	0.0122

\*The coefficient for extreme topography under ratings is equal to twice the coefficient for rolling topography. The coefficient for high surrounding development under ratings is equal to twice the coefficient for medium surrounding development. The ratings model illustrates substantial improvement in the statistical significance of the model and the individual coefficients.

### Interpreting Regression Results and the Sales Comparison Approach

The delineated regression models discussed here fit the underlying data well, and the additive relationship<sup>13</sup> among the predictor variables allows for direct application to the traditional sales comparison approach. Applying the adjustments from regression to the sales comparison approach provides an opportunity for further reconciliation. By selecting sales that the appraiser deems most comparable to the property being valued, the appraiser can further analyze the subject property's position in the market and account for fea-

tures that may not have been sufficiently captured by the regression model. It is also possible that the sales comparison approach with properly selected comparable sales may partially mitigate the negative effects of aggregation bias compared to direct application of the aggregated model itself and inform an appraiser that a valuation model is deficient. Exhibit 12 compares the adjustments reconciled from the delineated models to the biased adjustments indicated by the aggregated model. In Exhibits 13A, 13B, and 13C, the delineated and aggregated adjustments are applied to the traditional sales comparison approach to further highlight the misleading effects of aggregation bias.

13. The dependent variable, \$/SF, was left in its original form and not transformed in this case study. The most common transformation discussed in literature is the natural log transformation. While the advantages of log transformations of the dependent variable have been widely discussed, there are valid reasons not to do so. Linear regression on a log scale mathematically equates to a multiplicative model on the original scale. Rather than compounding percentage adjustments, an additive model was used in this article as it has a more natural interpretation when applied to the sales comparison approach. Additionally, adjustments for elements such as topography are primarily related to increased development costs, which are typically fixed or additive regardless of the values for other elements of comparison.



**Exhibit 12** Adjustments Based on Regression Coefficients

<b>Model</b>	<b>Delineated</b>			<b>Aggregated (Biased)</b>
	<b>Delineated / Dummy Var.</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
<b>Shape</b>				
Functional	Base	Base	Base	Base
Highly Irregular	−\$0.27	−\$0.27	−\$0.27	−\$0.12
<b>Topography</b>	<b>Delineated Model</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
Level	Base	Base	Base	Base
Rolling	−\$0.06	−\$0.09	−\$0.08	−\$0.18
Extreme	−\$0.14	−\$0.17	−\$0.16	−\$0.13
<b>Frontage</b>	<b>Delineated Model</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
Interior	Base	Base	Base	Base
Primary Road	\$0.10	\$0.10	\$0.10	\$0.08
Dual Primary Road	\$0.11	\$0.12	\$0.12	\$0.03
<b>Direct Highway Exposure</b>	<b>Delineated Model</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
No Direct Hwy. Exposure	Base	Base	Base	Base
Direct Hwy. Exposure	\$0.39	\$0.38	\$0.38	\$0.26
<b>Distance to Interstate Highway (miles)*</b>	<b>Delineated Model</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
0	\$0.00	\$0.00	\$0.00	\$0.00
0.25	−\$0.19	−\$0.18	−\$0.18	−\$0.08
0.5	−\$0.27	−\$0.26	−\$0.26	−\$0.11
0.75	−\$0.33	−\$0.32	−\$0.32	−\$0.14
1	−\$0.38	−\$0.36	−\$0.36	−\$0.16
1.25	−\$0.43	−\$0.41	−\$0.41	−\$0.18
1.5	−\$0.47	−\$0.45	−\$0.45	−\$0.19
1.75	−\$0.51	−\$0.48	−\$0.48	−\$0.21
2	−\$0.54	−\$0.51	−\$0.51	−\$0.22
<b>Surrounding Development</b>	<b>Delineated Model</b>	<b>Delineated/ Ratings</b>	<b>Reconciled Adjustment \$/SF</b>	<b>Aggregated Adjustment \$/SF</b>
Low Density / Older Vintage	Base	Base	Base	Base
Medium	\$0.18	\$0.23	\$0.23	\$0.12
High / Newer Commercial	\$0.46	\$0.46	\$0.46	\$0.44

\*Adjustment based on square root of miles times coefficient.

**Exhibit 13A** Sales Comparison Using Reconciled Regression Adjustments:  
Parcel A Sales Comparison

Parcel / Sale	A	Sale 7	Sale 8	Sale 12
Zoning	I-2 (Industrial)	I-3	PUD-1706	I-2
Highly Irregular Shape	No	No	No	No
Net Acres	32.50	30.14	74.28	21.88
Topography	Rolling	Level	Extreme	Rolling
Frontage	Dual Primary Rd.	Interior	Dual Primary Rd.	Primary Rd.
Direct Hwy. Exposure	No	No	No	No
Dist. to Hwy. (miles)	1	0.80	0.50	0.64
Surrounding Dev.	Medium	Low	Medium	High
\$/SF		\$0.49	\$0.65	\$1.07
<b>Delineated Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	\$0.00
Topography		-\$0.08	\$0.08	\$0.00
Frontage		\$0.12	\$0.00	\$0.02
Direct Highway Exposure		\$0.00	\$0.00	\$0.00
Distance to Interstate Highway (miles)*		-\$0.04	-\$0.11	-\$0.07
Surrounding Development		\$0.23	\$0.00	-\$0.23
Total Adjustments		\$0.23	-\$0.03	-\$0.28
Indicated \$/SF (Average of Sales)	\$0.71	\$0.72	\$0.62	\$0.79
Delineated Model Value \$/SF	\$0.72			
Delineated-Ratings Model Value \$/SF	\$0.75			
<b>Aggregated (Biased) Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	\$0.00
Topography		-\$0.18	-\$0.05	\$0.00
Frontage		\$0.03	\$0.00	-\$0.04
Direct Highway Exposure		\$0.00	\$0.00	\$0.00
Distance to Interstate Highway (miles)*		-\$0.02	-\$0.05	-\$0.03
Surrounding Development		\$0.12	\$0.00	-\$0.32
Total Adjustments		-\$0.04	-\$0.10	-\$0.39
Indicated \$/SF (Average of Sales)	\$0.56	\$0.45	\$0.55	\$0.68
Aggregated Model Value \$/SF	\$0.57			

\*Adjustment based on square root of miles times coefficient.

**Exhibit 13B** Sales Comparison Using Reconciled Regression Adjustments:  
Parcel B Sales Comparison

Parcel / Sale	B	Sale 1	Sale 4	Sale 16
Zoning	I-2 (Industrial)	I-2	A-2	I-2
Highly Irregular Shape	No	No	No	Yes
Net Acres	57.65	21.89	57.06	22.09
Topography	Rolling	Level	Extreme	Extreme
Frontage	Primary Road	Primary Rd.	Dual Primary Rd.	Primary Rd.
Direct Hwy. Exposure	Yes	Yes	Yes	Yes
Dist. to Hwy. (miles)	0.1	0.4	0.80	0.25
Surrounding Dev.	Medium	Medium	Medium	Medium
\$/SF		\$1.36	\$1.11	\$0.88
<b>Delineated Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	\$0.27
Topography		-\$0.08	\$0.08	\$0.08
Frontage		\$0.00	-\$0.02	\$0.00
Direct Highway Exposure		\$0.00	\$0.00	\$0.00
Distance to Interstate Highway (miles)*		\$0.12	\$0.21	\$0.07
Surrounding Development		\$0.00	\$0.00	\$0.00
Total Adjustments		\$0.04	\$0.27	\$0.42
Indicated \$/SF (Average of Sales)	\$1.36	\$1.40	\$1.38	\$1.30
Delineated Model Value \$/SF	\$1.36			
Delineated-Ratings Model Value \$/SF	\$1.35			
<b>Aggregated (Biased) Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	\$0.12
Topography		-\$0.18	-\$0.05	-\$0.05
Frontage		\$0.00	\$0.04	\$0.00
Direct Highway Exposure		\$0.00	\$0.00	\$0.00
Distance to Interstate Highway (miles)*		\$0.05	\$0.09	\$0.03
Surrounding Development		\$0.00	\$0.00	\$0.00
Total Adjustments		-\$0.13	\$0.08	\$0.09
Indicated \$/SF (Average of Sales)	\$1.13	\$1.23	\$1.19	\$0.97
Aggregated Model Value \$/SF	\$0.98			

\*Adjustment based on square root of miles times coefficient.

**Exhibit 13C** Sales Comparison Using Reconciled Regression Adjustments:  
Parcel C Sales Comparison

Parcel / Sale	C	Sale 8	Sale 15	Sale 16
Zoning	I-2 (Industrial)	PUD-1706	I-2	I-2
Highly Irregular Shape	No	No	No	Yes
Net Acres	45.25	74.28	34.63	22.09
Topography	Level	Extreme	Level	Extreme
Frontage	Primary Rd.	Dual Primary Rd.	Primary Rd.	Primary Rd.
Direct Hwy. Exposure	No	No	No	Yes
Dist. to Hwy. (miles)	1.5	0.50	1.00	0.25
Surrounding Dev.	Medium	Medium	High	Medium
\$/SF		\$0.65	\$1.06	\$0.88
<b>Delineated Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	\$0.27
Topography		\$0.16	\$0.00	\$0.16
Frontage		-\$0.02	\$0.00	\$0.00
Direct Highway Exposure		\$0.00	\$0.00	-\$0.38
Distance to Interstate Highway (miles)*		-\$0.19	-\$0.08	-\$0.26
Surrounding Development		\$0.00	-\$0.23	\$0.00
Total Adjustments		-\$0.05	-\$0.31	-\$0.21
Indicated \$/SF (Average of Sales)	\$0.67	\$0.60	\$0.75	\$0.67
Delineated Model Value \$/SF	\$0.69			
Delineated-Ratings Model Value \$/SF	\$0.73			
<b>Aggregated (Biased) Adjustments</b>				
Highly Irregular Shape		\$0.00	\$0.00	-\$0.12
Topography		-\$0.13	\$0.00	-\$0.13
Frontage		\$0.04	\$0.00	\$0.00
Direct Highway Exposure		\$0.00	\$0.00	\$0.26
Distance to Interstate Highway (miles)*		-\$0.08	-\$0.04	-\$0.11
Surrounding Development		\$0.00	-\$0.32	\$0.00
Total Adjustments		-\$0.16	-\$0.36	-\$0.10
Indicated \$/SF (Average of Sales)	\$0.66	\$0.49	\$0.70	\$0.78
Aggregated Model Value \$/SF	\$0.75			

\*Adjustment based on square root of miles times coefficient.

## Conclusion

This article shows how aggregation bias may creep into a regression model, and how professional appraisers are equipped to avoid it with the tools of market delineation and segmentation. No amount of statistical testing or advanced mathematics can cure nonrepresentative data. The “law of large numbers” has become cliché in some circles, a platitude to justify models built on giant data sets that ignore basic assumptions of economic behavior. By increasing the sample size of a nonrepresentative sample, a model may become further removed from that which it purports to measure while, ironically, being shielded by increasing “statistical significance.” Such models are illusory, and the appraisal industry should be skeptical of any efforts to hide the underlying data and source of algorithmic valuations behind a proprietary black box. An appraiser’s initial opinion of any model should be that the model is descriptive, not predictive or inferential. Rather than asking what a model predicts or what inferences can be made, appraisers should first ask what it describes. If it describes nothing, then it predicts nothing. It is an appraiser’s professional market knowledge, interactions with market participants, and application of the tools of market analysis that make the human appraiser uniquely qualified to make the leap from description to inference. If these real assets of professional appraisers are emphasized convincingly, human appraisers will not be replaced by algorithms for the foreseeable future.

The presence of aggregation bias is damaging to the real estate industry. While few would use a city’s median home price as an indicator of value for a specific home, there are more subtle forms of aggregation bias disguised by regression and other sophisticated valuation models. A list of inaccurate, algorithmically produced ad valorem tax valuations that purport to be market value would be exhaustive. Other unfortunate examples include over-aggregated data used in litigation settings involving unique events and unique markets. One highly publicized example

of aggregation bias involved Zillow, which shut down its algorithm-driven home buying program in November 2021. Despite Zillow having arguably the largest, most-comprehensive data set of single-family homes and consumer behavior, supported by billions in assets and human capital, “its algorithm proved to be overoptimistic, even in a housing boom.”<sup>14</sup> In the aftermath, Zillow

Rather than asking what a model

predicts, appraisers should first ask

what it describes. If it describes nothing,  
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priced two-thirds of its homes for less than what it paid, lost 15% in market capitalization in a single day, and laid off 25% of its workforce. Zillow was warned of its overvaluations over a decade prior in an *Appraisal Journal* article by Hollas, Rutherford, and Thomson.<sup>15</sup> Those authors’ research found Zillow’s valuations to be less accurate than those of a typical homeowner, with Zillow overvaluing homes by 10% on average in a market Zillow had reported to be its most accurate. While Zillow’s mistakes were limited to a single company, the accelerated growth of automated valuation models makes aggregation bias a market-wide risk. Aggregation bias is not uncommon in the current big-data-driven world, but it has not received sufficient attention. The illusions of big data have been obscured by its promises.

As Gelman, Hill, and Vehtari state, “If we do not know what the data actually represent, then we cannot extract the right information. Data analysis reaches a dead end if we have poor data.”<sup>16</sup> Market delineation and segmentation practices provide appraisers with the toolset to know what their data represent. Representativeness is necessary for validity. There is no escaping the arguably cumbersome process of market

14. Felix Salmon, “Zillow Abandons Its Home-Flipping Algorithm,” *Axios*, November 2, 2021, <https://bit.ly/3HSIkBO>.

15. Daniel R. Hollas, Ronald C. Rutherford, and Thomas A. Thomson, “Zillow’s Estimates of Single-Family Housing Values,” *The Appraisal Journal* (Winter 2010): 26–32.

16. Gelman, Hill, and Vehtari, *Regression and Other Stories*, 23.

delineation and segmentation that may involve detailed confirmation or verification of a plethora of sales. Fortunately, for this hard work the professional human appraiser is uniquely quali-

fied. Market delineation and segmentation should be the first step in valuation modeling, including regression, as it is a fundamental requirement for validity.

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### About the Author

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### Additional Resources

Suggested by the Y. T. and Louise Lee Lum Library

#### Appraisal Institute

- **Education**
  - *Quantitative Analysis*
  - *Real Estate Finance, Statistics, and Valuation Modeling*
- **Lum Library Knowledge Base information compilation [Login required]**
  - Appraisal Practice—Data, statistics, and statistical analysis
- **Publications**
  - *The Appraisal of Real Estate*, fifteenth edition (Chicago: Appraisal Institute, 2020)
  - *An Introduction to Statistics for Appraisers* (Chicago: Appraisal Institute, 2009)
  - *Practical Applications in Appraisal Valuation Modeling* (Chicago: Appraisal Institute, 2004)
  - *Valuation by Comparison* (Chicago: Appraisal Institute, 2018)



# The Appraisal of an Appraisal Company

by Mark Pomykacz, MAI, AI-GRS, and Chris Olmsted, MAI

## Abstract

At some point, real estate appraisers may consider selling their firm, buying another, or bringing in or buying out partners. At these moments, appraisers will want an appraisal of their appraisal company. The appraisal of an appraisal company is a business valuation exercise and importantly different from real property appraisal. This article examines the appraisal of appraisal companies from the perspective of business valuation. We will explain the methodologies and procedures that represent best business practices and discuss a range of valuation inputs. The discussion is focused on the valuation of small and midsize appraisal firms.

## Introduction

At some point, the owners and partners of a real estate appraisal company may look to sell their firm, buy another, or change partners. At these moments, the appraiser will want an appraisal of the appraisal company. Given the current demographics of the real estate appraisal industry, where about 66% of practitioners are over 50 years of age,<sup>1</sup> there will likely be a great number of sales of interests in appraisal firms in the next decade. While experienced real property appraisers may be leaders in their specific areas of practice, their practice experience does not necessarily prepare them fully to appraise their own businesses. The appraisal of an appraisal company is a business valuation exercise that has important differences from real property and personal property appraisal. Even with that distinction, most commercial real property appraisers will recognize the basic business appraisal exercise.

The following discussion examines appraisal company appraisals from the perspective of business valuation theory and practice. The methodologies and common procedures that represent rigorous and best business-appraisal practice will be explained. The broad range of valuation inputs from the market is identified, both for comparable industries and specifically for appraisal compa-

nies. Lastly, the process of selling a small business like an appraisal company is examined. Keep in mind, the need for an appraisal of an appraisal company may be occasioned not only by sale of the business but also by settlements in estates, divorces, and litigation.

## The Nature of Appraisal Companies

Appraisal companies or firms are best categorized as professional services firms, similar to accounting, legal, engineering, architectural, and real estate brokerage firms and management companies. Such companies share the following significant traits.

### Traits of Appraisal Services Companies

**Revenue is generated by expert human capital—the appraisal staff.** Appraisers and appraisal firms generate revenue by selling expert knowledge, not by selling tangible products or lower-skill services. Revenue is not materially generated by tangible assets, such as real property or machines used to generate products (e.g., steel mills) or services (e.g., restaurants), or from intangibles such as contracts (e.g., property rents) or copyrights (e.g., software), although these assets may contribute to company expenses such as

1. Appraisal Institute, "2023 US Valuation Profession Fact Sheet," available at <https://bit.ly/3vRjmzY>. The US appraiser population statistics were derived from the Appraisal Subcommittee (ASC) National Registry data from December 2019 to December 2022.

overhead. Appraisal companies rarely have subscription income or perennial contracts.

In appraisal firms, the requisite expert human capital requires training and experience to develop. There are requirements for entry and advancement, such as prerequisite education, licensing, and professional designation. It may take a while for a new appraiser to learn enough to be sufficiently productive to justify their expense to the firm and start adding value to the firm. The more experts there are in the firm, the more revenue there will be, assuming the experts are in demand. Sometimes the revenue of an appraisal company is closely tied to key appraisers; this is an important business valuation factor called the “key person” issue.

Appraisers occasionally charge hourly rates for consulting in addition to charging flat fees for appraisal reporting. Appraisals, once written, are very rarely resold unlike, for example, software code that once written can be resold many times. The appraiser must write new appraisals to generate more revenue. In this way, appraisers are akin to custom home builders whose revenue is limited by how many homes they can build in a year. Appraisers are not like landlords, whose revenue is disconnected from the number of hours the landlord works. Appraisers basically trade hours for dollars. Since there is a limit to fees and hourly rates, there are natural limits to appraisal incomes.

**Payroll is leading expense.** The flip side of revenue from a human capital business model is that a major portion of the revenue from clients is paid out as expenses for appraisal staff salaries and commissions. At professional services firms, the human capital expense is typically the largest expense of the firm by far. The human capital expense is frequently classified as an operating cost, but it may be useful to think of it as a cost of goods sold. Remember that the total cost of this human capital is not just salaries and commissions; it also includes payroll taxes, health insurance, education expenses, personal time off, severance, and all other perquisites and employee-related expenses. For income tax reporting and

management purposes, appraisal staff can be independent contractors and/or employees.

**Low capital investment.** Appraisal companies require only modest real estate, machinery, or other expensive capital investments. Appraisers typically rent minimal amounts of office space and buy ordinary common computers and office furnishings.

**Low-to-no debt financing.** Since there is little capital investment, debt financing is also typically low or nil. Appraisal companies are not purchased or owned like homes with high loan-to-value ratios, and companies generally are not funded with bank financing or corporate bonds. Appraisal companies operate with minimal business lines of credit, typically for temporary cash flow issues. If not paid in cash at closing, after-purchase payouts to the firm seller are frequently funded from company operations.

**Good profit margins.** Professional services firms such as appraisal companies have few expenses after the human capital expense, leaving more to the profit than many other industries.

**Slow-growth business.** Since revenue is largely dependent on staff, revenue growth may be limited to the potential to add staff. If there is enough work to justify hiring an additional staff appraiser, then there is revenue growth. Finding and developing that human capital, however, can be costly and time consuming. Thus, growth at appraisal companies is slow, rarely explosive, and rarely constant over the long term.

Growth also can be achieved by developing a reputation, which may be classified for valuation purposes as goodwill.<sup>2</sup> But, this too is slow to develop and gives rise to the previously mentioned “key person” issue.

Of course, some appraisers manage to increase revenue per appraiser by differentiation. The classic distinction among real estate appraisers is by property type (residential, commercial, industrial) and by geographic differentiation. Some firms have topical differentiations, such

2. *Goodwill*, in appraisal, is defined distinctly from the common language sense of having a good reputation. Technically, goodwill is the remaining value after all other assets comprising a business have been identified and appraised. It is comprised of unidentifiable intangible assets. See Appraisal Institute, *The Dictionary of Real Estate Appraisal*, 7th ed. (Chicago: Appraisal Institute, 2022), s.v. “goodwill.”

**Exhibit 1** Professional Services Firms Employment Data

NAICS Descriptions	No. of Firms	Employment	Employees per Firm	Annual Payroll per Employee
Offices of Real Estate Appraisers	12,660	34,143	2.70	\$63,506
Offices of Lawyers	160,378	1,071,071	6.68	\$105,946
Accounting, Tax Preparation, Bookkeeping, and Payroll Services	118,080	1,188,550	10.07	\$64,121
Architectural Services	20,805	181,321	8.72	\$83,965
Engineering Services	45,421	1,157,258	25.48	\$96,997

**Offices of Real Estate Appraisers**

Enterprise Employment Size	No. of Firms	Percentage of Firms	Employment		Employees per Firm	Annual Payroll per Employee
0–4	11,514	91%	15,928	47%	1.4	\$48,887
5–9	734	6%	4,614	14%	6.3	\$62,915
10–19	258	2%	3,321	10%	12.9	\$70,634
20–99	109	1%	4,062	12%	37.3	\$83,583
100–499	23	0%	3,063	9%	133.2	\$87,881
500+	22	0%	3,155	9%	143.4	\$81,152
<b>Total</b>	<b>12,660</b>	<b>100%</b>	<b>34,143</b>	<b>100%</b>	<b>2.7</b>	<b>\$63,506</b>

Source: Census Bureau 2020 NAICS, release date March 31, 2023.

as hospitality or office property appraisers, or appraisals for litigation, property taxes, condemnation, or government or accounting appraisals. But once moved into the broader categories, additional growth in revenue will be mostly limited to the potential to grow staff.

**Key person dependency.** At many professional services firms, clients and reputation are tied to individuals within the firm. The firm's value is related to the value that those key individuals bring to the firm. Appraisal companies are often led by one or a few high-reputation, high-value individuals. The individuals' names, not the company's, to a large degree may be the driving force behind the firm's cash flow. When such individuals separate from the firm, the firm's value frequently declines by the value of the separated individuals. The decline may occur over time, as the key person's reputation may linger to the benefit of the firm for years. In some appraisal contexts, the concept of personal goodwill may apply, and the concept may overlap with key person issues.

**Size.** One of the more important requirements in business appraisal is matching the size of the subject firm and comparables when considering market data. Unlike real estate values, business values by any unit of comparison increase significantly with size. Company size in business appraisal is not a reference to a physical measure but rather a financial measure of income to value. As Exhibit 1 shows, professional services firms generally are small businesses, and most appraisal companies tend to be very small. There are only a handful of large appraisal firms. The large firms generally often grew larger by acquiring smaller firms and by pursuing aggressive growth goals. The valuation of these larger firms is substantially different from the valuation of smaller firms, even though the larger firms regularly buy the smaller ones. This article is focused on the valuation of the small and midsize appraisal firms.

**Business structure and income taxes.** Few appraisal companies are organized as C-corporations or S-corporations. Most are sole proprietorships, partnerships, limited liability companies (LLCs),

or limited liability partnerships (LLPs). Frequently the appraisal of larger businesses is based on the income stream after income taxes. The appraisal treatment of taxes in C-corporations and S-corporations is extremely complex and is beyond the scope of this article. Fortunately, that appraisal complexity is avoided for the valuation of a typical appraisal firm. The appraiser of appraisal firms and small businesses can frequently complete the appraisal with analyses of pre-income-tax income only. When after-income-tax analyses are needed for an appraisal firm, which is not entirely uncommon, the highly complicated issues of C-corporations or S-corporations are rare. That still leaves the need for the appraiser to be competent with basic and intermediate after-income-tax analyses.

**Risk to appraisal companies.** There are several main causes of risk to appraisal firms. One risk is loss of leading clients or types of clients. Some firms have but a few clients accounting for most of their work. Some firms have clients from only one or a few categories, such as lenders. Some firms specialize in one type of appraisal, such as appraisal for income tax issues. Competition, changes in regulations, and economics can cut off or reduce demand from these major clients and client types. For example, during national financial crises, lenders often reduce demand for appraisals, which causes income to appraisers to decline substantially. While the appraisal industry usually follows general business and real estate industry cycles, on some occasions it does not. In 2023, the Federal Reserve raised interest rates, which consequently lowered demand for appraisal services.

Some other risks to firms include professional liabilities and appraisal regulations. In recent years, federal agencies have been moving to reduce the need for appraisals by changing the regulatory thresholds for when an appraisal is needed. This would lower demand.

Another major risk to appraisal companies is from the loss of key persons. Often the income of the company is tied to the presence of key individuals who, if they should leave the firm, will take substantial income (clients) with them.

In addition, advancements in artificial intelligence (AI) have accelerated concerns about appraiser displacement. However, it is not clear when and how this will occur. AI is currently not impacting appraisal firm valuation, but it is being

examined as possibly an advantageous tool in appraisal research, analysis, and writing that could enhance services.

## Business Appraisal Methodologies

Business appraisal uses the same basic approaches to value as real estate appraisal: sales comparison, cost, and income approaches. However, there are distinct variations of these three basic approaches within business appraisal. The variations have names that real estate appraisers may not recognize. The following list shows the business appraisal methods commonly used to appraise professional services firms, such as appraisal companies.

### Common Business Appraisal

#### Approaches to Value

- Asset-Based Approach (analogous to cost approach)
- Market Approach (analogous to sales comparison approach in real estate appraisal)
  - Comparable Transaction Approach
  - Guideline Public Company Approach
  - Employee/Professional Multiplier Approach
- Income Approach with various income multiplier approaches
  - Discounted Cash Flow Approach
  - Before and/or After Income Taxes Income Approaches

### Asset-Based Approach

An asset-based approach in business appraisal is similar to the cost approach in real estate appraisal. In real estate, the cost of the building is added to the value of the land to find the total real estate value. In the asset-based approach, the value of the various items of machinery and equipment are determined, along with the value of other assets in the business, and then they are added to the real estate values to find the total value of the business.

Notably, many techniques typically used in real estate appraisal or in business appraisal of other types of businesses are not commonly used in the appraisal of small professional services firms. Business appraisal theory teaches that since there are few tangible assets and few separately sellable assets at appraisal companies, the cost approach

(asset-based approach) is not probative to value. The most important asset of appraisal companies, its expert staff, is not an asset that the cost approach and the asset-based approach are best suited to appraise.

### Market Approach

**Comparable transaction approach.** A market approach, also known as a transaction comparison approach, is commonly used within business appraisal, and it is practical for use when valuing appraisal firms. The unit of comparison is often value/price per employee or professional. Sales of similar companies are researched. Then, the sale prices are converted into a price per employee or professional. Adjustments are considered and applied, and then a value per employee or professional for the subject is concluded. This is conceptually very similar to the traditional sales comparison approach used in the appraisal of real estate. Similar pros and cons arise with this technique relative to the other approaches.

**Multiplier approach and rules of thumb.** Various rule-of-thumb reference guides are used by some market participants to informally evaluate small companies such as appraisal companies. However, rigorous business appraisers view rule-of-thumb guides as notoriously imprecise, and they give little or no weight to rule-of-thumb indications of value. The issue with rules of thumb is that the basis of the rules comes from personal experience, hearsay, and/or averages or tendencies that the appraiser cannot analyze. The problem with the blind use of rules of thumb for business valuation is equivalent to the problem with a real estate appraiser taking a market average sale price from a CoStar market report and applying that market average to a subject without adjusting for any differences between the sales that comprise the market average and the subject. The source data for the averages and for typical multipliers is not verifiable. This leaves the reader of the appraisal without any means to review the rule-of-thumb data. If market data is available for the comparables used to develop a rule of thumb, then the technique can be reformed into a more reliable approach. For example, some brokers sell appraisal companies using the following rule-of-thumb multiples:  $0.5 \times$  sales revenue,  $2.0 \times$  seller's discretionary cash flow,  $5.0 \times$  EBITDA (earnings before interest, taxes, depreciation, and amortization). However, without details about these mul-

tiples, another appraiser could not adopt these for any given subject company. Also, depending on the source of the rule of thumb and who is using it, these may fail net opinion rules for expert opinions. An appraiser may not be able to draw credible or reliable conclusions about any specific firm using rules of thumb without analyzing and presenting the basis for the rules of thumb. Rules of thumb generally do not come with the data on which the rules were based. Without such data, there would be inadequate information on which to make appraisal judgments and to determine whether the subject is better, worse, or the same as the comparable companies that were the basis for the rules of thumb.

The danger of inaccuracy is easily spotted within the wide range of possible multipliers reported in the Exhibit 2 example. The exhibit also presents an example of valuation under various possible multipliers. Such a wide range of indications of value is common in business appraisal, perhaps more so than in real estate appraisal. However, that is not an excuse for inaccuracy or incomplete analysis. In short, it is simply not appropriate appraisal practice to opine that the typical or average multiple—or the low or the high multiplier—is suitable unless the appraiser has completed appropriate research and analysis to determine that the selected multiplier is correct for the subject. Note the excessive imprecision in the range of values in Exhibit 2. After a full analysis of the industry, the subject company, and the individual sales that make up the rule of thumb, an appraiser can frequently find a basis to conclude a specific and well-founded multiplier. After that full analysis, the appraiser also can often find a basis for adjustments to the typical multipliers for value-impacting differences between the comparables and the subject. This sound business appraisal practice avoids the pitfalls of the rote use of rules of thumb.

**Guideline public company approach.** Since appraisal companies are generally not publicly traded and tend to be very small, the guideline public company (GPC) approach is typically not used. Appraisers execute a GPC method by identifying publicly traded companies—which tend to have very large market capitalizations—that are comparable to the subject company in important value-impacting ways. The appraisers analyze the GPC comparables and extract various multipliers



and benchmarks that are then compared to and applied to the subject. The various multipliers and benchmarks include various income and expense ratios, debt/equity ratio, and other valuation multipliers. Analysis of the subject industry and the various GPC benchmarks indicates which of the valuation multipliers are best in the subject's case. That, in turn, is used to determine a value.

GPC data may also be used in other approaches to value. Exhibit 3 presents data on several publicly traded professional services firms that offer appraisal services among other services. This kind of data helps in identifying the characteristics of the industry and in reconciliations.

## Exhibit 2 Example of Problematic Use of Rule-of-Thumb Multipliers for Appraisal Companies

	Sales Revenue	Seller's Discretionary Cash Flow	EBITDA
<b>Range of Multipliers</b>			
Low Multiplier	0.25	1.50	3.00
High Multiplier	0.90	3.50	12.00
Typical	0.67	2.25	6.00
<b>Valuation Using Rule-of-Thumb Multipliers</b>			
Assumed Income	\$1,000,000	\$297,778	\$111,667
<b>Problematic Typical Range of Value</b>			
Low Value	\$250,000	\$446,667	\$335,000
High Value	\$900,000	\$1,042,222	\$1,340,000
Range of Values	360%	233%	400%
Typical Value	\$670,000	\$670,000	\$670,000
Difference from Low Value	268%	150%	200%
Difference from High Value	134%	156%	200%

Notes:

**Sales Revenue** = Value (market value of invested capital, equity, and debt) divided by seller's discretionary cash flow (SDCF) or seller's discretionary earning, or company earnings before interest, taxes, depreciation, and amortization (EBITDA) after adding back seller's compensation at company, and sometimes other adjustments, equals SDCF multiplier.

**SDCF** = Value (market value of invested capital, equity, and debt) divided by seller's discretionary cash flow (SDCF) or seller's discretionary earning, or EBITDA after adding back seller's compensation at company, and sometimes other adjustments, equals SDCF multiplier.

**EBITDA** = Value (market value of invested capital, equity, and debt) divided by EBITDA equals EBITDA multiplier.

## Income Approach

**Discounted cash flow.** Since appraisal firms' future cash flows are not prescribed by contracts, or do not follow predictable patterns, a discounted cash flow (DCF) analysis is not usually employed. With that said, the appraiser of an appraisal firm will frequently need to address two changing income circumstances. First, some firms are growing income, such as younger firms that are establishing their reputation and/or moving into new areas of practice. Second, income will likely decline if there is a departure of a key person. A DCF analysis can be employed in these circumstances; however, business appraisers typically will instead make adjustments to normalize forecasted incomes and/or to the income multipliers, or they will make post-value-computation adjustments.

While the issues of rules of thumb discussed previously must be recognized, it is ultimately the case that multiplier analyses are the leading approach to appraise small businesses but only when completed correctly. Below is a list of references for both rules of thumb and more rigorous sources for multipliers.

## Multiplier and Rule-of-Thumb Databases and References

- DealStats (formerly Pratt's Stats) and Bizcomps, from Business Valuation Resources
- Risk Management Association Annual Statement Studies
- S&P Capital IQ
- Bizcomps, from ValuSource
- Business Reference Guide

The income approaches commonly used for small professional services firms are multiplier techniques. Real estate appraisers will be familiar with gross rent or gross income multiplier techniques, which are essentially the same types of analyses in theory. Tradition has real estate appraisers switching to capitalization rates when analyzing net incomes and cash flows. Alternatively, business appraisers by tradition continue to apply multipliers to net incomes and cash flows. Remember that a capitalization rate is simply the inverse of a multiplier. Capitalization rates (or multipliers) must be precisely matched to the income level they are being applied to or else a fatal appraisal error will occur. The gross income capitalization rate (or multiplier) that is



### Exhibit 3 2022 Benchmarks from Publicly Traded Professional Firms Offering Appraisal Services

Company	No. of Employees	Gross Revenue per Employee	MVIC per Employee	MVIC / Gross Revenue Multiplier
Cushman Wakefield	53,000	\$190,598	\$110,816	0.58
CBRE Group Inc.	115,000	\$269,960	\$234,376	0.87
Newmark Group	6,500	\$416,235	\$244,615	0.59

Note: Technically, this table presents the market value of invested capital (MVIC), which equals the sum of the market value of outstanding equity shares at currently exchanged prices, plus the amount of the reported long-term and short-term debt.

appropriately applied to a gross income is not the appropriate capitalization rate (or multiplier) to apply to a net income or a cash flow. There are at least as many commonly used income levels in business appraisal as in real estate appraisal; the most common ones are listed in Exhibit 4.

One traditional difference between business valuation and real property valuation is that the former employs income approach methods that regularly compute incomes after income taxes. Since appraisal companies are commonly LLCs/LLPs, partnerships, or sole proprietorships, many complex income tax valuation issues that arise with C-corporations and S-corporations are avoided. Nonetheless, sometimes after-income-tax income approaches are used for small business appraisals, such as the appraisal of small appraisal businesses. These analysis types are seen in the last two rows of the list in Exhibit 4.

#### Income Approach Process

**Step 1: Income Normalization.** The business appraiser must normalize the financial statements of the subject firm and comparable companies. This normalization (stabilization) process is the same concept as in real estate appraisal, except that there are more line items in the income and expense statements to be normalized in business valuation, such as income taxes and working capital. The challenges in normalization of income projections in business appraisal should not be underestimated. In many respects, the normalization of income is more difficult in business appraisal than in real estate, because real estate income and expenses are more predictable, especially when income is prescribed by long-term leases. In contrast, businesses can have combinations of assets (real property, personal property, business intangibles), can have

### Exhibit 4 Commonly Capitalized Income Levels for Appraisal Companies

Leading methods are shown in blue.

Income Level	Multiplier
Gross Sales Revenue	× Gross Sales Revenue Multiplier
<b>Net Sales Revenue</b>	<b>× Net Sales Revenue Multiplier</b>
Gross Revenue	× Gross Revenue Multiplier
Gross Profit (Revenue less Cost of Goods Sold)	× Gross Profit Multiplier
<b>Seller's Discretionary Cash Flow (SDCF)</b>	<b>× SDCF Multiplier</b>
<b>EBITDA</b>	<b>× EBITDA Multiplier</b>
EBIT	× EBIT Multiplier
Net Income (after income taxes)	× Net Income Multiplier
Cash Flow (after income taxes)	× Cash Flow Multiplier

incomes and expenses that each change at their own rates, and can have anomalies in the historical records.

Typically, business appraisers will examine either the prior year's income and expenses, or the last three years, or both. However, it is not uncommon to analyze additional combinations of historical years. The selection of the number of years to analyze depends on the nature and growth expectations of the business and its income stabilization characteristics. If older historical years do not represent current and future levels of income, business appraisers will de-emphasize older historical years, and may use only the more recent year's income.

One question in business appraisal that is not commonly encountered in real estate appraisal is

the issue of matching the period of a multiplier with the period of the normalized income. Income forecasts and multipliers can be for either the trailing twelve months or last twelve months (TTM or LTM) or the next twelve months (NTM). The notion here is to avoid applying a TTM multiplier to a NTM income, and vice versa. The appraisal theory is that if the multiplier is based on comparable data of the TTM, then the income and matching TTM already reflect the market-anticipated appreciation or depreciation. In real estate, most income capitalization analyses are conducted on NTM income and rates/multipliers. While a valid concept for consideration, the appraisal problem at hand will often eclipse the significance of TTM versus NTM issue, such as when the subject company has anticipated income growth that is substantially different from what the comparables are expecting, or when there are other valuation issues of greater magnitude.

Business appraisers will spend significantly more time than real estate appraisers interviewing the management of the small business to uncover the special value-impacting issues within the business, its financial statements, and details about the industry. It is not uncommon for business appraisers to have multiple follow-up data and information requests and several interviews.

**Step 2: Comparable Selection.** The appraiser must choose comparable companies for derivation of multipliers. In business appraisal, the comparable companies are referred to as “guideline,” “peer,” or “competitive” (private or public) companies. This is analogous to comparable selection in any real estate appraisal. Data on comparable multiplier companies is just as scarce as it can be for real estate comparables. The task of finding comparable business sales and multipliers may leave even the experienced real estate appraiser uneasy with the results.

**Step 3: Multiplier Analysis.** The appraiser then calculates the multiples at the comparables, and then adjusts the multipliers, reconciles them, determines the most credible multipliers, and applies those credible multipliers to the subject company. The reconciliation, selection, and application step is where appraisal imprecision frequently arises. To improve precision, substantial insight and experience help separate comparable multipliers between those that are probative

and indicative of value for the subject and those that are not. The best practice is to compare numerous financial ratios between the subject firm and the comparables, and to give less weight or no weight to those comparables with substantive dissimilarities. This will be discussed later.

**Step 4: Reconciliation.** The appraiser reconciles these multiplier indications, of which there may be multiple multiplier indications, with all other indications to conclude a value.

**Step 5: Post-Value Computation Adjustments.** Lastly, the appraiser considers the necessity of applying discounts or premiums to the value for as-of-yet unaddressed issues, such as partial or minority interests (discount for lack of marketability and discount for lack of control), contractual conditions, or other issues not accounted for in the normalization of financial statements or in multiplier selection or reconciliation.

So far, the discussion has largely addressed direct capitalization techniques. At this point, the appraiser may need to consider a DCF, if the appraiser was not able to account for developing business opportunities or threats in either the income normalization steps or in the selection of a multiplier.

### Financial Ratios and Comparable Companies

The best way to discern applicable multipliers or sales comparables among potential comparable companies is to compare the financial ratios of the subject and comparable companies. There are dozens of financial ratios. Some are better for certain types of companies, such as large companies, fast-growing companies, asset-intensive companies, inventory-intensive companies, highly leveraged companies, and high-inventory companies, but these ratios do not inform the analyst much about the typical appraisal firm. The most common financial ratio indicators are listed in Exhibit 5; the ratios shown in blue are more likely to be useful for typical appraisal firms.

While the following is presented as typical within the last several years, note that there was a decline in financial performance (Exhibit 5) and in valuation multipliers (Exhibit 6) during the COVID-19 pandemic. Data from the quarters immediately after the pandemic suggested that a recovery was underway. However, because of the interest rate increases in 2023, multipliers for

**Exhibit 5** Common Financial Ratios

Financial Ratio	Description	Typical Range for Appraisal Firms
Sales/Professional (or Employee)	Sales or Gross Revenue per Professional (or Employee)	See Exhibit 6
Gross Profit Margin	Gross Profit/Net Sales	67% to 75%
SDCF Margin	Discretionary Earnings/Net Sales	20% to 75%
EBITDA Margin	EBITDA/Net Sales	10% to 50%
Operating Profit Margin	Operating Profit/Net Sales	5% to 15%
Net Profit Margin	Net Income/Net Sales	3% to 15%
Return on Assets	Net Income/Total Assets	
Return on Equity	Net Income/(Total Assets – Total Liabilities)	
Fixed Charge Coverage	Operating Profit/Interest Expense	
Long-Term Liabilities to Assets	Long-Term Liabilities/Total Assets	
Long-Term Liabilities to Equity	Long-Term Liabilities/(Total Assets – Total Liabilities)	
Current Ratio	Total Current Assets/(Total Liabilities – Long-Term Liabilities)	
Quick Ratio	(Total Current Assets – Inventory)/(Total Liabilities – Long-Term Liabilities)	
Total Asset Turnover	Sales/Total Assets	
Fixed Asset Turnover	Sales/Fixed Assets	
Inventory Turnover	Sales/Inventory	

appraisal firms may decline in the short term. It is worth noting that multipliers remain largely level over the longer term, changing only slightly due to major, broader economic conditions.

#### **Comparisons between Appraisal, CPA, and Law Firms**

Since data in appraisal, whether of real estate or businesses, can be scarce, it is probative to examine data from analogous circumstances for which there is more data. For appraisal companies, this means comparisons to professional services firms in architecture, engineering, accounting, and law. Exhibit 6 presents multipliers for these other professional services firms with sales less than \$5,000,000 but over \$250,000.

#### **Nonoperating, Operating, and Excess Assets/Liabilities and Income/Expenses**

Appraisal companies have few tangible assets. As such, they have little chance of having excess or nonoperating assets—that is, assets that are not essential to the current operations of the firm. If a firm did, the effects of those assets would need to be excluded from the analysis of the going con-

cern. As always in real estate or business appraisal, if the financial records include personal incomes or expenses that are mingled within the business records or include incomes and expenses that are otherwise not transferable to the next owner, then those incomes and expenses must be removed from the normalized forecast. Excess or nonoperating assets may have value as independent assets but are not part of the economic unit of the going concern. If a firm has liabilities, incomes, or expenses that are separable and independent of the going concern, these liabilities, incomes, or expenses must be excluded from the appraisal of the going concern. For example, a firm owner's personal car loan and insurance premiums ought to be excluded from the appraisal of the going concern. Depending on the client's appraisal needs, these assets and liabilities may need to be appraised separately.

#### **Seller's Discretionary Cash Flow**

Seller's discretionary cash flow is also known as seller's discretionary earnings. As always in appraisal, it is important to confirm that all parties are working with the same definitions because

**Exhibit 6** Multipliers for Appraisal Firms and Other Professional Services Firms

	Sales Revenue Multiplier	Seller's Discretionary Cash Flow Multiplier	EBITDA Multiplier	Net Sales / No. of Employees	Value / No. of Employees
<b>Appraisal Firms</b>					
Low	0.25	1.50	3.00	\$75,000	\$50,000
High	0.90	3.50	12.00	\$300,000	\$250,000
Typical	0.67	2.25	6.00	\$175,000	\$125,000
<b>Other Small Professional Firms: Accountants, Attorneys, Engineers, Architects</b>					
Low	0.25	1.00	1.00	\$50,000	\$25,000
High	1.50	5.00	8.00	\$500,000	\$400,000
Typical	0.85	2.25	3.50	\$150,000	\$125,000

variations are not uncommon and there are often no official or statutory definitions.

It frequently occurs that salaries and prerequisites to equity owners are in excess (or short) of market terms in the financial statements. While this is appropriate record keeping for accounting purposes, in appraisal, where the goal is to reflect market terms, this needs to be excluded from the appraisal. There are two ways to do so. The appraiser can replace the excessive (or short) terms with market rate compensation. Then the appraiser would apply a multiplier to the income level that reflects the deduction of equity owner's compensation. Or the appraiser can exclude all owner's compensation from the income computation but then must apply the proper multiplier to that level of income, namely a seller's discretionary cash flow multiplier, as this is known. This latter method is common in the appraisal of small professional businesses.

**Other Transaction Terms**

Similar to descriptions of real estate leases—where it is misleading to merely quote a rent without also describing the lease as net or gross, the annual rent changes, free rent, and work letters—business transactions have numerous terms and conditions that could impact the value conclusion. Business value conclusions must be accompanied by an understanding of who (buyer or seller) gets the assets or liabilities and which ones and when. For example, the value of an appraisal firm is different depending on who gets to keep the payments for outstanding invoices (accounts receivable) from before the appraisal date. The

following are some terms of sale that must be specified as part of a business valuation.

**Sales Terms and Conditions**

- Accounts receivable and accounts payable
- Working capital accounts (checking and savings accounts)
- Excess and nonoperating assets and liabilities
- Potential or pending litigation
- Insurance beneficiaries
- Noncompete terms
- Time-release payouts
- Contingent payouts

**Example Analysis of an Appraisal Company**

The table in Exhibit 7 presents a traditional income multiplier analysis of a fictitious appraisal firm. To normalize the income forecast, the appraiser notes that, except for the COVID years of 2020 and 2021, gross income was stable. Therefore, the appraiser concluded that the technique of averaging out the last three to five years of income and expenses as the basis of the forecast would not be appropriate. The appraiser could have used the common technique for limiting the analysis to the trailing twelve months, TTM. The appraiser opted for an analysis of the years before and after COVID and to also reflect the impacts of inflation.

It is important to note that the definitions of the various income streams are not uniform

among analysts. For example, the net income shown in Exhibit 7 is before deduction of interest and depreciation, which many analysts do. It is good practice to confirm the working definitions. Further, notice that this company incurs no capital expenses, and therefore has no depreciation or amortization because all purchases are expensed in the year of purchase. This means that the net operating income (NOI) is the same as the NOI after capital expenses.

Detailed interviews with management and ownership reveal that reported salary expenses include some compensation to ownership. The appraiser would need to describe this in the report, because this will impact the value based on the EBITDA multiplier and because the appraiser will need to adjust the SDCF. The interviews also reveal that an adjustment to the SDCF is needed for car and insurance expenses for the owner that are not customary in the market and are not strictly speaking expenses of the business.

The appraiser gathered various multiplier data from the market. That research revealed several multipliers from comparable companies. The appraiser researched and analyzed comparable companies and their multipliers. The appraiser considered the differences between the comparables and the subject company and concluded on the use of three different multipliers tailored for the subject.

In the reconciliation, the appraiser would review the quality of the data in each multiplier analysis. The appraiser would note which is preferred in the marketplace—usually the SDCF analysis and the gross revenue analysis for stable companies. In detailed analyses, the appraiser would research and analyze the applicable financial ratios of the subject relative to the multiplier of comparable companies and to other market data, benchmarks, and financial ratios. The appraiser would also reconcile with the other approaches completed, such as a market (sales comparison) approach and other market data and benchmarks, such as value per professional or per employee. Exhibit 8 presents a typical analysis of an income proforma, a like-kind analysis. All dollars are expressed as a percentage and related to gross income.

In the post-value calculations, the appraiser identified two significant issues: a key person issue and a partial interest issue. The key person issue was considered substantial because there are no golden handcuffs, payouts, or earnouts. The key

person was expected to depart the firm promptly after the sale. The appraiser conducted the research and made an adjustment for this issue. This adjustment could have been made within the income normalization forecast. The partial interest was addressed separately with a discount study to determine the discount for lack of control and for lack of marketability.

### **Process of Selling or Buying an Appraisal Business**

All appraisers know that price may not equal value. Even good appraisers may forget this principle, however, as personal emotions creep in during sale of a firm. It is important to remember that as many as 70% of offered small businesses will never sell, and that as few as 30% of family businesses get handed down. It is unwise to hold out for the proverbial last dollar or to assume a family transfer is the exit plan. With that said, appraisers should be prepared with their completed homework and begin the negotiations. Research currently suggests that large and small private firms that sell typically sell for between 80% and 90% of the asking price, taking between 100 and 225 days to sell.

Business owners can help prepare years in advance by considering and aligning the pool of potential buyers and examining each: partners, senior staff, family, local appraisal firms, national appraisal firms, or accounting/consulting firms. The most aggressive buyers typically expect synergy or strategic advances from the deal, have market leadership, have enthusiasm for the deal, and have financial wherewithal. Such buyers will pay the most and are most likely to close a deal. Appraisers should prepare their client contacts over the preceding years for the buyer's use. In the year preceding the sale, prepare the business's records. Acquirers may choose to maintain a list of prospects and to foster relationships in advance, as closing a deal is assisted with already established trust and understanding.

**Potential trouble spots.** The following are issues that cause deals on small professional practices to fail:

- bad real estate leases
- poor professional liability insurance
- unwanted assets or obligations
- contingent liabilities and lawsuits
- sloppy accounting
- lack of enthusiasm for the deal

**Exhibit 7** Example of Income Multiplier Analysis

(\$,000)	2018	2019	2020	2021	2022	2023 Forecast	Multiplier	Indicated Value	Value per Professional
Appraisal Services	\$1,594.1	\$1,668.3	\$1,223.9	\$934.8	\$1,672.8	\$1,810.0			
Consulting Services	\$285.4	\$156.2	\$113.2	\$193.1	\$183.3	\$229.0			
Payroll Protection Plan	\$0.0	\$0.0	\$0.0	\$216.0	\$0.0	\$0.0			
<b>Gross Revenue</b>	<b>\$1,879.4</b>	<b>\$1,824.5</b>	<b>\$1,337.0</b>	<b>\$1,343.9</b>	<b>\$1,856.1</b>	<b>\$2,039.0</b>			
Credit Loss/Write-Off	-\$1.0	-\$19.0	-\$3.0	-\$12.0	-\$29.0	-\$18.0			
<b>Adjusted Gross Income</b>	<b>\$1,878.4</b>	<b>\$1,805.5</b>	<b>\$1,334.0</b>	<b>\$1,331.9</b>	<b>\$1,827.1</b>	<b>\$2,021.0</b>	<b>0.67</b>	<b>\$1,350.0</b>	<b>\$225.0</b>
Salaries and Benefits	\$947.5	\$968.8	\$842.5	\$803.8	\$1,135.0	\$1,120.0			
Payroll Taxes	\$41.0	\$47.0	\$46.0	\$46.0	\$46.0	\$49.0			
<b>Payroll and Payroll Expenses</b>	<b>\$988.5</b>	<b>\$1,015.8</b>	<b>\$888.5</b>	<b>\$849.8</b>	<b>\$1,181.0</b>	<b>\$1,169.0</b>			
Subcontractors	\$43.0	\$10.0	\$88.0	\$25.0	\$20.0	\$27.0			
<b>Cost of Goods Sold</b>	<b>\$1,031.5</b>	<b>\$1,025.8</b>	<b>\$976.5</b>	<b>\$874.8</b>	<b>\$1,201.0</b>	<b>\$1,196.0</b>			
<b>Gross Profit</b>	<b>\$846.9</b>	<b>\$779.7</b>	<b>\$357.5</b>	<b>\$457.2</b>	<b>\$626.1</b>	<b>\$825.0</b>			
Auto Expense	\$5.0	\$7.0	\$8.0	\$6.0	\$5.0	\$6.0			
Insurance Expenses	\$75.0	\$75.0	\$102.0	\$87.0	\$114.0	\$97.0			
Office Rent	\$36.3	\$47.5	\$51.3	\$48.8	\$47.5	\$48.0			
All Other Operating Expenses	\$336.0	\$346.0	\$292.0	\$293.0	\$306.0	\$362.0			
<b>Expenses</b>	<b>\$452.3</b>	<b>\$475.5</b>	<b>\$453.3</b>	<b>\$434.8</b>	<b>\$472.5</b>	<b>\$513.0</b>			
<b>Net Operating Income/EBITDA</b>	<b>\$394.7</b>	<b>\$304.2</b>	<b>-\$95.7</b>	<b>\$22.4</b>	<b>\$153.6</b>	<b>\$312.0</b>	<b>4.50</b>	<b>\$1,400.0</b>	<b>\$233.3</b>
Depreciation & Amortization	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0			
Interest Expense	\$0.2	\$0.3	\$2.0	\$4.0	\$1.0	\$1.0			
<b>Taxable Income</b>	<b>\$394.5</b>	<b>\$303.9</b>	<b>-\$97.7</b>	<b>\$18.4</b>	<b>\$152.6</b>	<b>\$311.0</b>			
<b>Taxes, Income</b>	<b>\$174.0</b>	<b>\$109.0</b>	<b>\$72.0</b>	<b>\$211.0</b>	<b>\$49.0</b>	<b>\$49.0</b>			
<b>Cash Flow</b>	<b>\$220.7</b>	<b>\$195.2</b>	<b>-\$167.7</b>	<b>-\$188.6</b>	<b>\$104.6</b>	<b>\$263.0</b>			
<b>Sellers Compensation</b>	<b>\$250.0</b>	<b>\$275.0</b>	<b>\$150.0</b>	<b>\$150.0</b>	<b>\$300.0</b>	<b>\$300.0</b>			
<b>Auto Expense</b>	<b>\$2.5</b>	<b>\$3.5</b>	<b>\$4.0</b>	<b>\$3.0</b>	<b>\$2.5</b>	<b>\$3.0</b>			
<b>Insurance Expenses</b>	<b>\$4.5</b>	<b>\$4.5</b>	<b>\$4.5</b>	<b>\$4.5</b>	<b>\$4.5</b>	<b>\$4.5</b>			
<b>Add Backs for Sellers Discretionary Income</b>	<b>\$257.0</b>	<b>\$283.0</b>	<b>\$158.5</b>	<b>\$157.5</b>	<b>\$307.0</b>	<b>\$307.5</b>			
<b>Sellers Discretionary Income</b>	<b>\$651.7</b>	<b>\$587.2</b>	<b>\$62.8</b>	<b>\$179.9</b>	<b>\$460.6</b>	<b>\$619.5</b>	<b>2.25</b>	<b>\$1,390.0</b>	<b>\$231.7</b>

Note: The numbers in this table are fictitious. The ratios and values that result may not represent real market conditions.



**Exhibit 8** Typical Analysis of an Income Proforma

	2018	2019	2020	2021	2022	2023 Forecast
Appraisal Services	85%	91%	92%	70%	90%	89%
Consulting Services	15%	9%	8%	14%	10%	11%
Payroll Protection Plan	0%	0%	0%	16%	0%	0%
<b>Gross Revenue</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Credit Loss/Write-Off	0%	-1%	0%	-1%	-2%	-1%
<b>Adjusted Gross Income</b>	<b>100%</b>	<b>99%</b>	<b>100%</b>	<b>99%</b>	<b>98%</b>	<b>99%</b>
Salaries and Benefits	50%	53%	63%	60%	61%	55%
Payroll Taxes	2%	3%	3%	3%	2%	2%
<b>Payroll and Payroll Expenses</b>	<b>53%</b>	<b>56%</b>	<b>66%</b>	<b>63%</b>	<b>64%</b>	<b>57%</b>
Subcontractors	2%	1%	7%	2%	1%	1%
<b>Cost of Goods Sold</b>	<b>55%</b>	<b>56%</b>	<b>73%</b>	<b>65%</b>	<b>65%</b>	<b>59%</b>
<b>Gross Profit</b>	<b>45%</b>	<b>43%</b>	<b>27%</b>	<b>34%</b>	<b>34%</b>	<b>40%</b>
Auto Expense	0%	0%	1%	0%	0%	0%
Insurance Expenses	4%	4%	8%	6%	6%	5%
Office Rent	2%	3%	4%	4%	3%	2%
All Other Operating Expenses	18%	19%	22%	22%	16%	18%
<b>Expenses</b>	<b>24%</b>	<b>26%</b>	<b>34%</b>	<b>32%</b>	<b>25%</b>	<b>25%</b>
<b>Net Operating Income/EBITDA</b>	<b>21%</b>	<b>17%</b>	<b>-7%</b>	<b>2%</b>	<b>8%</b>	<b>15%</b>
Depreciation & Amortization	0%	0%	0%	0%	0%	0%
Interest Expense	0%	0%	0%	0%	0%	0%
<b>Taxable Income</b>	<b>21%</b>	<b>17%</b>	<b>-7%</b>	<b>1%</b>	<b>8%</b>	<b>15%</b>
<b>Taxes, Income</b>	<b>9%</b>	<b>6%</b>	<b>5%</b>	<b>16%</b>	<b>3%</b>	<b>2%</b>
<b>Cash Flow</b>	<b>12%</b>	<b>11%</b>	<b>-13%</b>	<b>-14%</b>	<b>6%</b>	<b>13%</b>
<b>Sellers Compensation</b>	<b>13%</b>	<b>15%</b>	<b>11%</b>	<b>11%</b>	<b>16%</b>	<b>15%</b>
<b>Auto Expense</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Insurance Expenses</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>
<b>Add Backs for Sellers Discretionary Income</b>	<b>14%</b>	<b>16%</b>	<b>12%</b>	<b>12%</b>	<b>17%</b>	<b>15%</b>
<b>Sellers Discretionary Income</b>	<b>35%</b>	<b>32%</b>	<b>5%</b>	<b>13%</b>	<b>25%</b>	<b>30%</b>

**Value and sale price.** There are almost always considerations beyond getting the full market value when selling or buying an appraisal firm. While appraisers typically focus on market value, sometimes in a sale of an appraisal firm other values ought to be determined. If purchasing a particular appraisal company provides a strategic advantage or synergy to the buying company, then investment value ought to be examined, and paying a price above market value can make good business sense. Business appraisers often describe the “buy a job” deal. While sometimes not being the best financial action relative to otherwise normal transactions, some buyers of small businesses appear willing to exceed market multiples and benchmarks to buy an income stream that merely matches a salary, but with no premium for the business entrepreneur. While perhaps not a market-rate transaction, buying a job may represent a value in use.

If delaying the sale is delaying other pursuits or other business initiatives, then value in use ought to be considered, and perhaps selling for less than market value is wise. While less likely in the sale of an appraisal firm, both buyers and sellers may have tax considerations that would justify departure from a typical market value sale price. With that said, estate tax and management considerations often impact sale price decisions. Recognizing when the client needs something other than or in addition to market value is essential to business valuation consulting. Understanding these and other values may bridge understanding gaps from the acceptable price to market value and may reduce insecurity to levels sufficient to close the deal.

**Risk.** Potential buyers should examine the risk profile of the appraisal firm and sellers should work to reduce any risk. It is not just about estimating income. Identify the leading sources of appraisal income and the leading clients and determine which are at risk. To the extent possible, enter into noncompete agreements with key employees and get long-term contracts with clients. Offer or demand golden handcuffs for key persons. Identify any intellectual property or geographic advantage or appraisal specialty that creates value or that may be at risk.

Appraising businesses in divorce, litigation, and partition situations requires adaptation. The context not only affects the definition of value, but it also frequently affects the premise of value, an uncommon issue in general real estate appraisal. Local law may have prescriptions for the consideration of goodwill, key person considerations, and noncompete clauses, and for discounts for marketability and control. Early first steps in these appraisals may need to include consulting with legal and accounting counsel.

## Conclusion

In the next decade, many real estate appraisers will need a business appraisal for their own businesses. As always, informed consumers fare best. Real estate appraisal practices differ from business appraisal practices, but much of the methodology will appear familiar. With a little help, a careful real estate appraiser can easily understand a business appraisal of an appraisal firm and might even be able to draft such an appraisal themselves.

SEE NEXT PAGE FOR ADDITIONAL RESOURCES >

### About the Authors

**Mark Pomykacz, MAI, AI-GRS, ASA-BV**, is the managing member at Federal Appraisal LLC. Pomykacz specializes in the appraisal of complex real property and businesses, often related to (1) utilities, power, and infrastructure and (2) tax and investor reporting. Pomykacz has been appraising businesses and real estate for over thirty-seven years. He regularly publishes and teaches materials on complex appraisal matters. **Contact: [mark@federalappraisal.com](mailto:mark@federalappraisal.com)**

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### Additional Resources

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Suggested by the Y. T. and Louise Lee Lum Library

#### Appraisal Institute

- **Lum Library, Knowledge Base [Login required]**
  - Business value
  - Professional practice: Divorce, matrimonial dissolution
  - Value in use
- **Publications**
  - The Appraisal of Real Estate*, fifteenth edition

# Announcement of Scholarship Awards

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Appraisal Institute Education and Relief Foundation

## Transforming Our Future

Each year, the Appraisal Institute Education and Relief Foundation (AIERF) awards scholarships and grants to qualified individuals for education or work in the field of real estate. The AIERF is pleased to announce the winners of its 2023 scholarships. For more information on the Appraisal Institute Education and Relief Foundation and the scholarships, visit [aierf.org](http://aierf.org).

### **AIERF Appraisal Institute Course Scholarship**

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#### **Region 3**

Mark D. Tatreau, Waukesha, WI

#### **Region 4**

Theano Tomazos, New York, NY

#### **Region 5**

Spencer Lee Brown, Yadkinville, NC

Harrison Luke Higginbotham, Roanoke, VA

David L. Ivey, AI-GRS, Fayetteville, NC

Lee Spence Temple, Wilmington, NC

#### **Region 6**

Jordan Schmalhofer, Lititz, PA

#### **Region 8**

Jack Jerome Enright, Austin, TX

Joshua Kamaal Moss, Dallas, TX

#### **Region 9**

Vincent Carr, SRA, New Orleans, LA

Preston J. King, Jonesboro, AR

### **AIERF Minorities and Women Appraisal Institute Course Scholarship**

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#### **Region 1**

Anita Kim Algiene, Anchorage, AK

Ashley N. Harrison, Wenatchee, WA

Angela R. Hernandez, MAI, Sacramento, CA

#### **Region 2**

Katherine R. Clagett, Kansas City, MO

Ryan DeLeon, Wichita, KS

Harold Hagey, Denver, CO

Kayla McKinney, Moore, OK

Shaun Berry Pettine, Fort Collins, CO

#### **Region 3**

Yulia Gomonova, Willowbrook, IL

Michelle Hedges, Minneapolis, MN

Kimberly Ann MacPherson, SRA, Stevens Point, WI

Thania Mendoza, Calumet City, IL

Sasha Wesolowski, Pulaski, WI

#### **Region 4**

Carmen Luz Cruz, Newport, RI

#### **Region 5**

Matthew Vincent Charity, Durham, NC

Cynthia Megan Gregory, Charlotte, NC

Charity Jean Stout, Westfield, IN

Tunisia Whitaker, Charlotte, NC

#### **Region 6**

Shanon-Imani Benjamin, Baltimore, MD

Latoya Cheeks, Philadelphia, PA

Robert N. Igbanugo, SRA, Windsor Mill, MD

Janelle Mack, Middletown, DE

William Mayah, Hanover, MD

#### **Region 7**

Manisha Hunter, SRA, AI-RRS, Rancho Cucamonga, CA  
Desiree Manuel, Honolulu, HI  
Andrew Powell III, Santa Clarita, CA  
Sharon A. Steele, SRA, AI-RRS, Solvang, CA  
Kelly White, Solvang, CA

#### **Region 8**

Hope Arabie, Weston Lakes, TX  
Tiffany Sharday Finch, Houston, TX

#### **Region 9**

Victoria Ruth Bishop, Nesbit, MS  
Deidre L. Henley, Newnan, GA  
Deonte Thomas, Atlanta, GA  
Kristy Leigh Young, Gulfport, MS

#### **Region 10**

Abigail Bird, Tampa, FL  
Ronald Perry Chambers Jr., Pace, FL  
Nancy Cruz, SRA, Orlando, FL  
Niesha Hinton, Jacksonville, FL  
Francisca Antonia Medina, Miami, FL  
Elizabeth Gretta Welle, Mexico Beach, FL

#### **AIERF PAREA Scholarship**

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##### **Region 8**

Pedro Espinoza, Laredo, TX  
Tiffany J. Roberts, Austin, TX

##### **Region 10**

Atef Roufaiel Hanna, Lutz, FL

##### **Not Affiliated**

Deanna Smith, Deadwood, SD  
Brady Joe Wilson, Monticello, MN

**The AIERF is proud** to announce that scholarships were awarded to students at the following colleges/universities:

#### **AIERF College Scholarship**

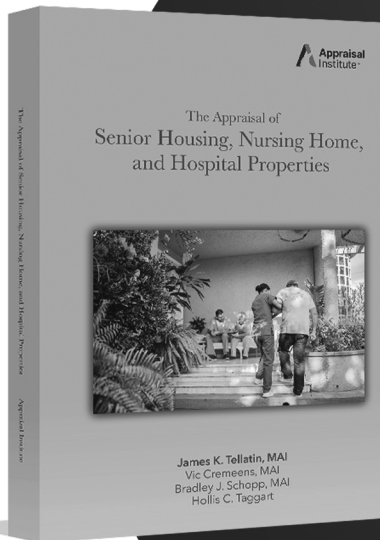
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Fordham University  
Harvard University  
South Dakota School of Mines & Technology  
Temple University (two awarded)  
Texas A&M University  
University of San Diego  
Western Governors University

#### **AIERF Minorities and Women College Scholarship**

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By James K. Tellatin, MAI; Vic Cremeens, MAI; Bradley J. Schopp, MAI; and Hollis C. Taggart

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