Urban Real Estate: Highest and Best Use

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Abstract

This paper explores community and public policy constraints in the developing the highest and best use (HBU) of a property and presents a model that considers regulatory variables present in determining HBU. Forces shaping HBU from citizen stakeholders, political and regulatory controls are discussed. The model developed in this paper applies to an urban (re)development setting and provides an understanding of the social, legal, and economic constraints facing real estate appraisers in the determination of a methodology to address changing property use.

Introduction: The Illusive Nature of Highest and Best Use (HBU)

The interest in preparing this paper is in response to the growing involvement and power of regulatory and community based stakeholders (citizen groups, neighborhood activists, special interest groups, politicians and other land use advocates) in controlling the highest and best use (HBU) of property. The confrontation between regulatory/community interests and ownership interests is most prevalent in property development or redevelopment. Additionally, academic literature over the past decade has been relatively silent in exploring the development of HBU issues surrounding regulatory and stakeholder interests. This is perplexing given that the determination and control of HBU occurs in the public entitlement and regulatory decisions that control property use, design, zoning and size.

The appraisal professional literature tends to be focused on the traditional factors on HBU analysis. For the determination of the legally permissible component of HBU, there seems to be a preoccupation and limitation to only the views of government agencies in the appraisal professional education literature (Munizzo and Musial, (2009), Appraisal Institute, (2008), American Society of Farm Managers and Rural Appraisers, (2000). However, there is a growing recognition that citizen empowerment trends over land use decision making (Fanning, (2005), is gaining a foothold in professional appraisal practice. Indeed, the professional appraisal community must be more engaged and observant of citizen influence

over HBU especially in urban settings. The HBU driving force of maximization of profits is a mythical Shangri-La and the selection of the most intense, legally permissible use is unrealistic, rarely achieved and the concept has no practical value for the appraiser (Thair, 2001). Consequently, it is unacceptable (Eaton, (1995) that "some appraisers always seem to conclude that a reasonable probability that a rezoning exists, while others never conclude that this probability exists."

Over the years, real estate appraisers and academics have observed changes in the elements and processes that determine HBU. As such, the definition of HBU has undergone as many manifestations, clarifications, reconsiderations and definitions. Accordingly, property valuation theory and appraisal practice have evolved to recognize the economic, social, financial, regulatory and legal changes with HBU. However, academic discussions of HBU issues and theory lately have been neglected. This is surprising given current urban development issues involving private/public partnerships, public subsidies to developers, growing land use controls and the growing community stakeholder demand for greater input on land use decision-making. This paper builds on the existing economic, political, social and legal research in an effort to expand our understanding of the determinants of HBU.

The goal of this paper is to present a model which more fully considers the legal construct of HBU resulting from citizen stakeholders, political and regulatory controls. While this model is most applicable in a property redevelopment setting, it also has applications in providing a better understanding of the social, legal, and economic constraints facing changing property use and property markets. One may ask, "Why is this model needed?" The existing research on HBU clearly incorporates the role of community stakeholders in the HBU decision continuum through the existing appraisal tenets of legally permissible, physically possible, financially feasible and maximally productive. However, we argue that the HBU context for real estate (re)development project approval is much more complex, citizen empowerment and activism in the development process has become greater, and that there is a growing connection between community social and economic issues and real estate development than what was recognized by previous research on HBU.

Literature Review

The determination of HBU serves as a principal basis for conducting a real estate market analysis and for selecting comparable properties to estimate value in property appraisal assignment. Regulatory controls place growing constraints on the ability of developers and property investors to obtain the desired use of a property which reflects the highest market value. The appraisal industry (Appraisal Institute 2008, Appraisal Institute 2010) currently uses the following definition of HBU in appraisal practice: "The reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported and financially feasible and that results in the highest value." Under this definition, real estate appraisers apply four successive tests of possible property use to formulate an opinion of HBU: legally permissible, physically possible, financially feasible and maximally productive.

The four HBU tenets require a balance in relationships and constraints among the physically possible, legally permissible and feasible financial property components. Within these constraints real estate appraisers formulate the HBU of a property and identify comparable properties. The current definition of and process to determine HBU is the product of multiple professional and scholarly attempts at refinement and exactness. Dotzour, Grissom, Liu and Pearson (1990) in their paper, "*Highest and best use: The evolving paradigm*", Grissom (1983) in his paper, "*The Semantics debate: Highest and best use vs. most probable use*", and Vandell (1990) in his paper, "*Toward analytically precise definitions of market value and highest and best use*", provide insightful typologies of the polemics seeking a consistent and explicit framework and definition of HBU. It is important to point out that the evolution of the definition of HBU includes both a clear definition of HBU but also a formal model—not simply a process.

The literature on HBU presents a clear distinction between the HBU model and the HBU process employed by appraisers. Indeed, the HBU model and a HBU process reflect two schools of thought. This dichotomy is discussed by Wilson (1995) in his paper: "*Highest and best use analysis: Appraisal Heuristics versus economic theory*". The two diverging approaches to HBU are also known as the traditional approach which reflects the practices and terminology of the appraisal profession and the contemporary approach, which is based on an economic or theoretical method. In the determination of HBU appraisers must

incorporate past experience, knowledge of real estate markets, land use regulation, investor behavior and other inferences into the determination of a property's HBU. But to make a determination of HBU without consideration of a structured analytical approach (a theoretical model) is troublesome. Indeed, an observer could conclude that without the existence of a HBU model, little if any systematic or meaningful consideration of HBU occurred as part of an appraisal process. More importantly, the dovetailing of the experiential heuristic approach with the structure and benefits of a systemic model would meet the expectations of the marketplace for appraisal services. Indeed, while Wilson (1995) is extremely critical of modeling HBU he stated:

Despite the harsh criticism of the contemporary theorists, one respects their wish to improve on the analytical processes of heuristic highest and best use analysis. A huge and unfortunate surplus of office space exists that a more effective form of highest and best use analysis might have averted, at least partially.

The relationship of appraisal HBU to economic theory has a history dating back to the early 19th century in the work of Johann von Thunen (in Wolverton, 2004) and David Ricardo (in DiPasquale and Wheaton, 1996). The roots of HBU are conflicting in the attributes of what constitutes the basis of HBU—the utility of the property or the context in which the property is located. Dotzour et al. (1990) noted the longstanding and conflicting roots in the economic work of Von Thunen which views HBU either as a function of location or of urban structure (macro), and Ricardo which views HBU as a function of physical and legal property attributes (micro). Clearly, both Ricardo's and von Thunen's concepts have contributed to defining HBU. However, in a real estate (re)development setting were regulatory changes are needed by investors or developers to achieve HBU, the theoretical conflict between micro and macro centers on one of individual wealth maximization versus community welfare (Colwell, 1988).

Consequently, the relationship between investor wealth maximization and community welfare must be in balance for investment or (re)development to occur. The real estate development industry in the US provides abundant examples of how the relationship between wealth maximization and community welfare are critical to a more refined understanding of HBU. Webb (1980) in his article, "*Highest and best use: A critical reexamination*", identified

the importance of risk factors association with alternative property uses and the need to recognize risk in the determining HBU. Developers must understand the “individual wealth maximization” / ”community welfare risk” tradeoff to successfully (re)develop a project. The need for community and political support of a (re)development proposal is central to project approval, zoning changes, variances, density issues, infrastructure support, public financing and subsides.

Compound legal and urban structure issues in HBU face (re)developers. One observer (NAIOP, 2004) of the forces over land use pointed out that the growing influence of community leaders, environmental activists, smart growth, and citizen action groups totaling over 28,000 organizations (not including numerous ad hoc community groups organized around a particular project) were “keeping a hawk’s eye view on business behavior.” Indeed, Thomsett (2004) in his book, *NIMBYism Navigating the Politics of Local Opposition*, noted that as long as a politician can justify their opposition to a project on some basis (environmental, growth management, legal interpretations) they can find a way to vote against a project no matter what the law says. Public involvement in (re)development is required (US Environmental Protection Agency, 2002) in what to build, where to build, and how to build along with public evaluation of site plans and the multiple phases of site planning. DeLisle (2004) noted the importance of the community in property development risk in quoting James Graaskamp: “the best risk management device for the producer group, which is usually the lead group in the initiation of project is thorough research so that the development product fits as closely as possible to the needs of the tenant or purchaser, the values of the politically active collective consumer, and the land-use ethic of the society.” Indeed, the assumption (Peiser and Hamilton, 2012) that ownership rights to determine property use is not a given, and developers who do not understand this end up in litigation.

On the basis of property rights theory, Buitelaar and Segeren (2011) opine in their paper, *Urban structures and land: The morphological effects of dealing with property rights*, that the relationships among the assignment of the bundle of rights over land, the delineation of property rights (control by the public sector), and the land resource’s value is dynamic and subject to social interaction and construction. The bundle of rights metaphor is some type of moving target where definition and exactness are poorly defined. Indeed, as Epstein (2011)

points out, when we deal with property rights the fear is that the people who put the bundle together are public authorities who, for reasons that only they know, parcel it out as they see fit.

Clearly, an appraiser's determination of a property's highest and best use, a requisite consideration in all appraisal assignments, must integrate the legal, economic, financial, and physical aspects of and forces on a property—factors that can vary widely from assignment to assignment and from parcel to parcel. Wendt (1972) in his article, "*Highest and best use—Fact or fancy*", identified the quintessence of the theoretical thinking about HBU. That is the determination of HBU is ultimately an appraisal opinion (based on the appraiser's judgment and predilections) which can be expected to vary widely among appraisers, and that it should be the goal of the theorist to aid in the development of that structure. Accordingly, this paper presents a methodology to better understand the changing dynamics of HBU as a result of the influence to which community power structure and public policy initiatives affect the legal permissibility constraint in the HBU process.

A great deal of thought has been devoted to the financial characteristics of HBU and how, based on the financial outcomes (and limitations) of property performance, HBU should be considered. Clearly, in most HBU cases and in past times, the financial HBU model is most prominent. However, with the increasing power of community groups and broader governmental policy goals shaping property use, the theory of HBU is in need of reexamination. An emerging body of economic literature is expanding our interpretation of property rights and accordingly, HBU. Boydell, Searle and Small (2007) in their article, "*The contemporary commons: understanding competing property rights*", provide an example of a mosaic of new property rights. This "mosaic" of new property rights, in addition to HBU, identified 16 interacting components that define urban common property. It is important to note that the impetus behind the role of new property rights is that we are in an era of constrained government capital expenditure with governance replacing government in meeting shortfalls in the public provision of space.

The investment interests that determine HBU are constrained by regulatory (governance) controls driven by multiple interest groups and a complicated institutional structure. The institutional structure facilitates bargaining (North, 1990) between interest groups and that the

multiplicity of interest groups reflects concentrations of voters in particular areas. Beatly (1994) noted that even the staunchest supporters of the concept of private property rights (with perhaps the exception of libertarians) acknowledge that collective constrains must be placed on land. The so called “bundle of sticks” reflecting property rights is diminishing by social and environmental circumstances.

From a theoretical perspective Grissom (1983) developed a graphic interpretation of HBU which shows the legal constraints, physical limitations, and necessary infrastructure which identified the “production-possibility frontier—or use capacity—of any site” and Venn diagrams illustrating the forces shaping the HBU of a property. These graphic depictions of HBU trace a semantics debate seeking exactness in the definition and nature of what constitutes HBU. The evolution of the professional definition of HBU has been traced by multiple academics (Vandell (1982), Grissom (1983), Dotzour, Grissom, Liu and Pearson (1990), and Rabianski (2007)) and is largely centered on the development and application of the HBU definition advanced by the appraisal industry (American Institute of Real Estate Appraisers, Society of Real Estate Appraisers, and Appraisal Institute) and allied organizations. From an appraisal perspective, Vandell (1982) called for the development of a consistent and clear definition of HBU based on the importance of HBU in property valuation and the ambiguity in the meaning that HBU reflected in the existing appraisal literature. Critical to appraisal practice was the need for appraisers to develop an appropriate and procedural methodology to structure the relevant variables of HBU and market conditions. Vandell formulates a probability matrix for a case study which considers user behavior, property use, and price (most probable, expected, median and maximum) reflecting the HBU/Market Value relationship.

Rabianski in his 2007 paper, “*Comments on the Concept and Definition of Highest and Best Use*,”identified the HBU relationships of physically possible, legally permissible and financially feasible in a Venn diagram with a goal to develop a recognized and recommended standardized definition. Since HBU definition(s) appear in appraisal texts, workbooks, appraisal terminology dictionaries and most importantly, appraisal reports, the HBU Venn diagram contains three (physical, legal & financial) intersecting and slightly overlapping circles with the overlapping area representing those possible land uses which meet all three criteria. Ultimately, a parcel’s HBU will be that particular property from within the area

joining all three circles which yields the greatest financial benefit (i.e., it is maximally productive). However, the polemics surrounding HBU, as Rabianski point out, are not that simple or straightforward. Specifically, legality of use can be bifurcated into legal and illegal which can be, for a particular parcel, altered through social activism, community demands, or political action.

The land use constraint of legal permissibility plays a significant role in determining HBU. Perhaps the most common issue in HBU is a zoning change which would remove current zoning restrictions and elevate property utility and thereby financial returns to an investor or developer. Similarly, the granting (or disallowing) of other forms of public entitlements, variances, planned unit developments, conditional use permits and subsidies are also important as zoning to HBU because they also control the allowed feasible set of uses and the resulting financial performance of a property.

Determining HBU in relation to the Community/Regulatory Environment

The challenges facing an accurate assessment of HBU of a property coalesce at the overlapping segment of physically possible, financially feasible and legally permissible uses. Investment and development HBU seeks the maximally productive use contained within the overlapping segment but often can accept less than maximum legal determination of use. It is the contention of this paper that HBU in an urban (re)development context is being shifted by a movement of the legally permissible uses as a result of citizen, special interest advocacy and political constraints.

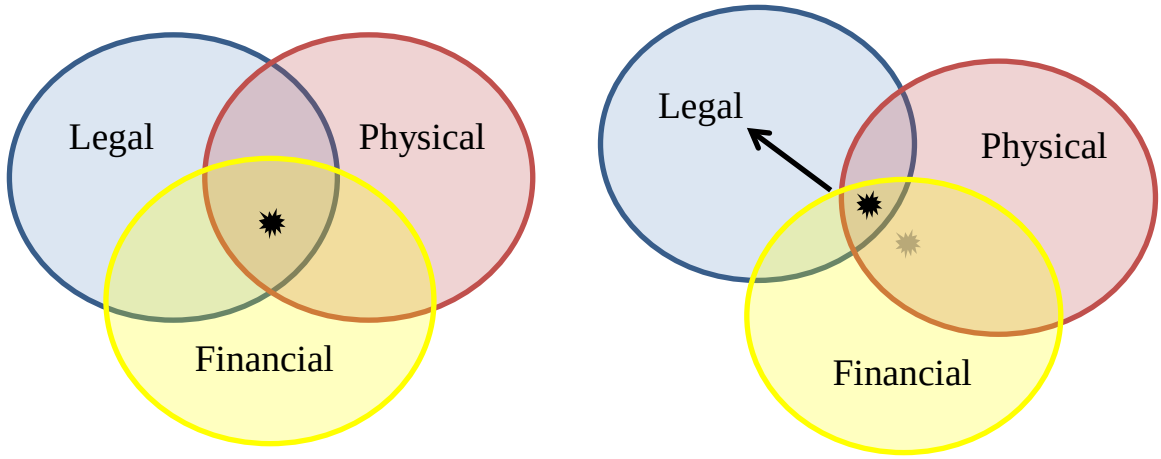
Peiser and Hamilton (2012) noted that development rights have been eroded as a result of municipal fiscal health, quality of life issues and that in many cases the response has been to increase regulatory control over property. Peiser and Hamilton noted that:

"*Municipal strategies range from the blunt instrument of comprehensive downzoning (reduction of allowed density across a zoned area) to a set of more finely tuned incentives to locate and shape allowable development where political opposition will allow it or where infrastructure better supports it.*"

When a Venn diagram is constructed representing the three elements of HBU, the legally permissible use, per Peiser and Hamilton shifts outward reflecting a declining utility in HBU.

Exhibit I

Constraints on Legally Permissible HBU



The left Venn diagram shows the initial case with HBU represented by the black star in the intersection of the three circles. The right Venn diagram shows the new HBU (dark star) due to social and/or political constraints affecting legal permissibility, and the old HBU is noted by the lightly shaded star in the intersection between only the physical and financial circles.

Alternatively, we can look at the degree of regulatory control constraining either an existing HBU or the potential for changing the HBU to provide greater property utility. There are multiple scenarios for constructing a HBU stratification based on regulatory constraints and community opposition. The type of property, location, possible area issues, level of community activism and opposition to change in use, land use planning goals, area revitalization goals, and community design review are a few of these factors. Additionally complicating an assessment of change in HBU is the intensity of opposition that a municipality, politician, neighborhood or activist group has against a change in use or against the existing HBU.

From a real estate appraiser's standpoint the best benchmarks for the determination of HBU rest with an analysis of the interface of changing market activity, community character and community (re)development. Also, this analysis of the general HBU framework must consider possible mitigating factors that would alter community or political opposition to an alternative HBU. Mitigating factors include the alternative contributions to area development, area employment, blight removal, pollution remediation, traffic, parking and related externalities.

A good approach to understanding the appraiser's assessment of the likelihood of retaining a current HBU or the possibility of a higher more productive HBU can be found in the construction of a stratification of potential property uses. This stratification would be centered on an assessment of the legally permissible and delineated on the likelihood that certain prospective outcomes could occur. However, consideration of the legally permissible would not be disconnected from the interrelationships among the physically possible, financially feasible and maximally productive aspects of the property and environment.

Exhibit II

Stratification of HBU and Determinants of HBU Change

Legally Permissible HBU	Assessment of Determinants
	Degree of community and special interest group opposition to change in use. Fit with comprehensive plan, municipal development plans, and municipal staff support. Availability of public subsidies. Degree of neighborhood/area opposition. Economic and tax contribution.
Creation of a Planned Unit Development	
Obtaining an Industrial Zoning Classification	
Obtaining a Community Retail Zoning Classification	
Obtaining a Neighborhood Retail Zoning Classification	
Obtaining a Large-Scale Multifamily Zoning Classification	
Obtaining a Small Scale Multifamily Zoning Classification	
Obtaining a land Subdivision	
Obtaining a Zoning Variance	
Obtaining a Conditional Use Permit	
Obtaining a Required Operating License	
Current Use	

Conclusion

The determination of HBU can become an insurmountable problem for real estate appraisers. Too often the existing use is accepted as "Highest and Best". While it is true that most often the existing use is the actual HBU, the recidivism created by this condition shades the appraiser's perception of other forces shaping HBU. Similarly, in cases where a change in HBU is contemplated, due to lack of experience and knowledge, the appraiser is ill equipped to properly and adequately consider alternative uses and the associated likelihood of any possible change occurring. Clearly, the polemics debating HBU will accelerate as urban areas face (re)development and property investors and developers seek higher/more productive uses for their properties. At this same time community stakeholders will weigh-in with public concerns for use of private property.

References

American Society of Farm Managers and Rural Appraisers and the Appraisal Institute, (2000). The Appraisal of Rural Property, Chicago: Authors.

Appraisal Institute, (2009). *Appraisal of Real Estate 13th Ed*., Chicago: Author.

Appraisal Institute, (2010). *The Dictionary of Real Estate Appraisal 5th Ed*., Chicago: Author.

Beatly, T., (1994). *Ethical Land Use Principles of Policy and Planning*, Baltimore: Johns Hopkins University Press.

Buitelaar, E and Segeren, A., (2011). Urban structures and land. The morphological effects of dealing with property rights. *Housing Studies* 26 (5).

DeLisle, J.R., (2000).Graaskamp: A Holistic Perspective. In J.R. DeLisle and E. Worzala (Eds.), *Essays in honor of James A. Graaskamp: Ten years after* (pp.51-86) New York: Kluwer Academic Publishers Group.

DiPasquale, D. and Wheaton, W., (1996), *Urban Economics and Real Estate Markets,* New Jersey: Prentice Hall.

Dotzour, M.G., Grissom, T.V., Liu, D.H. and T. Pearson, (1990). Highest and best use: The evolving paradigm. *Journal of Real Estate Research*, 5 (1).

Eaton, J.D. (2005). *Real Estate Valuation in Litigation*, Chicago: Appraisal Institute.

Epstein, R.A., (2011). Bundle of rights theory as a bulwark against statist conceptions of private property. *Economic Journal Watch*, 8 (3).

Fanning, S.F., (2005). *Market analysis for real estate: Concepts and applications in valuation and highest and best use.* Chicago: Appraisal Institute.

Grissom, T.R., (1983). The Semantics debate: Highest and best use vs. most probable use. *Appraisal Journal*, 51 (1).

Munizzo, M.A. and Musial, L.V.(2009). *General Market Analysis and Highest and Best Use,* Mason: Cengage

North, D.C., (1990). *Institutions, institutional change and economic performance,* Cambridge: Cambridge University Press.

Rabianski, J.S. (2007). Comments on the concept and definition of highest and best use. *Real Estate Issues,* 32 (1).

Vandell, K.D., (1982). Toward analytically precise definitions of market value and highest and best use. *Appraisal Journal*, 50 (2).

Webb, J.R., (1981) Highest and Best Use: A critical reexamination. In American Institute of Real Estate Appraisers (Ed.), *Readings in highest and best use.* (143-151). Chicago: American Institute of Real Estate Appraisers.

Wendt, P.F., (1981). Highest and best use: Fact or fancy (April, 1972). In American Institute of Real Estate Appraisers (Ed.), *Readings in highest and best use.* (133-143). Chicago: American Institute of Real Estate Appraisers.

Wilson, D.C., (1995). Highest and best use analysis: Appraisal heuristics versus economic theory. Appraisal Journal, 63 (1).

Wolverton, M.L., (2004).Highest and best use: The von Thunen connection. *Journal of Real Estate Research*, 26 (4).

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