EXPERT WITNESS REPORT

Prepared by:

Bennie D. Waller, Ph.D. 201 High Street Farmville, VA 23901



PURPOSE/SCOPE OF ASSIGNMENT:

I have been retained to offer an opinion on the impact a 120 bed adult alcoholism and substance abuse rehabilitation facility would have on existing property values located in the proximate vicinity of 41W400 Silver Glen Road, St Charles, Illinois. Nothing in this opinion is intended to be personally judgmental toward individuals with alcoholism or substance abuse issues nor condemning of facilities that treat such individuals. The purpose of this study is to analyze—(no comma) the impact on residential property values located within a close proximity to the proposed 120 bed alcoholism and substance abuse rehabilitation treatment facility. This parcel is currently zoned F, (Farming) and Maxxam Partners, LLC has petitioned Kane County for a special use permit allowing the facility to be used in a different and likely disruptive new manner, as an alcoholism and substance abuse rehabilitation center. Section 4.8-2 (b) and (c) of the Kane County Zoning Ordinance states that a special use allowance "...will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values within the neighborhood". Furthermore, an opinion is also offered on the impact study of MaRous on the proposed alcohol and substance abuse rehabilitation treatment facility.

This report sets out the opinions that I have formed regarding negative externalities (or the perception thereof) in residential neighborhoods and their economic impact on neighboring residential real estate markets. My opinions are based in part on public records data in the area of Campton Hills, Illinois as well as information from the MaRous study. Additionally, opinions are formed based on my published research, an extensive review of related academic literature and industry professionals' opinions. Furthermore, as a licensed real estate professional, real estate investor and academic, I have personally observed the behavior of participants involved in real

estate transactions surrounding what is perceived to be a negative externality (e.g., places where a murder occurred, a registered sex offender lives or an operating drug treatment center) on neighboring properties.

INFORMATION ABOUT EXPERT

I am a Professor of Finance and Real Estate at Longwood University. I received a Ph.D. in Finance from the University of Mississippi in 1998 and a Ph.D. in Management Information Systems from the University of Mississippi in 2007. The dissertation for the Ph.D. in Finance compared regression and neural networks model for valuation of residential properties. The dissertation for the Ph.D. in MIS also centered on the valuation of residential properties using an expert system. In addition, I am a licensed real estate salesperson (Virginia Real Estate Board-0225179497) and hold an instructor certification in appraisal (Virginia Real Estate Appraiser Board-4002000169). I regularly publish in the area of residential real estate. A significant portion of my empirical research involves the factors that are likely to have an impact on the probability of a successful transaction as wells as the effect of negative externalities on the pricing and duration of residential real estate. A complete curriculum vitae is in appendix.

OPINIONS RENDERED

Maxxam Partners, LLC, seek a special use permit that will allow for the operation of a forprofit 120 bed adult alcoholism and substance abuse rehabilitation facility, located at 41W400 Silver Glen Road, St Charles, Illinois. This facility will bring about a loss in utility for neighboring residents in the forms of decreased property values, increased traffic volumes, increased crime rates and overall declines in neighborhood quality. The overall housing value loss to the greater neighborhood is expected to be in excess of \$12 million.¹

OPINION #1: It is my professional opinion that the establishment of a 120 bed for-profit alcoholism and substance abuse rehabilitation facility to be located at 41W400 Silver Glen Road, St Charles, Illinois (formerly Glenwood School for Boys) will be significantly detrimental to nearby property values as a result of the increased risks (or perceived risks) of residing near such a facility. The marketplace considered in this opinion is largely representative of and consistent with the empirical research cited in this opinion.

This opinion is based in part on an abundance of academic and empirical studies (discussed later) which show the existence of a negative externality to have a negative impact on nearby real property values. Specifically, such a facility would at a minimum;

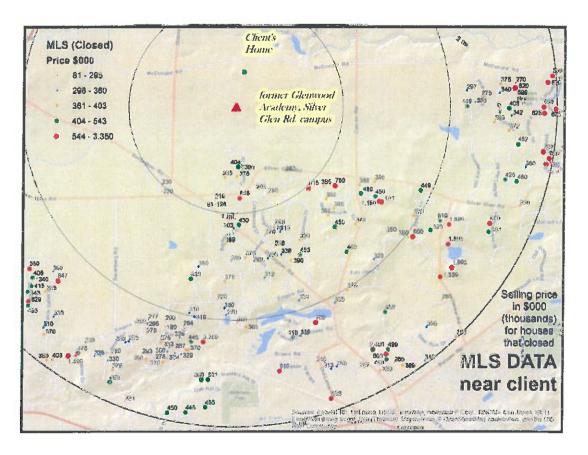
• Negatively impact property values in the surrounding areas of the proposed facility anywhere from 8-17%, an estimate which is based on inferences drawn from similar empirical studies (cited throughout opinion). For the average property located in the Campton Hills area, this could be a loss of \$43,813 - \$93,103 in property value.²

¹ Based on average listings over the last 12 months. The impact on property values are forecasted to be 17% for properties located within a one mile radius and an 8% impact for those between a 1 and 3 mile radius.

 $^{^{2}}$ Average property value of properties listed over last 12 months times 17% (547,662 x .17 = 93,103)

- For more expensive properties in excess of \$2 million the loss in value could exceed \$400,000.
- As a result of the increased degree of risk or perceived degree of risk posed by the proposed 120 bed adult alcoholism and substance abuse rehabilitation facility, there will be more of a negative impact on nearby property values then the impact of the facility examined by MaRous. As shown by LaRoche, Waller and Wentland (2014), as the homeowner's perception of risk increases so will the value of the negative externality resulting in lower neighborhood property values.
- The most severe impact on property values will be those located nearest the proposed facility. There exists a significant amount of research that shows negative externalities have the most severe impact on properties located closest to the externality (LaRoche, Waller, Wentland, 2014; Wentland, Waller and Brastow, 2014; Farber, 1999; Congdon-Hohman, 2013; Turnbull, Waller, Wentland, Witschey and Zahirovic-Herbert, 2015). It is likely that all properties that fall within a 3-mile radius (see graphic below) will be negatively impacted by the proposed alcoholism and substance abuse rehabilitation facility.
- The mostly rural location of the proposed 120 bed adult alcoholism and substance abuse rehabilitation facility will be a significant factor in the influence of property values. Wentland, Waller and Brastow (2014) find that residents in suburban/rural areas consider larger geographical areas when defining who constitutes a "neighbor" and as such it is logical to expect that residents in the Campton Hills, unincorporated Kane County, and St. Charles area will also assess the risk out farther from the facility than would residents in a similar facility in an urban area.

The more expensive properties in the immediate area will be impacted more severely in terms of loss in value. The graphic below illustrates those properties that sold in the last 12 months within a 3-mile radius of the proposed 120 bed alcoholism and abuse rehabilitation facility. It is readily apparent that there are numerous properties in the area that are likely to be impacted by the proposed facility.



BASIS FOR OPINION #1:

It is widely held in real estate that any modification of existing land uses in a close proximity to an existing residential property will economically impact said property. Such externalities may be an intangible, largely determined by public perception, which is capitalized into the selling price of nearby residential properties (LaRoche, Waller and Wentland, 2014). The intangible discussed here is the fear and anxiety of an alcoholism and substance abuse

rehabilitation treatment facility. It has long been acknowledged the existence of numerous externalities to have an impact on the marketing outcome of residential real estate. The direction of the impact is dependent upon the perceived influence of the modification (proposed facility). For example, the location of a landfill will have a negative impact on values of existing residential properties, whereas the development of a community park will increase property values. Similarly, the construction of a 4,000 square foot luxury home in the neighborhood of mostly 2,000 square foot homes would positively impact values of the smaller properties in the neighborhood.

A consequence of locating a 120 bed alcoholism and substance abuse rehabilitation treatment facility in residential areas is that many patients leave the program before completion (Shaffer, 2012). Furthermore, the large degree of correlation between crime and alcohol or drug use is well documented.³ In addition to alcohol and substance abuse addiction, many patients of substance abuse facilities are likely to have other mental health issues. Indeed, the current petitioner is proposing to treat dual diagnosis patients seeking both mental health and substance abuse treatment. Connery (2011) finds substance abuse to be multifaceted and the fact that many patients have a dual diagnosis of mental health issues as well as a substance addiction.⁴ This is important to note as Dear, Taylor and Hall (1980) in a survey of over 1000 households find that mental health facilities generate fears concerning property values, traffic volume and overall neighborhood satisfaction. The authors also show that as the proximity to such a facility increases, so does the perceived undesirability of such a facility. Public awareness and type of facility both have an effect on the results, although proximity is clearly the dominant factor. This is particularly relevant to this study as there are many properties located in near proximity of the proposed

³ http://www.bjs.gov/content/pub/pdf/DRRC.PDF (last visited on 1/9/16).

⁴ In a 2007 survey by the Substance Abuse Mental Health Services Administration (SAMHSA, 2008), 39% of clients in treatment centers had mental health issues as well as substance abuse addiction.

facility. Many families of a drug addict refuse to "enable" their behavior forcing the addict to experience the consequences of their action of refusing treatment. Such "tough love" may force the addict to fend for themselves resulting in undesirable behaviors in attempts to fuel their addiction (LaRoche, Waller and Wentland, 2014). The likelihood of relapse (Shaffer, 2012) coupled with the probability of criminal activity associated with alcoholism and substance abuse validates the argument that such a facility is likely to promote objectionable and undesirable consequences in the community such as decreased property values and an overall decrease in quality of life for existing residents (LaRoche, Waller and Wentland, 2014).

An article published by the Appraisal Institute (2013), cautions "potential homebuyers that bad neighbors can significantly reduce nearby property values". The article goes on to warn homebuyers to visit the neighborhood on several different occasions to fully understand what is happening in the neighborhood. Realtors also offer similar advice to potential homebuyers advising them to talk with neighbors about the neighborhood (www.marketwatch.com, 2011). Appraisal Institute President Richard L. Borges warns that "external factors, such as living near a bad neighbor, can lower home values by more than 5 to 10 percent" going on to warn potential homebuyers the be aware of the proximity to commercial facilities as they also can negatively affect home values (Appraisal Institute, 2013). If a neighborhood becomes less desirable for any of a number of reasons, such as the location of an alcoholism and substance abuse rehabilitation center, such a detrimental externality will decrease the value of the neighborhood properties, making it more affordable to lower-income families and less attractive to higher-income families. Over time, higher-income residents may relocate. As a result, the by-products of high-income residents, such as social status, school quality, low crime and well-maintained, owner-occupied homes, may dissipate. McCluskey and Rausser (2003) find that higher income households require

larger and significant discounts to live in close proximity to a negative externality. Similarly, Farber (1998) finds that undesirable land uses expected to impose a negative externality on surrounding properties are translated into negative and economically significant pricing discounts on adjacent property values. Such negative effects may persist even when such land uses provide offsetting advantages such as employment opportunities. "The larger the facility, the greater the potential impact with the precise impact of the externality source will depend on the characteristics of the population with which it intersects" (Farber, 1998). Taylor and Hall (1977) shows that response to externalities will vary with the socioeconomic structure of the neighborhood. It is possible to observe different reactions to an identical externality source according to the subpopulation's attitudinal response. Results show that a resource-rich middle class neighborhood is more likely to defend such an encroachment more vociferously than lower income, more transient, resource deficient areas (Dear, Taylor and Hall, 1980). Although treatment centers tend to be as inconspicuous as possible, there are reasons to believe that such facilities adversely impact neighborhood values (LaRoche, Wentland and Waller, 2014).

REVIEW OF RELATED LITERTURE

A triggering event, such as the location of a negative externality such as the proposed 120 bed substance abuse rehabilitation facility, may result in direct damage; however there might be a spillover or multiplier effect as well. The resulting and additional damage is called consequential damage. Once a stigma becomes associated with a particular neighborhood, property values may be stigmatized for decades. This reluctance to buy can be reflected in lower residential property values and may be based on perceived risk that may or may not have a scientific foundation. (McCluskey and Rausser, 2003). Drawing on the related academic literature cited herein, the proposed 120 bed alcoholism and substance abuse rehabilitation center will likely be a driving

factor in two noxious externalities. The first is the impact it will have on nearby properties; the stigma of the facility will impact the neighboring property owner's utility (e.g., safety, inconvenience, property values). The second is the neighborhood externality impact the proposed facility will have on the composition of residents in the neighborhood bringing about a change in overall neighborhood quality.

Such conflict revolving around externality issues have been lamented upon by legal and academic scholars for decades. There are numerous empirical studies that show how externalities, both positive and negative impact property values in near proximity to the externality. Given that one's primary residence is typically the average individual's largest investment, it is not surprising that the mantra of "location, location, location" is of considerable and ever growing concern of buyers of residential real estate (LaRoche, Wentland and Waller, 2014). Savvy potential home buyers diligently research the communities in which they are considering living including, school systems, crime rates, sex offenders, etc. (LaRoche, Wentland and Waller, 2014; Wentland, Waller and Brastow, 2014).

Examples of externalities having a positive impact on property values include nearby renovated properties through the use of rehabilitative tax credits (Turnbull, Waller, Wentland Witschey and Zahirovic-Herbert, 2015); the creation of a historic district (Coffin, 1989; Clark and Herrin, 1997); historical properties (Coulson and Leichenko, 2001); near proximity to high-rise office buildings (Thibodeau, 1990); properties located near a resort community (Spahr and Sunderman, 1999) and neighborhood parks (Espey and Owusu-Edusei, 2001).

Similarly, numerous empirical studies provide evidence that properties located within a close proximity to an externality with a perceived negative stigma is likely to deter the marketability and value of neighboring properties. Such impacts are likely to decrease the

likelihood of a sale, decreased selling price and decreased liquidity (longer marketing times). Empirical studies reflecting decreased property values as the result of negative externalities include those located near rental properties (Wang, Grissom, Webb and Spellman, 1991); churches (Do, Wilbur and Short, 1994); elevated rates of crime (Thaler, 1978; Gibbons, 2004; Ihlanfeldt and Mayock, 2010; Pope, 2012; Buck, Deutsch, Hakim, Spiegel and Weinblatt, 1991); landfills (Nelson, Genereux and Genereux, 1992; Reichert, Small and Mohanty, 1992; Hite, Hitzhusen and Randall (2001)); increased levels of automobile traffic (Hughes and Sirmans, 1992); airport noise (Mieszkowski and Saper, 1978; Nelson, 1979; and O'Byrne, Nelson and Seneca, 1985); power lines (Francois, 2002); foreclosed properties (Harding, Rosenblatt and Yao, 2009; Lin, Rosenblatt and Yao, 2009; Daneshvary, Clauretie and Kader, 2011; Danesvary and Clauretie, 2012; Agarwal, Ambrose, Chomsisengphet and Saunders, 2013; Bian, Brastow, Waller and Wentland, 2014); shopping centers (Des Rosier, 1996); sex offenders (Wentland, Waller, and Brastow, 2014; Linden and Rockoff, 2008; Pope, 2008) and substance abuse rehabilitation treatment centers (LaRoche, Waller and Wentland, 2014).

Simons and Saignor (2006) did a meta-analysis study where 75 peer-reviewed journal articles on externalities and their impact on value based on the proximity to the externality. Of those 75 studies, 58 involved negative externalities and the remaining 17 were studies dealing with positive externalities. It is also important to note that of the 58 negative externality studies, 19 (33%) were published in the Appraisal Journal, which is largely a practitioner's publication. This illustrates the huge impact that externalities have on the valuation process.

More specifically and germane to this opinion is the consistent and significant empirical findings that demonstrate the importance of proximity or distance from a nearby externality and its impact on value to neighboring properties. Turnbull, Waller, Witschey, Wentland and

Zahirovic-Herbert (2015) examine the impact properties that have been preserved or renovated with rehabilitative tax credits (RTCs) on neighboring property values within and outside of historical districts. The authors find that of the 11,737 properties located within .10 miles of an RTC property sell on average for a 6% price premium relative to comparable properties without the positive externality of a close proximity to an RTC property. The pricing effect is significant on properties located up to 2 miles from an RTC property. Espey and Owusu-Edusei (2001) examine the pricing effect of single family homes based upon their proximity to neighborhood parks. The authors find that the greatest impact on housing values was their proximity to small neighborhood parks with property values as much as 13% higher for homes located up to 500 feet away and 6.5% higher for those properties between 500 and 1,500 feet. Francois (2002) examines the impact of high-voltage transmission lines on surrounding property values and find home values to depreciate on average 10%, however for properties located where the setback boundary is only 50 ft., their loss in value is 14%. Furthermore the authors find discrimination in valuation loss as lower priced properties suffered on average a 10-15% decrease in value, whereas more expensive properties had value diminution in the 15-20% range. Bian, Brastow, Waller and Wentland (2015) examine the impact of marketing time and probability of sale on how nearby foreclosed properties impact neighboring homes. The author's find that a typical home located within .10 of a mile of a foreclosure may take 16% longer to sell than an otherwise comparable home, and may be 29% less likely to sell at all. Their findings all confirm that the loss in property value is the result of the dis-amenity effect and not the supply effect of nearby foreclosed properties. Congdon-Hohman (2013) finds that properties located within one-quarter of a mile of a methamphetamine lab suffer significant decreases in value of between 10-19% with a diminishing effect the further the distance from the lab. Reichert, Small, and Mohanty (1992) in an examination of the impact of landfills on

property values find a negative impact on value when located within several blocks. The authors find a negative pricing effect ranging from 5.5% - 7.3% depending on the distance from landfill with a less pronounced effect on less expensive and older properties (3-4%). Also, a study by Hite, Hitzhusen and Randall (2001) find a negative pricing impact for properties located within 3.25 miles of a landfill. The authors also find the negative pricing effect of the landfill to remain even after it has been closed for a number of years. Linden and Rockoff (2008) find declines in property values of 4% following the arrival of a sex offender in the neighborhood. For properties located adjacent to the sex offender, property values are negatively impacted by 12%. Pope (2008) also examines the impact of a registered sex offender and finds that when a sex offender moves into a neighborhood nearby properties values fall by 2.3%. Similarly Wentland, Waller and Brastow (2014) find a 10.3% negative pricing effect on neighboring properties within 0.1 miles of a registered sex offender. This is approximately 3 times the magnitude of the impact found by Pope (2008), suggesting a higher willingness to pay to avoid such a negative externality for residents in the predominantly suburban and rural areas considered in their study. The authors further explore whether or not the market differentiates between violent and non-violent sex offenders and discover that violent offenders have a more significant and negative impact on nearby property values. Property values located within 0.1 mile from a violent sex offender will be negatively impacted by \$17,595, while a nearby non-violent sex offender reduces a home's sale price by only \$2,639. Possibly an even more alarming result is the fact that nearby (or < 0.1 mile) from a violent sex offenders will increase a home's marketing duration by 125 days, while a nearby non-violent sex offender increases a home's time on market by about a month. The negative and significant impact on value is shown to persist up to a 1 mile radius whereas other sex offender studies find no significant impact of a sex offender on property values beyond 0.3 miles, suggesting the

significant difference to be attributable to what residents consider "neighbors" in the suburban/rural relative to urban areas (Wentland, Waller, and Brastow, 2014). Residences in suburban/rural areas like central Virginia tend to be less densely located then areas such as Charlotte, NC and Tampa, FL which were the focus of the studies by Linden and Rockoff (2008) and Pope (2008) respectively. Wentland, Waller and Brastow (2014) put forth that residents in suburban/rural areas distinguish properties within a larger radius as neighbors, resulting in a greater alertness or aversion to crime risk over larger distances. Such declining magnitudes of coefficients across distance conforms to the rational expectation that risk falls as the physical distance from a perceived threat rises.

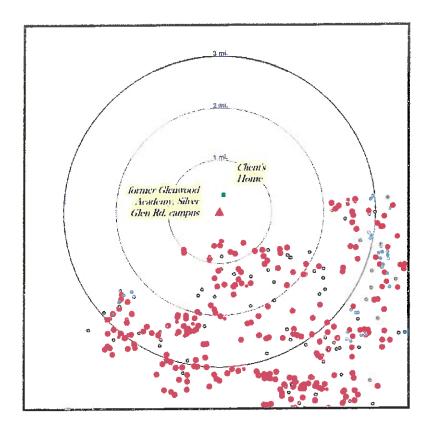
LaRoche, Waller and Wentland (2014) examine over a decade (2001-2011) of approximately 200,000 residential real estate transactions from central Virginia which includes urban, suburban and rural areas. The MLS data used by the authors includes the greater Richmond area which is representative and typical of other U.S. housing markets. The average property in the data has a listing and selling price of \$263,641 and \$242,116 respectively. The authors specifically explore the impact of substance abuse rehabilitation centers on selling prices and liquidity of nearby residential properties. The authors compute the distance from each home in the data set to each treatment facility and find a negative pricing effect of approximately 8% for those properties located within 1/8th of a mile of a rehab center. The authors further determine that abuse rehabilitation facilities for treating heroin addicts have a more pronounced impact on values of up to 17% for properties located within 1/8 of a mile of such a facility. The authors find their results to be robust across multiple methodologies and conclude that unobserved spatial heterogeneity is not a contributing factor. That is their findings provide strong evidence that their results are not the consequence of a "bad part of town" effect and insistently conclude there is a robust and

negative relationship between the presences of a substance abuse rehabilitation treatment center and nearby home values. Farber (1998) looks at a summary of empirical studies on undesirable land uses finds that undesirable facilities reduce property values in their vicinity with diminishing effects as distances from the undesirable use increases. The author also points to evidence that these negative effects may be more severe in thin markets of rural areas more so than urban areas.

To reiterate, the voluminous empirical studies cited here provide ample evidence that the establishment of a for-profit 120 bed alcoholism and substance abuse rehabilitation facility to be located at 41W400 Silver Glen Road, St Charles, Illinois (formerly Glenwood School for Boys) would bring about at a minimum;

- Negatively impact property values in the surrounding areas of the proposed facility from 8% to 17%.
- Homeowners will perceive a 120 bed adult alcoholism and substance abuse rehabilitation facility to present significant risks facility thereby creating a negative externality resulting in lower property values. Specifically, homes located near an alcoholism and substance abuse rehabilitation facility like the one proposed in St. Charles, Illinois, will sell for a larger discount relative comparable homes.
- Given the rural nature of the proposed 120 bed alcoholism and abuse rehabilitation facility, it likely that the negative impact will be more severe in terms of both value and breadth given the tendency of residents in suburban/rural areas like Campton Hills to consider larger areas when defining who constitutes as a "neighbor" and assessing subsequent risks (Wentland, Waller and Brastow, 2014).
- The most severe impact on property values will be those located nearest the proposed 120 bed alcoholism and abuse rehabilitation facility. The graphic below depicts those

properties that were listed (white dots) and sold (red dots) within a 3 mile radius over the past 12 months.



Have a larger and more severe impact on more expensive properties in the area. The graphic below depicts those properties that sold for \$250,000 or more within the last 12 months.



OPINION #2: The MaRous impact study supposes there to be no significantly negative impact on property values located nearby the proposed facility. I have thoroughly reviewed the MaRous opinion and find some areas of concern in the study.

- The MaRous study uses a matched-pair analysis to purport no differences in property values for those properties located near a former facility for troubled youth and not the 120 bed adult alcoholism and substance abuse rehabilitation facility such as the one proposed in St. Charles. Analyses using a matched-pair approach is very subjective and can be easily manipulated through property selection.
- Park Ridge, Illinois is the area used in the MaRous matched-pair analysis study and is not comparable to the Campton Hills area, where the proposed facility is to be located. The Park Ridge area is a suburban/urban area and significantly larger than Campton Hills which is of a more rural area in nature. The former Park Ridge facility is no longer operational and being converted to a park.

• The MaRous study also conducts a valuation of an existing property located near the proposed facility in St. Charles. However, this valuation has no current or predictive value of how market values will be impacted if the proposed 120 bed adult alcoholism and substance abuse rehabilitation center becomes a reality.

The impact study by MaRous is based upon a matched-pair analysis of properties located near a facility in Park Ridge, Illinois, which was formerly a facility for troubled youth. The facility is now being revamped into a park.⁵ The opinion offered in the MaRous impact study puts forth there to be no significantly negative impact on residential property values in close proximity to the proposed facility based on a matched-pair analysis conducted in the area of the former Park Ridge Youth facility. The former Park Ridge Youth facility is located in the suburban area of Park Ridge, Illinois and is located across the street from the Park Ridge Country Club. The findings are based on a matched-pair analysis comparison, which is a practical and excellent means of residential valuation in theory, however in practice much more problematic and difficult. In an appraisal forum discussion concerning matched pair analysis, one appraiser had this to say, "Great in theory, difficult in practice...matched-pairs, that is."6 Also, theoretically a matched-pair analysis assumes that the two properties chosen for comparison have only a singular difference, which in this situation is presumed to be the proximity near the former Park Ridge Youth facility. Another pertinent question from the appraisal forum referenced above concerning the selection of properties for comparison was "how often do you find 2 sales but with a single difference between the two?" In fact, as a licensed appraisal instructor, I demonstrate this dilemma of comparable property selection when teaching real estate appraisal courses by assigning the same property to be appraised by two students. One is assigned to valuate and appraise the property for the highest

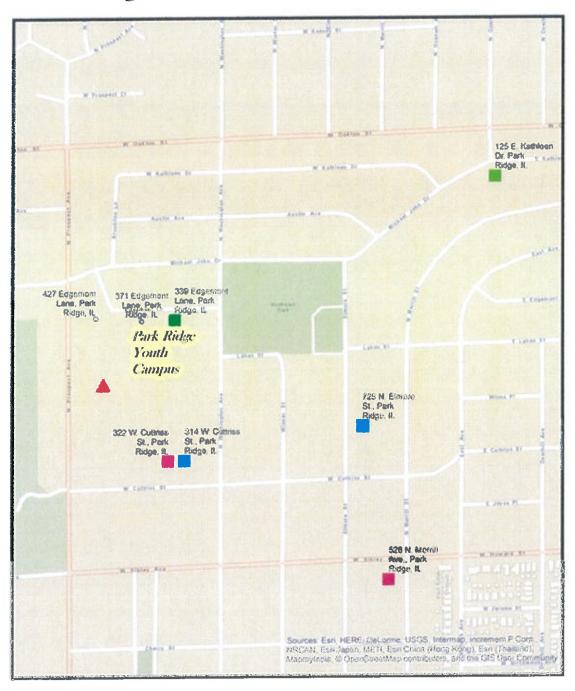
⁵ http://www.chicagotribune.com/suburbs/park-ridge/ct-park-ridge-youth-campus-tl-20150122-story.html

⁶ http://appraisersforum.com/forums/threads/matched-paired-analysis.151233/

justifiable value based on comparable properties while the other student is assigned to appraise the same property for the lowest justifiable value based on comparable properties.

In the MaRous study, the first matched pair analysis compares 339 Edgemont Lane, Park Ridge, IL with 125 E. Kathleen Drive, Park Ridge, IL According to MaRous, the property located at 339 Edgemont (close to previous Park Ridge Youth facility) last sold in June 2011 for \$370,000 after being marketed for 67 days (see figure below of matched-pair properties). The property did transact for a \$29,000 discount relative to asking price. The comparison property located at 125 E. Kathleen Drive, Park Ridge, IL, sold in November, 2011 for \$412,000 after being marketed for only 5 days. This was an \$8,000 discount in price relative to the list price of \$420,000. Also, as shown in the figure below, 339 Edgemont Lane is in close proximity to both Northeast Park and Park Ridge Country Club, which are considered to be positive externalities and thus having an impact on nearby property values.

Matched Pair Analysis Park Ridge Youth Campus 0 250 500 750 1,000



The second matched-pair analysis compares 314 W. Cuttriss street, Park Ridge, IL to 725 N. Elmore Street, Park Ridge IL. The 314 W. Cuttriss property listed for \$1,049,000 and sold for

\$855,000 in August, 2008 after being marketed for 71 days for a discount of \$194,000. The comparison property located at 725 N. Elmore listed for \$798,000 and sold for \$745,000 in October 2009 after 105 days on the market for a discount of \$53,000. Some notable differences in characteristics of the 314 W. Cuttriss property relative to the suggested comparable of 725 N. Elmore (cookcountyassessor.com) that bring into question whether or not these are good comparable properties include the significant difference in living area (3,298 vs. 2,360), type of exterior (Frame/Masonry vs. Frame only), presence of central air, type and size of garage and lot size (11,450 vs 9,600 sqft.). As with the first matched-pair analysis, the proximity to the Park Ridge Country Club and considered to be a positive externality impacting nearby property values further increasing the already difficult and subjective process of value adjustment in matched-pair analysis.

The third matched-pair analysis compares 322 W. Cuttriss, Park Ridge, IL to 528 N. Merrill Ave, Park Ridge, IL. The 322 W. Cuttriss property was listed for \$889,000 and sold for \$851,000 in August, 2007 after spending 7 days on the market. The comparable property, located at 528 N. Merrill Ave listed for \$884,000 and sold for \$812,500 in October, 2007 after spending 74 days on the market. As with both previous matched-pair analyses, the Park Ridge Country Club will likely have a positive impact on nearby properties making the value adjustment process more uncertain.

In summary, matched-pair analysis is a subjective methodology that can be exploited to achieve any result the investigator desires by searching out comparison properties that supports the desired conclusion.⁷ As can be seen in figure below, there are a multitude of residential properties in the Park Ridge area from which the investigator could have selected for use in comparison. Even the most experienced appraiser would have difficultly examining all of the

⁷ http://activerain.com/blogsview/1106287/paired-sales-matched-pairs----a-flawed-technique---

possible properties to insure that the absolute most similar property was selected. "Traditional appraisal methods contain a high potential for bias, because the appraiser often engages in the highly questionable practice of "data mining" by selecting comparable sales to support a preconceived value consideration." Finally, the former Park Ridge Youth facility is located in a very close proximity to Northeast Park and the Park Ridge Country Club, both of which are positive externalities impacting value which further convolutes the already difficult and subjective process of value adjustment in matched-pair analysis.

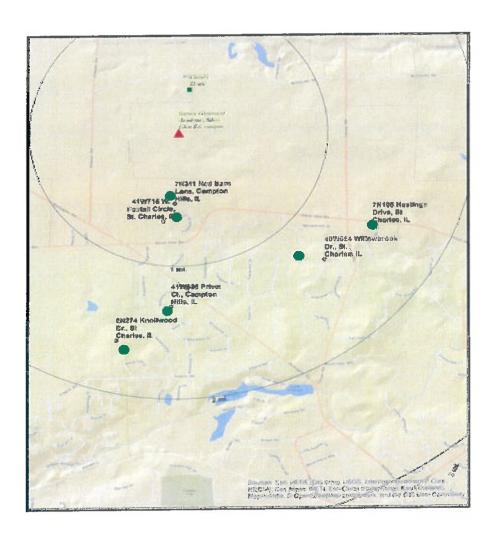


The MaRous impact study also did an analysis of a recently sold property in the vicinity of the proposed alcoholism and substance abuse rehabilitation center in St. Charles, IL. The property the investigator uses as the subject property is 41W625 West Foxtail Circle, St. Charles, IL suggested a list of comparable properties listed in the table and figure below;

	Property address
Comp 1	7N108 Hastings Drive, St Charles, IL
Comp 2	41W686 Privet Ct., Campton Hills, IL
Comp 3	40W654 Willowbrook Dr., St. Charles, IL
Comp 4	7N311 Red Barn Lane, Campton Hills, IL

http://realstat.com/downl.oad/discredit.pdf

Comp 5	6N274 Knollwood Dr., St Charles, IL
Comp 6	41W715 Foxtail Circle, St. Charles, IL

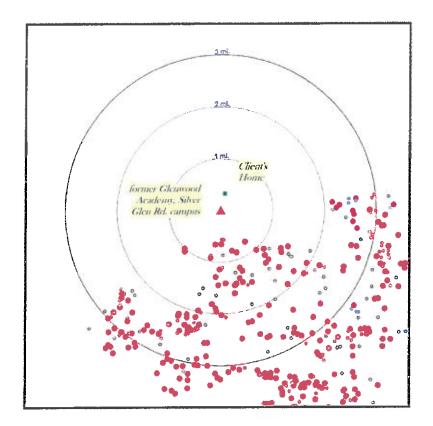


The investigator values the property located at 41W625 West Foxtail Circle, St. Charles, IL to be between \$365,000 and \$385,000. The property sold for \$375,000 after being on the market for 8 days. However, this valuation is not pertinent to this opinion given that the negative externality of the proposed facility does not currently exist.

SUMMARY OF IMPACT OF ALCOHOLISM AND SUBSTANCE ABUSE REHABILITATION FACILITY

It is my professional opinion that the proposed 120 bed adult alcoholism and substance abuse rehabilitation facility will have significant and negative impact on the community including, but not limited to the following;

- A negative impact on property values in the surrounding areas of the proposed facility ranging from 8% to 17%. For the average property located in the Campton Hills area, this could be a loss in value of over \$93,103 in property value. Based on the 269 of 486 properties that were listed for sale over the last 12 months within a 3 mile radius of the proposed 120 bed alcoholism and substance abuse rehabilitation facility, the average loss in value would at a minimum exceed \$12 million for the greater neighborhood.
- Properties located in the closest proximity to the proposed facility will be impacted more harshly than those with a larger distances from the facility. There exist a significant amount of research that shows negative externalities have the most severe impact on value the more proximate the properties to the externality (in this case the proposed abuse rehabilitation facility) (LaRoche, Waller, Wentland, 2014; Wentland, Waller and Brastow, 2014; Dear, Taylor and Hall, 1980; Farber, 1999; Congdon-Hohman, 2013; Turnbull, Waller, Wentland, Witschey and Zahirovic-Herbert, 2015). It is likely that all properties that fall within the graphic below will be negatively impacted by the proposed alcoholism and substance abuse rehabilitation facility.



- It is expected that those properties located within a 1 mile radius will be the most devalued by the proposed 120 bed alcoholism and substance abuse rehabilitation facility with losses in value of approximately \$3million based on the properties that were listed for sale over the last 12 months.
- o Properties located between 1 and 3 miles of the proposed facility will suffer an estimated loss in property value as much as \$10 million based on the properties that were listed for sale over the last 12 months.
- The more expensive properties in the immediate area of the proposed 120 bed alcoholism and substance abuse rehabilitation facility will be more severely impacted in terms of value loss. Of the 485 properties that sold over the last 12 months, 50% or 244 of these properties sold for \$449,900 or more. In fact, properties that transacted in the upper 25 percentile (122 properties) sold for \$600,000 or more. Thus it is readily apparent that there are

numerous properties that will be impacted by the proposed 120 bed alcoholism and substance abuse rehabilitation facility resulting in significantly large losses in property values.

- As a result of the increased degree of risk posed by the proposed 120 bed adult alcoholism and substance abuse rehabilitation facility, there will be a more severe, negative impact on nearby property values then the impact of the facility presented by MaRous, which posed a lower degree of risks to nearby homeowners. As shown by LaRoche, Waller and Wentland (2014), as the homeowner's perception of risk increases so will the negative externality resulting in lower neighborhood property values. The proposed 120 bed adult alcoholism and substance abuse rehabilitation facility is likely to be perceived by the typical homeowner to have significant risks resulting in a negative externality to the Campton Hills community resulting in lower property values.
 - o Given that extensive estimate in property value loss of over \$21 million associated with the proposed 120 bed alcoholism and substance abuse rehabilitation center, there will be an unintended consequence of loss in real estate tax revenue.
- The mostly rural location of the proposed 120 bed adult alcoholism and substance abuse rehabilitation facility will be a significant factor in the influence of property values. Wentland, Waller and Brastow (2014) find that residents in suburban/rural areas consider larger geographical areas when defining who constitutes a "neighbor" and assign risk in a broader geographical area.
 - The rural area has somewhat of a double-edge sword effect (see figure of area below). One is that residents in such communities consider a larger geographical area when assessing externality risks (Wentland, Waller and Brastow, 2014). That

is the proposed 120 bed alcoholism and substance abuse rehabilitation facility will have a more far-reaching impact on property values than if it were to be located in an urban area. A second effect of the rural location is liquidity impact that such a facility will have on properties being marketed for sale. Rural areas tend to have less liquidity (marketability) due to the simple economic concept of supply and demand. That is there are simply more buyers and sellers in urban markets than rural ones. The decreased marketability of properties due to the rural nature of the area coupled with the negative externality of the proposed facility will significantly impact the marketing outcomes of both selling price and marketing time.



Regardless of the separation by from "most residential dwellings" such separation will have no impact on the stigma effect that will be associated with the proposed 120 bed adult alcoholism and substance detox facility. Furthermore, the water tower for the proposed

⁹ MaRous Impact study

facility is quite an obvious fixture and will certainly be a topic of question for future homebuyers in the area.

Regardless of highest and best use for the existing property, demand for the existing facility or financial benefits to taxing bodies, such a facility will negatively impact neighboring properties values and thus should not be permitted under section 4.8-2 (b) and (c) of the Kane County Zoning Ordinance.

PROPERTIES LISTED	FULL SAMPLE	1 MILE	2 MILE	3 MILE
N	486	33	53	183
AVG. PRICE	547,662	452,124	392,104	537,460
TOTAL	266,163,732	14,920,092	20,781,512	98,355,180
AVG. PROPERTY LOSS (14%)	76,673	63,297	54,895	75,244
LOSS @8%	21,293,099	1,193,607	1,662,521	7,868,414
LOSS @ 17%	45,247,834	2,536,416	3,532,857	16,720,381

PROPERTIES SOLD	FULL SAMPLE	1 MILE	2MILE	3 MILE
N	309	24	30	107
AVG. PRICE	532,072	415,528	352,752	510,974
TOTAL	164,410,248	9,972,672	10,582,560	54,674,218
AVG. PROPERTY LOSS (14%)	74,490	58,174	49,385	71,536
LOSS @8%	13,152,820	797,814	846,605	4,373,937
LOSS @ 17%	27,949,742	1,695,354	1,799,035	9,294,617

REFERENCES:

Agarwal, S., Ambrose, B. W., Chomsisengphet, S., & Sanders, A. B. (2012). Thy neighbor's mortgage: Does living in a subprime neighborhood affect one's probability of default? *Real Estate Economics*, 40(1), 1-22.

Appraisal Institute. (2013). Bad Neighbors Can Reduce Property Values, Appraisal Institute Warns, http://www.appraisalinstitute.org/bad-neighbors-can-reduce-property-values-appraisalinstitute-warns/ (last visited, 1/28/2016.

Bian, X., Brastow, R.T., Waller, B. D. & Wentland, S.A. (2015). Foreclosure Externalities and Real Estate Liquidity. *Working paper*.

Buck, A. J., Deutsch, J., Hakim, S., Spiegel, U., & Weinblatt, J. (1991). A von Thünen model of crime, casinos and property values in New Jersey. *Urban Studies*, 28(5), 673-686.

Clark, D. E., & Herrin, W. E. (1997). Historical preservation districts and home sale prices: evidence from the Sacramento housing market. *The Review of regional studies*, 27(1), 29-48.

Coffin, D. A. (1989). The impact of historic districts on residential property values. *Eastern Economic Journal*, 221-228.

Congdon-Hohman, J. M. (2013). The lasting effects of crime: The relationship of discovered methamphetamine laboratories and home values. *Regional Science and Urban Economics*, 43(1), 31-41.

Connery, H. Alcohol Use and Abuse—A Harvard Medical School Special Health Report. 2011. Fact Sheet MHPAEA. http://www.dol.gov/ebsa/newsroom/ fsmhpaea.html. HUD Disability Rights in Housing. http://portal.hud.gov/hudportal/HUD?src5/program offices / fair housing equal opp/disabilities/inhousing.

Coulson, N. E., & Leichenko, R. M. (2001). The internal and external impact of historical designation on property values. *The Journal of Real Estate Finance and Economics*, 23(1), 113-124.

Daneshvary, N., Clauretie, T., & Kader, A. (2011). Short-term own-price and spillover effects of distressed residential properties: The case of a housing crash. *Journal of Real Estate Research*, 33(2), 179-207.

Daneshvary, N., & Clauretie, T. M. (2012). Toxic Neighbors: Foreclosures And Short-Sales Spillover Effects From The Current Housing-Market Crash. *Economic Inquiry*, 50(1), 217-231.

Dear, M., Taylor, S. M., & Hall, G. B. (1980). EXTERNAL EFFECTS OF MENTAL HEALTH FACILITIES*. *Annals of the Association of American Geographers*, 70(3), 342-352.

Des Rosiers, F., Lagana, A., Thériault, M., & Beaudoin, M. (1996). Shopping centres and house values: an empirical investigation. *Journal of Property Valuation and Investment*, 14(4), 41-62.

Do, A. Q., Wilbur, R. W., & Short, J. L. (1994). An empirical examination of the externalities of neighborhood churches on housing values. *The Journal of Real Estate Finance and Economics*, 9(2), 127-136.

Espey, M., & Owusu-Edusei, K. (2001). Neighborhood parks and residential property values in Greenville, South Carolina. *Journal of Agricultural and Applied Economics*, 33(3), 487-492.

Farber, S. (1998). Undesirable facilities and property values: a summary of empirical studies. *Ecological Economics*, 24(1), 1-14.

Francois Rosiers, (2002). Power lines, visual encumbrance and house values: a microspatial approach to impact measurement. *Journal of Real estate research*, 23(3), 275-302.

Fottrell, Quentin. (2011). 10 Things Your Neighbor Won't Tell You. http://www.marketwatch.com/story/10-things-your-neighbors-wont-tell-you-1307481521780, last visited 1/28/2016.

Gibbons, S. (2004). The Costs of Urban Property Crime. *The Economic Journal*, 114(499), 441-F463.

Harding, J. P., Rosenblatt, E., & Yao, V. W. (2009). The contagion effect of foreclosed properties. *Journal of Urban Economics*, 66(3), 164-178.

Hite, D., Chern, W., Hitzhusen, F., & Randall, A. (2001). Property-value impacts of an environmental disamenity: the case of landfills. *The Journal of Real Estate Finance and Economics*, 22(2-3), 185-202.

Hughes, W. T., & Sirmans, C. F. (1992). TRAFFIC EXTERNALITIES AND SINGLE-FAMILY HOUSE PRICES. *Journal of Regional Science*, *32*(4), 487-500.

Ihlanfeldt, K., & Mayock, T. (2010). Panel data estimates of the effects of different types of crime on housing prices. *Regional Science and Urban Economics*, 40(2), 161-172.

La Roche, C., Waller, B., & Wentland, S. (2014). "Not in My Backyard": The Effect of Substance Abuse Treatment Centers on Property Values. *Journal of Sustainable Real Estate*, 6(2), 63-92.

Lin, Z., Rosenblatt, E., & Yao, V. W. (2009). Spillover effects of foreclosures on neighborhood property values. *The Journal of Real Estate Finance and Economics*, 38(4), 387-407.

Linden, L., & Rockoff, J. E. (2008). Estimates of the impact of crime risk on property values from Megan's laws. *The American Economic Review*, 1103-1127.

Linn, J. (2013). The effect of voluntary brownfields programs on nearby property values: Evidence from Illinois. *Journal of Urban Economics*, 78, 1-18.

Mieszkowski, P., & Saper, A. M. (1978). An estimate of the effects of airport noise on property values. *Journal of Urban Economics*, *5*(4), 425-440.

McCluskey, J. J., & Rausser, G. C. (2003). Stigmatized asset value: is it temporary or long-term? *Review of Economics and Statistics*, 85(2), 276-285.

Nelson, A. C., Genereux, J., & Genereux, M. (1992). Price effects of landfills on house values. *Land economics*, 359-365.

O'Byrne, P. H., Nelson, J. P., & Seneca, J. J. (1985). Housing values, census estimates, disequilibrium, and the environmental cost of airport noise: A case study of Atlanta. *Journal of Environmental Economics and Management*, 12(2), 169-178.

Pope, D. G., & Pope, J. C. (2012). Crime and property values: Evidence from the 1990s crime drop. *Regional Science and Urban Economics*, 42(1), 177-188.

Pope, J. C. (2008). Fear of crime and housing prices: Household reactions to sex offender registries. *Journal of Urban Economics*, 64(3), 601-614.

Reichert, A., Small, M., & Mohanty, S. (1992). The impact of landfills on residential property values. *Journal of Real Estate Research*, 7(3), 297-314.

Rossi-Hansberg, E., P-D. Sarte, and R. Owens. Housing Externalities. *Journal of Political Economy*, 2010, 118, 485–534.

Simons, R., & Saginor, J. (2006). A meta-analysis of the effect of environmental contamination and positive amenities on residential real estate values. *Journal of Real Estate Research*, 28(1), 71-104.

SAMHSA. National Survey on Substance Abuse Treatment Services (N-SSATS). 2008. http://www.samhsa.gov/samhsanewsletter/Volume 18 Number 1/TreatmentFacilities.aspx.

Shaffer, H. Overcoming Addiction Paths Toward Recovery—A Harvard Medical School Special Health Report. 2012.

Spahr, Ronald, and Mark Sunderman. "Valuation of property surrounding a resort community." *Journal of Real Estate Research* 17.2 (1999): 227-243.

Taylor, S. M., & Hall, F. L. (1977). Factors affecting response to road noise. *Environment and Planning A*, 9(5), 585-597.

Thaler, R. (1978). A note on the value of crime control: evidence from the property market. *Journal of Urban Economics*, 5(1), 137-145.

Thibodeau, T. G. (1990). Estimating the effect of high-rise office buildings on residential property values. *Land Economics*, 402-408.

Turnbull, G.K., Waller, B.D., Wentland, S.A., Witschey, W. and Zahirovic-Herbert, V. (2015). The Impact of Historical Rehabilitative Tax Credits on the Marketing Outcomes of Neighboring Properties. Working paper.

Wang, K., Grissom, T. V., Webb, J. R., & Spellman, L. (1991). The impact of rental properties on the value of single-family residences. *Journal of Urban Economics*, 30(2), 152-166.

Wentland, S., Waller, B., & Brastow, R. (2014). Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. *Real Estate Economics*, 42(1), 223-251.

BENNIE D. WALLER, PhD

Office Address
Longwood University
201 High Street
Farmville, VA 23901
(434) 395-2046 - Office
(434) 395-2203 -Fax
wallerbd@longwood.edu

Home Address 804 First Avenue Farmville, VA 23901 www.benniewaller.com bdw@benniewaller.com

BIOGRAPHY

Bennie D. Waller is Professor of Finance and Real Estate and Department Chair in the College of Business and Economics as well as the Director of the Center for Financial Responsibility at Longwood University. Dr. Waller's research and consulting is largely focused in the area of principal-agent and housing externality issues in residential real estate and the use of automated valuation models. He holds active real estate salesperson and appraisal educational licenses in Virginia.

Dr. Waller has published in the leading real estate journals which include Real Estate Economics, Journal of Real Estate Finance and Economics and Journal of Real Estate Research among others. Furthermore, his research has been cited in top media outlets such as MSNBC.com, SmartMoney.com and the Wall Street Journal. Dr. Waller is also the co-author of two real estate textbooks; Real Estate Finance and Investment Decisions in Real Estate.

EDUCATION

University of Mississippi

Major: Management Information Systems, Ph.D., 2007

Dissertation: Decision Support Systems: Agent Based or Query Based for Better Residential Real Estate Decision Making.

Major: Finance, Ph.D., 1998

Dissertation: Location, Location, Location: A Comparison of the Predictive Validity of a Neural Network and Regression Methodology and their Performance in the Construction of a Heterogeneous Residential Appraisal Model.

Minors: Real Estate, Management Information Systems and Quantitative Methods

University of North Carolina-Wilmington, MBA - 1993

Longwood University, BSBA - 1990

OTHER PROFESSIONAL LICENSES

- Real Estate Appraiser, Mississippi 1998-2002
- Real Estate Appraiser Education, Virginia 2007-present
- Real Estate Broker, Mississippi 1998-2002
- Real Estate Salesperson License, Virginia 2007-present.

RELEVANT EXPERIENCE

Director, Center for Financial Responsibility: Longwood University

2013 - Present

Responsibilities include;

- Fund raising
 - o Grant funding (\$15,000) to pilot dual enrollment program in economics and personal finance, 2013
 - o Local fund raising to sponsor dual enrollment program (\$5,000), July 2014.
 - o Grant funding to install streaming video equipment (\$15,000) for course delivery options.
- Community outreach
- Dual enrollment initiative with Virginia High Schools to offer state mandated economics and personal finance class
- Continuing education

Department Chair, Accounting, Economics, Finance and Real Estate and ISCS: Longwood University 2008 - present

Responsibilities include but not limited to;

- Networking with internal and external constituents for financial support, internship opportunities and speaking engagements.
- Scheduling and supervision of department which includes twelve full-time faculty members, several adjunct professors and administrative staff.
- Departmental budgeting including the allocation of scarce resources for faculty development and travel.
- Recruitment and preservation of top faculty members during severe budget crisis.
- Strategic planning for department including the promotion and fostering of professional development activities related to academic leadership, classroom instruction, instructional technology, and support staff development.
- Service as a member of the School of Business Administration and Economics' Administrative team in charge of strategic planning of the CBE's mission.
- Service as co-chair of the University's Academic Advisory Council (AAC) representing the department and college on academic issues.
- Monitoring all aspects relating to accreditation standards, both AACSB and SACS.

Full Professor: Longwood University 2012 - present

 Classes (undergraduate and graduate) include but not limited to corporate finance, managerial finance, personal finance, principles of real estate, real estate appraisal, real estate finance and investments and risk management.

Associate Professor: Longwood University 2006 – 2012

Assistant Professor: Longwood University 2003 – 2006

Assistant Professor: Auburn University Montgomery 2002 - 2003

Assistant Professor: Francis Marion University 1999 - 2002

Visiting Assistant Professor: University of Mississippi, Oxford, MS 1998 - 1999

Consultant: FNC, Inc., Oxford, MS 1997 – 1999

Graduate Instructor: University of Mississippi, Oxford, MS 1993 - 1998

Graduate Research Assistant: University of North Carolina, Wilmington, NC 1991-1993

Lecturer: Cape Fear Community College, Wilmington, NC 1991-1993

PUBLICATIONS

• Client Externality of Agents Selling Their Own Properties. Xun Bian, Geoffrey K. Turnbull and Bennie D. Waller. Journal of Real Estate Finance and Economics, forthcoming.

- Commission Splits in Real Estate Transactions: An Agency Problem? Xun Bian, Abdullah Yavas and Bennie D. Waller. Journal of Real Estate Finance and Economics, forthcoming.
- How Many Listings Are Too Many? Agent Listing Inventory and Sales Performance. Xun Bian, Geoffrey K. Turnbull, Bennie D. Waller and Scott Wentland. Journal of Housing Economics, forthcoming.
- The Role of Transaction Costs in Impeding Market Exchange in Real Estate (Best Paper Award). Xun Bian, Bennie D. Waller and Scott A. Wentland. *Journal of Housing Research*, forthcoming.
- Not in My Backyard": The Effect of Substance Abuse Treatment Centers on Property Values. Claire LaRoche, Scott Wentland and Bennie D. Waller. *Journal of Sustainable Real Estate*, 2014, 6:1, 63-92.
- What You Say Matters: The Impact of Broker Vernacular on Property Marketing Outcomes. Kimberly R. Goodwin, Bennie D. Waller and Shelton Weeks. *Journal of Housing Research*, forthcoming.
- Seller Over-Pricing and Listing Contract Length: The Effects of Endogenous Listing Contracts on Housing Markets. Randy Anderson, Ray Brastow, Geoffrey K. Turnbull and Bennie D. Waller. *Journal of Real Estate Finance and Economics*, 2014, 49:3, 434-450.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Scott Wentland, Bennie D. Waller and Ray Brastow. *Real Estate Economics* 2014, 42:1, 223-251.
- Two Sides of Dual Agency: Evidence from Homebuyers and Transactions. Jon Wiley, Bennie D. Waller and Raymond Brastow. *Journal of Property Research*, 2013, 30:1, 47-66.
- **Dual Agency Representation: Incentive Conflicts or Efficiencies?** Ray Brastow and Bennie D. Waller. *Journal of Real Estate Research*, 2013, 35:2, 199-222.
- On the Likelihood of a Transaction and the Amount of Time Provided the Broker to Sell Property, Raymond T. Brastow, Ken H. Johnson and Bennie D. Waller. *Journal of Housing Research*, 2012, 21:2, 215-225.
- Efficiency and Incentives in Residential Brokerage, Raymond T. Brastow, Thomas Springer and Bennie D. Waller. *Journal of Real Estate Finance and Economics* 2012, 45:4, 1041-1061.
- Undergraduate Real Estate Appraisal in the United States. William Hardin, Bennie D Waller and H. Shelton Weeks. *Journal of Real Estate Practice and Education* 2012, 15:1, 19-31.

- The Impact of Agent Experience on the Real Estate Transaction. Bennie D. Waller and Ali Jubran. *Journal of Housing Research* 2012, 21:1, 67-82.
- Listing Contract Length and Time on Market, Bennie D. Waller, Raymond T. Brastow, and Ken H. Johnson. *Journal of Real Estate Research*, 2010, 32:3, 271-288. *Best Paper by ARES membership*, 2010.
- Liquidating Real Estate Assets Quickly: What Affects the Probability of a Quick Sale? Bennie D. Waller and Melanie Marks. Journal of Real Estate Practice and Education 2010, 13:1, 2010, 55-70.
- A Comparison of University Freshman and Faculty Perceptions of Academic Honesty, Mitchell Adrian, Sally Gilfillan, Wayne McWee and Bennie D. Waller. *Insights to a Changing World Journal* 2007, 3, 135-145.
- Minimizing Market Duration: The Strategic Selection of the Listing Brokerage Firm, Bennie D. Waller and David Ellis. ASBBS E-Journal 2006.
- Time on Market: An Analysis of Lake Properties, Bennie D. Waller and Cecilia Robinson. ASBBS E-Journal 2005.
- Improving Customer Service in the Real Estate Industry: A Property Selection Model Using Taguchi Loss Functions, Bennie Waller, Bryan Kethley and Troy Festervand, *Total Quality Management*, 2002, 13:6, 739-748.
- The Marketing of Industrial Real Estate: Application of Taguchi Loss Functions, Bennie Waller, Bryan Kethley and Troy Festervand, Journal of Multi-Criteria Decision Analysis 2001, 10:4, 219-228.
- An Appraisal Tool for the 21st Century: Automated Valuation Models, Bennie Waller, Neil Riley and Timothy Greer, Australian Property Journal, 2001, 36:7, 636-641.
- The Technological Astuteness of the Appraisal Industry, Bennie D. Waller, *Appraisal Journal* October 2000, 68:4, 469-473.
- A Survey of the Technological Astuteness of the Appraisal Industry, Bennie D. Waller, Valuation, Insights and Perspectives, 2000, 5:3, 14-16.
- Flaming Among First-time Group Support System Users, Milam Aiken and Bennie Waller, Information and Management 2000, 37:2, 95-100.

- EDI and E-Commerce: The Future of the Appraisal Industry, Bennie D. Waller, *Appraisal Journal*, 1999, 67, 370-374.
- The Impact of AVMs on the Appraisal Industry, Bennie Waller, Appraisal Journal, July 1999, 67, 287-292.
- A New Tool for the Pricing of Homeowner Association Dues, Bennie Waller and Milam Aiken, International Journal of International Information Management, March 1999, 10:1, 73-80.
- Predicting Prepayment of Residential Mortgages: A Neural Network Approach, Bennie Waller and Milam Aiken, International Journal of Information and Management Systems, December 1998, 9:4, 37-44.

PAPERS UNDER REVIEW

- Capitalization of Targeted Property Tax Relief in Home Prices: Evidence from Virginia Elections. Jeremy G. Moulton, Bennie D. Waller and Scott A. Wentland. Under review at Journal of Urban Economics.
- Do "Productive" Agents Really Deliver for their Clients? Geoffrey K. Turnbull and Bennie D. Waller. R&R at Journal of Real Estate Research.
- Dynamic Spatial Externalities and Real Estate Liquidity, Ray Brastow, Bennie D. Waller and Scott Wentland. Under review at *Journal of Real Estate Research*.
- Sex and Selling: Real Estate Agent Gender, Bargaining, House Price and Liquidity. Duong Pham, Geoffrey K. Turnbull and Bennie D. Waller. Under review at *Journal of Labor Economics*.

TEXT BOOKS

- Real Estate Finance. Phillip T. Kolbe, Gaylon E. Greer and Bennie D. Waller, Dearborn Financial Publishing Inc., 3rd edition, 2012.
- Investment Analysis for Real Estate Decisions. Phillip T. Kolbe, Gaylon E. Greer and Bennie D. Waller, Dearborn Financial Publishing Inc., 8th edition, 2013.

WORKING PAPERS

• Does Agent-Type Impact Marketing Outcomes? An Empirical Test of Agent-Owned Properties. Geoffrey K. Turnbull, Bennie D. Waller and Scott A. Wentland.

PRESENTATIONS

- Sex and Selling: Real Estate Agent Gender, Bargaining, House Price and Liquidity. Duong Pham, Geoffrey K. Turnbull and Bennie D. Waller. Presented at AREUEA annual meeting, San Francisco, CA, January, 2016.
- Capitalization of Targeted Property Tax Relief in Home Prices: Evidence from Virginia Elections. Jeremy Moulton, Bennie D. Waller and Scott Wentland. Presented at AEA annual meeting, San Francisco, CA, January, 2016.
- The Impact of Gasoline Prices on the Marketing Outcomes of Residential Real Estate. Ken H. Johnson and Bennie D. Waller. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- The Impact of Historical Rehabilitative Tax Credits on the Marketing Outcomes of Neighboring Properties. Geoffrey K. Turnbull, Velma Zahorivic-Herbert and Bennie D. Waller and Walter Witschey. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Island Property Management: Amenities and Dis-amenities in Paradise. Claire LaRoche and Bennie D. Waller. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Sex and Selling: Real Estate Agent Gender, Bargaining, House Price and Liquidity. Duong Pham, Geoffrey K. Turnbull and Bennie D. Waller. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Information Quality and Residential Real Estate Markets: Mistake or Market Manipulation? Xun Bian, Justin Contat, Bennie D. Waller and Scott A. Wentland. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Hot Markets, Cold Markets: An Alternative Housing Market Index. Xun Bian, Ray Brastow, Justin Contat, Bennie D. Waller and Scott A. Wentland. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Sources of Dual Agency in Housing Transactions. Ray Brastow and Bennie D. Waller. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Dynamic Spatial Externalities and Real Estate Liquidity, Ray Brastow, Bennie D. Waller and Scott A. Wentland. Presented at ARES annual meeting, Ft. Myers, FL. April, 2015.
- Foreclosure Externalities and Real Estate Liquidity. Xun Bian, Raymond T. Brastow, Bennie D. Waller and Scott A. Wentland. Presented at AREUEA annual meeting, Boston, MA. January, 2015.

- The Impact of Additional Education of Real Estate Professionals on the Outcome of Owner-Agent Properties. Geoffrey K. Turnbull and Bennie D. Waller. Presented at Academy of Financial Services Conference, Nashville, TN. October 2014.
- The Impact of Elections on Real Estate: Evidence from Residential Micro-data in Virginia. Jeremy Moulton, Bennie D. Waller and Scott Wentland. Presented at Southern Economic Association Conference, Atlanta, GA. November 2014.
- Termination of Listing Contracts: A Competing Risk Survival Analysis. Xun Bian, Chao Yue Tian, and Bennie D. Waller. Presented at ARES annual meeting, San Diego, CA. April, 2014. National Association of Realtors best paper award.
- The Practice of Client Farming by Real Estate Agents. Kimberly R. Goodwin, Edward Kinman and Bennie D. Waller. Presented at ARES annual meeting, San Diego, CA. April, 2014.
- The Impact of Elections on Real Estate: Evidence from Residential Microdata in Virginia. Jeremy Moulton, Bennie D. Waller and Scott Wentland. Presented at ARES annual meeting, San Diego, CA. April, 2014.
- Foreclosure Externalities and Real Estate Liquidity. Xun Bian, Raymond T. Brastow, Bennie D. Waller and Scott A. Wentland. Presented at ARES annual meeting, San Diego, CA. April, 2014.
- Agent Specialization and Transaction Efficiencies in Real Estate. Xun Bian, Raymond T.
 Brastow, Thomas Springer, Bennie D. Waller and Scott A. Wentland. Presented at ARES annual
 meeting, San Diego, CA. April, 2014.
- Not in My Backyard: The Effect of Substance Abuse Treatment Centers on Property Values.
 Claire LaRoche, Bennie D. Waller and Scott Wentland. Presented at ARES annual meeting, San Diego, CA. April, 2014. Best paper award.
- **Do "Productive" Agents Really Deliver for their Clients?** Geoffrey K. Turnbull and Bennie D. Waller. Presented at AREUEA annual meeting, Philadelphia, PA, January, 2014.
- How Many Listings Are Too Many? The Impact of Agent Inventory Externalities. Xun Bian, Geoffrey K. Turnbull, Bennie D. Waller and Scott Wentland. Presented at AREUEA annual meeting, Philadelphia, PA, January, 2014.
- Neighborhood Tipping and Sorting Dynamics in Real Estate: Evidence from the Virginia Sex Offender Registry (Best Paper Award), Xun Bian, Raymond Brastow, Michael Stoll, Bennie D. Waller and Scott Wentland. ARES annual meeting, Kona, HI, April 2013.
- How Many is Too Many? The Impact of Agent Inventory on Selling Price and Liquidity of Client Properties, Xun Bian, Geoffrey K. Turnbull and Bennie D. Waller. ARES annual meeting, Kona, HI, April 2013.
- Commission Splits in Real Estate Transactions: An Agency Problem? Xun Bian, Abdullah Yavas and Bennie D. Waller. AREUEA annual meeting, San Diego, CA, January 2013.

- Effects of Listing Broker Specialization. Ray Brastow, Tom Springer and Bennie D. Waller. SFA meeting, Charleston, SC, November 2012.
- Cumulative Probability of Residential Real Estate Sales and Listing Contract Length.
 Ray Brastow and Bennie D. Waller. ARES meeting, St. Petersburg, FL, April 2012.
- Commission Splits in Real Estate Transactions: An Agency Problem? Xun Bian, Abdullah Yavas and Bennie D. Waller. ARES meeting, St. Petersburg, FL, April 2012.
- The Examination of the Multi-tasking Agent. Xun Bian, Geoffrey Turnbull and Bennie D. Waller. ARES meeting, St. Petersburg, FL, April 2012.
- Signaling a Costly Transaction to Induce Dual Agency: Evidence from Virginia.

 Xun Bian, Bennie D. Waller and Scott Wentland. ARES meeting, St. Petersburg, FL, April 2012.
- The Dependency of the Real Estate Broker's Response Function on the Homeowner's Pricing Distribution. Geoffrey Turnbull, Bennie D. Waller, Randy Anderson, and Ray Brastow. AREUEA meeting, Chicago, IL, January 2012.
- The Performance of Owner-Agent Properties during Volatile Economic Conditions (Best Paper Award). Brandon Caracciolo (Honor's undergraduate student) and Bennie D. Waller. Clute Institute meeting, Orlando, FL, 2012.
- A Multi-Stage Hierarchical Process Using Taguchi Loss Functions And Regression To Appraise Residential Properties: A Second Look. Bryan Kethley, Brian Reithel and Bennie D. Waller. Clute Institute meeting, Orlando, FL, 2012.
- Incorporating Students into our Research: Experience in Real Estate. Bennie D. Waller and Ali Jubran. Invited presentation at Longwood's Presidential Inauguration lecture series. October, 2011.
- The Motivating Causes of Dual Agency Transactions: Specialization and Incentives Ray Brastow, Thomas Springer and Bennie D. Waller. ARES meeting, Seattle, WA, April 2011.
- The Role of Transaction Costs in Impeding Market Exchange in Real Estate (Best Paper Award). Bennie D. Waller and Scott Wentland. ARES meeting, Seattle, WA, April 2011.
- What You Say Matters: The Impact of Broker Vernacular on Property Marketing Outcomes. Kimberly Goodwin, Bennie Waller and Shelton Weeks. ARES meeting, Seattle, WA, April 2011.
- Listing Contract Terms and the Simultaneous Determination of Time on Market and Selling Price. Randy Anderson, Ray Brastow, Geoffrey K. Turnbull and Bennie D. Waller. ARES meeting, Seattle, WA, April 2011.
- The use of a Taguchi Loss Function as a mechanism for the selection of optimal comparable properties in the residential appraisal process (Best Paper Award). Bennie D. Waller and Bryan Kethley. Clute Institute meeting, New Orleans, LA, March 2011.

- The Transitory Nature of Real Estate Agents. Ali Jubran (undergraduate student) and Bennie D. Waller. Clute Institute meeting, New Orleans, LA, March 2011.
- How Close is Too Close? An Examination of School Quality and Proximity. William B. Lewis (MBA student) and Bennie D. Waller. Clute Institute meeting, New Orleans, LA, March 2011.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Ray Brastow, Bennie D. Waller and Scott Wentland. AREUEA meeting, Denver, CO, January 2011.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Ray Brastow, Bennie D. Waller and Scott Wentland. Research Seminar Federal Reserve Bank of Richmond, Baltimore, MD, January 2011.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Ray Brastow, Bennie D. Waller and Scott Wentland. Research Seminar Federal Reserve Bank of Richmond, Richmond, VA. November 2010.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Ray Brastow, Bennie D. Waller and Scott Wentland. Longwood Blackwell Talks, October 2010.
- Ethical Dilemmas Facing Today's Real Estate Professional, Bennie D. Waller, Paul Barrett, and Louise Waller. AABRI meeting, Orlando, FL. September, 2010.
- Undergraduate Real Estate Appraisal in the U.S. William Hardin, III, Bennie D. Waller and Shelton Weeks. ARES conference, Naples, FL, 2010.
- Pricing and Time Effects of Broker Incentives in Residential Real Estate. Ray Brastow, Thomas Springer and Bennie D. Waller. ARES conference, Naples, FL, 2010.
- Estimating the Effect of Crime Risk on Property Values and Time on Market: Evidence from Megan's Law in Virginia. Ray Brastow, Bennie D. Waller and Scott Wentland. ARES conference, Naples, FL, 2010.
- Dual Agency Representation: A Breeding Ground for Moral Hazard. Ray Brastow and Bennie D. Waller. Annual Southern Finance Association, Captiva Island, FL; November, 2009.
- The use of a Taguchi Loss Function as a mechanism for the selection of optimal comparable properties in the residential appraisal process. Bennie D. Waller, Bryan Kethley and Brian Reithel. DSI annual meeting, New Orleans, LA; November, 2009.
- The Impact of Gas Prices on the Marketing Duration of Residential Real Estate. Louise Waller and Bennie D. Waller. AABRI, Orlando, FL, October, 2009.

- Broker and Seller Incentives at Listing: Simultaneous Determination of Contract Length and Time on Market. Bennie D. Waller and Ray Brastow. American Real Estate Society conference, Monterey, CA; April 2009.
- The Probability of Dual Agency (Best Paper). Bennie D. Waller and Ray Brastow. American Real Estate Society conference, Monterey, CA; April 2009.
- The Impact of Listing Agent Characteristics on the Residential Sales Process. Bennie D. Waller and David Olsen (undergraduate honor student), ASBBS Conference, Las Vegas, NV, 2009.
- Two-Stage Least Squares: Simultaneous Determination of Days on Market, Length of Contract, and Percentage Overpriced, Bennie D. Waller, Ray Brastow and Caitlin Hooe (undergraduate honor student), ARES Conference, Captiva Island, FL, 2008.
- Information Asymmetries: Does a moral hazard AND adverse selection situation exist for properties sold in less than thirty days?, Bennie D. Waller, Caitlin Hooe (undergraduate honor student) and Ray Brastow, ASBBS Conference, Las Vegas, NV, 2008.
- Small Business Ownership as Part of an Integrated Personal Financial Plan, Bennie D. Waller, John Gaskins and Arora Sangeeta, ASBBS Conference, Las Vegas, NV, 2008.
- Using Geographic Information Systems to Assess Consumer Real Estate Market Conditions, Bennie D. Waller, John Gaskins, ASBBS Conference, Las Vegas, NV, 2008.
- The examination of the relationship between real estate brokerage firms and home inspectors: Is the relationship truly arms-length? Bennie D. Waller, Chad Roberson (undergraduate student), ASBBS Conference, Las Vegas, NV, 2008.
- Maximization or Minimization; How asymmetric information contributes to the conflicts of dual agency representation, Bennie D. Waller, Amy Swayne (undergraduate student), and Claire LaRoche, ASBBS Conference, Las Vegas, NV, 2008.
- The Correlation between Author Characteristics and Demographics and Publication Success in Operation Management Journals, Bennie D. Waller, Bryan Kethley, ASBBS Conference, Las Vegas, NV, February, 2005.
- An Analysis of Factors Leading to Password Security Failures, Bennie D. Waller, Bryan Kethley and Dean Cleavenger, ASBBS Conference, Las Vegas, NV, February, 2004.
- From Full Time Faculty To Administrator, Bennie Waller, Robert Barrett and Neil Riley, *Annual Meeting of SE INFORMS*, Myrtle Beach, SC, 2001.

- A Comparison of Algorithms Used in Automated Valuation Models: A Neural Network Approach to Residential Property Appraisal, Bennie D. Waller and Timothy Greer. Annual Decision Sciences Institute, Orlando, FL, 2001.
- The Pricing of Homeowner's Association Dues using Neural Networks, Bennie D. Waller, Bryan Kethley and Timothy Greer. Annual Conference of the Decision Sciences Institute, New Orleans, LA, 1999.
- The Estimation of the Appraisal Valuation Function using a Neural Network Methodology and the Inference of its Estimated Derivatives on Residential Appraisals, Bennie D. Waller, John Johnson and William Rayburn. Annual Meeting of the Financial Management Association, Honolulu, HI, 1997.
- An Investigation of the Effects of Professional Management on Homeowner Association Dues: A Field Study of the North Carolina Beaches, Bennie D. Waller George Izzo and Ronald Copley Annual Meeting of the American Real Estate Society Meeting, Sarasota, FL, 1997.

TESTIMONY AND EXPERT REPORTS

- Expert Report of Bennie D. Waller in Re: <u>Regional Multiple Listing Service (RMLS) of Minnesota, Inc., dba NorthstarMLS vs. American Home Realty (AHRN) vs. Edina Realty, Inc., and Home Services of America (HSA), Inc.</u> The United States District Court, District of Minnesota, Case No. Civil No. 12-CV-0965 JRT/FLN, November 18, 2014.
- Supplemental Expert Report of Bennie D. Waller in Re: Regional Multiple Listing Service (RMLS) of Minnesota, Inc., dba NorthstarMLS vs. American Home Realty (AHRN) vs. Edina Realty, Inc., and Home Services of America (HSA), Inc. The United States District Court, District of Minnesota, Case No. Civil No. 12-CV-0965 JRT/FLN, January 18, 2014.
- Deposition of Bennie D. Waller in Re: <u>Regional Multiple Listing Service (RMLS) of Minnesota, Inc.</u>, <u>dba NorthstarMLS vs. American Home Realty (AHRN) vs. Edina Realty, Inc.</u>, <u>and Home Services of America (HSA), Inc.</u> The United States District Court, District of Minnesota, Case No. Civil No. 12-CV-0965 JRT/FLN, January 28, 2014.

MEDIA

- Quoted in "Longwood real estate faculty rank among best in the world for contributions to field" by Matthew McGregor, January 6, 2016. http://www.longwood.edu/2016releases-63930.htm
- Research featured in "Pricy Gas Leads to Lower Home Prices" by Adam Bonislawski in Wall Street Journal (online and print editions) October, 21, 2015. http://www.wsj.com/articles/pricey-gas-leads-to-lower-home-prices-1445437786

- Quoted in "Area Gas Prices Falling Sharply" by Chris Suarez at http://www.dailyprogress.com/news/lower-gas-prices-bringing-more-fun-to-summer-plans/article_e0e7dbf0-3a30-11e5-8ea7-9b5107b6c573.html, August 3, 2015.
- Quoted in "Eight Experts Weigh in on Managing Student Debt." July 26, 2015. https://www.totalmortgage.com/total-path/eight-experts-student-debt/
- Quoted in "An Iran deal would help drivers and home sellers." By Philip Walzer in Virginia. Virginia Pilot, online and print, July 9, 2015.
- Quoted in "Are you ready to own your first home? 6 Questions to ask yourself now." April 21, 2015. www.mainstreet.com
- Research cited in "The Closer the Broker, the Quicker the Close" by Adam Bonislawski in Wall Street Journal (online and print editions) March 27, 2015. http://www.wsj.com/articles/homes-closer-to-brokers-offices-sell-faster-1427301063
- Quoted in "Getting the Most Out of Your Home Inspection" by Aaron Crowe at http://realestate.aol.com/blog/2015/03/08/getting-most-home-inspection/, March 8, 2015.
- Quoted in "Should You Sell Your House or Renovate It?" by Geoff Williams at http://money.usnews.com/money/personal-finance/articles/2015/03/06/should-you-sell-your-house-or-renovate-it, March 7, 2015.
- Quoted in "Teaching Common Cents: The Current state of financial literacy education in Virginia" by Chip Knighton, Disclosures, March/April, 28:2, 2015, pp. 14-17.
- Quoted in "Should You Use a Credit Card to Pay Taxes?" by Miranda Marquit at
 http://www.thecreditsolutionprogram.com/should-you-use-a-credit-card-to-pay-taxes, January 13,
 2015.
- Quoted in "5 things to consider for Brevard real estate" at www.flordiatoday.com, January, 2015.
- Quoted in "Seven Real Estate Trends to Watch For in 2015" at www.homefinder.com, January, 2015
- Quoted in "Who really benefits from a real estate dual agent?" by Ray Akers at www.madisonparktimes.com, November, 2014.
- Research cited in interview "Are Foreclosures Still a Threat in Today's Market?" with Karen Simpson-Hankins (archived link), a radio talk show covering real estate and financial literacy topics. November, 2014.
- Quoted in "Why Jumbo Mortgages are so Cheap" by Aaron Crowe at www.mortgageloan.com, November, 2014.
- Research cited in "Treatment Centers Can Impact Home Prices" in Daily Real Estate News at http://realtormag.realtor.org/daily-news/2014/10/17/treatment-centers-can-impact-home-prices, October 17, 2014

- Quoted in "10 biggest mortgage mistakes, by Amy Fontinelle at www.Interest.com, October, 2014.
- Quoted in "The Return of Stated Income Loans" by Aaron Crowe in <u>www.mortgageloan.com</u>, October, 2014.
- Quoted in "4 Things to Know Before Suing Your Landlord" in <a href="www.huffingtonpost.com/realtorcom/realto
- Guest interview on "Surviving the Credit Crisis "Are You Looking for an MBA in Real Estate" with Karen Simpson-Hankins (archived link), a radio talk show covering real estate and financial literacy topics. August, 2014.
- Quoted in "10 Cheapest States for Mortgage Rates" by Christina Lavingia in http://www.gobankingrates.com/, August, 2014
- Quoted in "A landlord's dos and don'ts" by Kate Ashford in bbc.com, July 29, 2014.
- Quoted in "This is still the easiest way to lower your mortgage payments" by Sarita Harbour at https://homes.yahoo.com/news/easy-way-to-lower-mortgage-payment-012445479.html July, 16, 2014.
- Research cited/referenced in "Better Words, Higher Prices" by Jim Karrh on arkansasbusiness.com, July 21, 2014.
- Quote in article "Don't let bad finances stop you from getting a mortgage" by Terri Williams on Yahoo.com, June 23, 2014.
- Quoted in article "Want to Flip a House? Here's How to Actually Make a Profit" by Lisa Rowan on thepennyhoarder.com, June 24, 2014.
- Guest interview on "Surviving the Credit Crisis "Unusual Location Factors That May Affect Your Property Value!" with Karen Simpson-Hankins (<u>archived link</u>), a radio talk show covering real estate and financial literacy topics. April 23, 2014.
- Quoted in article "How student loan debt is holding back first time buyers" by Tim Manni on HSH.com, June 9, 2014.
- Guest interview on "Surviving the Credit Crisis "Unusual Location Factors That May Affect Your Value" with Karen Simpson-Hankins, a radio talk show covering financial literacy topics. April 21, 2014.
- Quoted in article "On inspections and appraisals" by Christine Bahls on philly.com, April 20, 2014.
- Quoted in article "Dual Agency is Controversial among Brokers" by Christine Bahls on philly.com, April 13, 2014.
- Research cited in article, "What is a Word Worth?" by Sanette Tanaka in Wall Street Journal (print edition and online), April 10, 2014.

- Quoted in article "How Refinancing will save Homeowners \$21 billion this year" by Sarita Harbour on Yahoo! Homes, March 14, 2014.
- Guest interview on "Surviving the Credit Crisis "The Pros and Cons of a Dual Agency Real Estate Contract" with Karen Simpson-Hankins (archived link), a radio talk show covering financial literacy topics. January 27, 2014.
- Research cited in article, "How a Dual Agency Affects Sale Prices" by Sanette Tanaka in Wall Street Journal (print edition and online), January 24, 2014.
- Quoted in article "10 Money Predictions for 2014" by Kristin Colella on mainstreet.com, December 26, 2013.
- Quoted in article "New Bill Prohibits Pre-Employment Credit Checks" by Rebekah Coleman on loans.org, December 23, 2013.
- Quoted in article "4 Reasons to Buy a House During the Holidays" by Jennifer Calonia on money.usnews.com, December 10, 2013.
- Quoted in article "Reading between the lines of real-estate lingo" by Nora Firestone on Hamptonroads.com, December 2, 2013.
- Interviewed for "8 News Investigates: Skeletons Behind Your Closet" by Kerri O'Brien on WRIC8 TV, Richmond, Virginia, November 25, 2013.
- Featured story "Study: Multiple Sex Offenders Can Affect Real Estate Values" on WVTF radio (NPR station) by Lisa Fenderson, November 22, 2013.
- Quoted in article "9 biggest mortgage mistakes" by Amy Fontinelle on interest.com, November 23, 2013.
- Quoted in article "Buyers should beware using seller's agent" by Michael Estrin on Bankrate.com, November 23, 2013.
- Quoted in article "Study: Sex offenders hurts sales" by Michael Buettner in Chesterfield Observer (print edition and online). November 13, 2013.
- Quoted in article "Credit Score May Include Rent, Utility Payments" by Aaron Crowe on theoreditsolutionprogram.com, November 19, 2013.
- Quoted in article "What is a liar loan?" by Isaac Juarez on Loans.org, November 5, 2013.
- Quoted in article "5 Homes That Can Be Hard To Mortgage" by Aaron Crowe on Mortgageloan.com, November 5, 2013.
- Quoted in article "5 Questions to Ask Your Real Estate Broker Up Front" by Jay Jenkins on MotleyFool.com, November 3, 2013.

- Quoted in article "6 Financial Horror Stories That Could Happen to You" by Jennifer Calonia on GoBankingRates.com, October 31, 2013.
- Featured article "Where sex offenders gather, home values drop" by Steve Vaughan in Virginia Gazette (print and online), October 18, 2013.
- Featured article "Measuring the Impact of Sex Offenders on a Real Estate Market: When the Negatives Start Registering" on PRWeb.com, October 16, 2013.
 - o Reprinted on wfmj.com, October 16, 2013.
 - o Reprinted on DigitalJournal.com, October 16, 2013.
- Guest interview on "Surviving the Credit Crisis" with Karen Simpson-Hankins (<u>archived link</u>), a radio talk show covering financial literacy topics. October 7, 2013.
- Featured article, "Sex Offender clusters impacting VA neighborhood" by Scott Wise on wtvr.com, October 3, 2013.
- Quoted in article "Real Estate Road Rage: How to Keep Your Cool While Closing" by Casey Bond on GoBankingRates.com, October 1, 2013.
- Quoted in article, "Long Term Auto Loans Create Emotional and Financial Burdens" by Rebekah Coleman on loans.org, September 27, 2013.
- Research cited in article, "The Price of Real-Estate Experience: \$25,000" by Sanette Tanaka in Wall Street Journal (print edition and online), September 13, 2013.
- Quoted in article, "Ask The Experts: What are the Pitfalls of Buying a Foreclosure?" on Cardhub.com, by Mark Huffman, August 16, 2013.
- Quoted and research cited in article, "A Narrow Focus Helps Real-Estate Agents" by Sanette Tanaka in Wall Street Journal (print edition and online), June 14, 2013.
- Featured article about innovative financial literacy program. Farmville Herald, summer 2013.
- Research cited in article, "Oliver Larry Beck Lawsuit: Family Of Molested Girl Want Sex Offender to Buy Home" on Huffingtonpost.com, March 18, 2013.
- Research cited in article, "Parents of molested girl try to force sex offender to buy their home", on MSN.com by James Eng, March 19, 2013.
- Quoted in article, "For Sale: Former Crime Scene", in Sioux City Journal by Molly Montag involving heinous crimes and their impact on property values, February 10, 2013.
- Quoted in article, "3 BR, hot tub, 3 murders: How homicide homes hold their secrets", in MSNBC.com article, June 26, 2012.
- Featured article, "Seller Beware", in *On Point*, summer, 2012.

- Guest interview on "The Property Beat" (<u>archived link</u>), a radio talk show covering real estate topics. June 9, 2012.
- Quoted in article, "Study: Housing Trust Fund would help boost Virginia's economy", in the Richmond Times Dispatch by Carol Hazard, September 9, 2011.
- Quoted in article, "Deadline looms for mortgage aid program", in the Richmond Times Dispatch by Carol Hazard, July 22, 2011. Reprinted in whole or part in godanriver.com, newsadvance.com, and personalloaninsurance.com.
- Quoted in article, "Windsor Farms foreclosure case a quagmire" in the Richmond Times Dispatch by Carol Hazard, June 28, 2011.
- Research cited in article, "10 Things Your Neighbors Won't Tell You" on SmartMoney.com by Quentin Fottrell, June 13, 2011.
- Research cited in article, "7 Neighbors That Can Hurt Your Home" in Mainstreet.com (MainST Real Estate) by Brian O'Connell, May 7, 2011
- Quoted in article, "Proposal to eliminate home tax break assailed" in the Richmond Times Dispatch by Carol Hazard, December 4, 2010. Reprinted in whole or part in queensforeclosures.net.
- News Interview, "Longwood University Study Shows Impact of Sex Offenders on Real Estate Sales" on WSET-13 (ABC) by Shelly Basinger, December 1, 2010
- Article feature, "Students Get a Lesson in Managing Their Finances Successfully" in The Rotunda by Tate Leftwich, March 31, 2010.
- Research presentation featured in article, "Waller Speaks on Megan's Law During Blackwell Talk" in The Rotunda by Laura Beth Stricker, October 6, 2009.
- Research cited in, "Research by Longwood business professors examines sex offenders' effect on home sales" in the Chronicle of Higher Education, August, 2010.
- Research featured in article, "Sex offenders as neighbors a realty factor" in the Richmond Times Dispatch by Carol Hazard, August 11, 2010.
- Research cited in article, "Live near a sex offender" in the Courier Record, August 19, 2010.
- Research cited in article, "LU Professors Examine Link Between Home Sales, Sex Offenders" in the Farmville Herald, August 13, 2010
- Research award featured in article, "Business Professors Receive National Award for Research Paper" in The Rotunda by Laura Beth Stricker, September 9, 2009.
- National Public Radio Interview (NPR's With Good Reason) entitled "The misalignment of incentives in the real estate industry", aired January 24, 2009.
- Quoted in article, "No harm in asking" on SpokesmanHomes.com by Barbara Ballinger, Fall, 2009

- Research cited in web article, "Does the market penalize overpriced listings?" by Austin Jaffe, Summer, 2009
- Quoted in article, "Mortgage plan called a good step" in Richmond Times Dispatch by Carol Hazard, February 19, 2009
- Research cited in web article, "Analyze This" by Jack Harris, October, 2008.
- Research in cited Chronicle of Higher Education web article, "Advancing undergraduate research", October, 2008.

SELECT UNIVERSITY/COLLEGE SERVICE

- Longwood Magazine Advisory Board (2012-present)
- Quality Enhancement Plan (QEP) for SACS reaccreditation.
- AACSB Steering Committee member (2011-2012)
- University Budgeting committee (2010-2011)
- Chair of Academic Advisory committee on department chair compensation
- Curriculum committee chair (2004-2007)
- COBE Senator (2007-2008)
- Club advisor (2003-present)
- Educational Policy Committee member (2004-2008)
- COBE student awards committee member (2006-2007)
- Intercollegiate Athletic Council (2005-2006)
- Academic Advisory Council (2008- present) (co-chair, 2010-present)
- Intellectual Contributions committee (2008-present) (chair, 2009-present)

EXTERNAL/PROFESSIONAL SERVICE

- Session Chair, American Real Estate Society Meeting, 2015
- Adhoc reviewer for Journal of Urban Economics
- Adhoc reviewer for Journal of Real Estate Research
- Session Chair, American Real Estate Society Meeting, 2013.
- Adhoc reviewer for Journal of Housing Research
- Adhoc reviewer for Journal of Property Research
- Adhoc reviewer for Automation in Construction
- Adhoc reviewer for Journal of Real Estate Practice and Education

STUDENT RESEARCH

- Brandon Caracciolo, The Impact of Owner/Agent properties on the Real Estate Transaction, 2012.
 Presented at Clute Institute, Orlando, FL 2012, Best Paper Award.
- William Lewis, How Close is Too Close? An Examination of School Quality and Proximity, 2011.
 Presented at Clute Institute, New Orleans, 2011.

- Ali Jubran, The Transitory Nature of Real Estate Agents, 2011. Presented at Clute Institute, New Orleans, 2011.
- Jessica Tamplett, The Impact of First Time Home Buyer Tax Credit on Residential Real Estate Investment Trusts: A Test of Market Efficiency, 2010. Presented at Allied Academies, New Orleans, 2010.
- Cory Nichols, Wordy or Worthwhile: A Study of Real Estate Agent Comments and Perceived Values, 2009-2010. Presented at ASBBS, Las Vegas, 2010.
- Brandon Caracciolo, Selling Your House in 30 Days: Is it Good Luck or Moral Hazard? 2010.
 Presented at ASBBS, Las Vegas, 2010.
- David Olsen, The Impact of Listing Agent Characteristics on the Residential Sales Process, 2009.
 Presented at ASBBS, Las Vegas, 2009.
- Amy Swayne, Maximization or Minimization: How Asymmetric Information Contributes to the Conflicts of Dual Agency Representation, 2008. Presented at ASBBS, Las Vegas, 2008.
- Chad Roberson, The Examination of the Relationship Between Real Estate Brokerage Firms and Home Inspectors: Is this Relationship Truly Arms-Length? 2008. Presented at ASBBS, Las Vegas, 2008.
- Caitlyn Hooe, "The Examination of the Strategic Role of Listing Contract Duration and Time on Market: A Two-Stage Least Squares Approach", 2008. Presented at ASBBS, Las Vegas, 2008.
- David Ellis, Minimizing Market Duration: The Strategic Selection of the Listing Brokerage Firm, 2007. Presented at ASBBS, Las Vegas, 2007, Best Paper award.
- Matthew Davis, Two Stage Least Squares; The Simultaneous Determination of Days on Market and Length of Contract, 2006. Presented at ASBBS, Las Vegas, 2006.
- Cecilia Robinson, Time on Market: An Analysis of Lake Properties, 2004-2005. Presented at ASBBS, Las Vegas, 2005. Best Paper award.

PROFESSIONAL AFFILIATIONS

- Financial Management Association
- Southern Finance Association
- American Real Estate Society
- American Real Estate and Urban Economics Association

HONORS/AWARDS

- National Association of Realtor Brokerage award at American Real Estate Society (ARES) best paper award (Termination of Listing Contracts: A Competing Risk Survival Analysis), 2014.
- American Real Estate Society (ARES) best paper award-Out of the box category (Not in My Backyard": The Effect of Substance Abuse Treatment Centers on Property Values.), 2014.

- American Real Estate Society (ARES) best paper award (Transaction Signaling: Evidence from Virginia), 2013.
 - American Real Estate Society (ARES) best paper award (The Probability of Dual Agency), 2009.
- Beta Gamma Sigma Honor Society, 2010
- Journal of Real Estate Research best paper award (Listing Contract Length and Time on Market), 2010.
- American Real Estate Society (ARES) best paper award (The Role of Transaction Costs in Impeding Market Exchange in Real Estate), 2011.
- Red Pen Award, Journal of Housing Research, 2012.
- Dominion Power Higher Education Partnership grant, 2012
- American Real Estate Society (ARES) best paper award (Neighborhood Tipping and Sorting Dynamics in Real Estate: Evidence from the Virginia Sex Offender Registry), 2013.
- Interdisciplinary grant to develop GIS/Real Estate class, Longwood University, 2013.

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Respectfully submitted,

Bennie D. Waller, PhD