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UNLOCKING
the full value of
GREEN HOMES

Why Green Multiple Listing Services are a Key to Residential Energy Efficiency
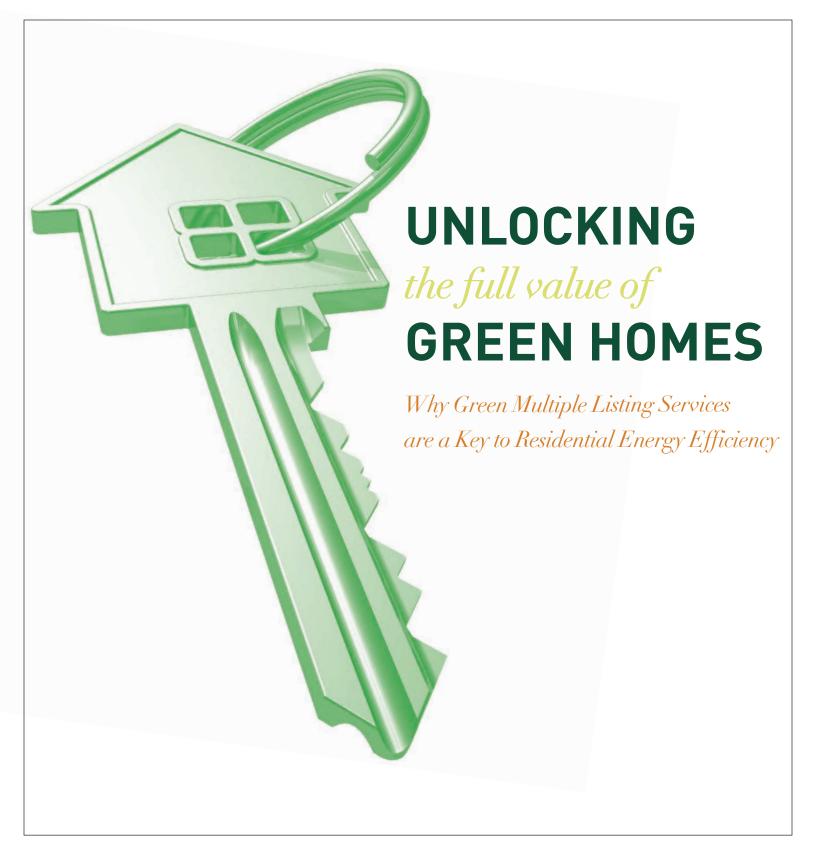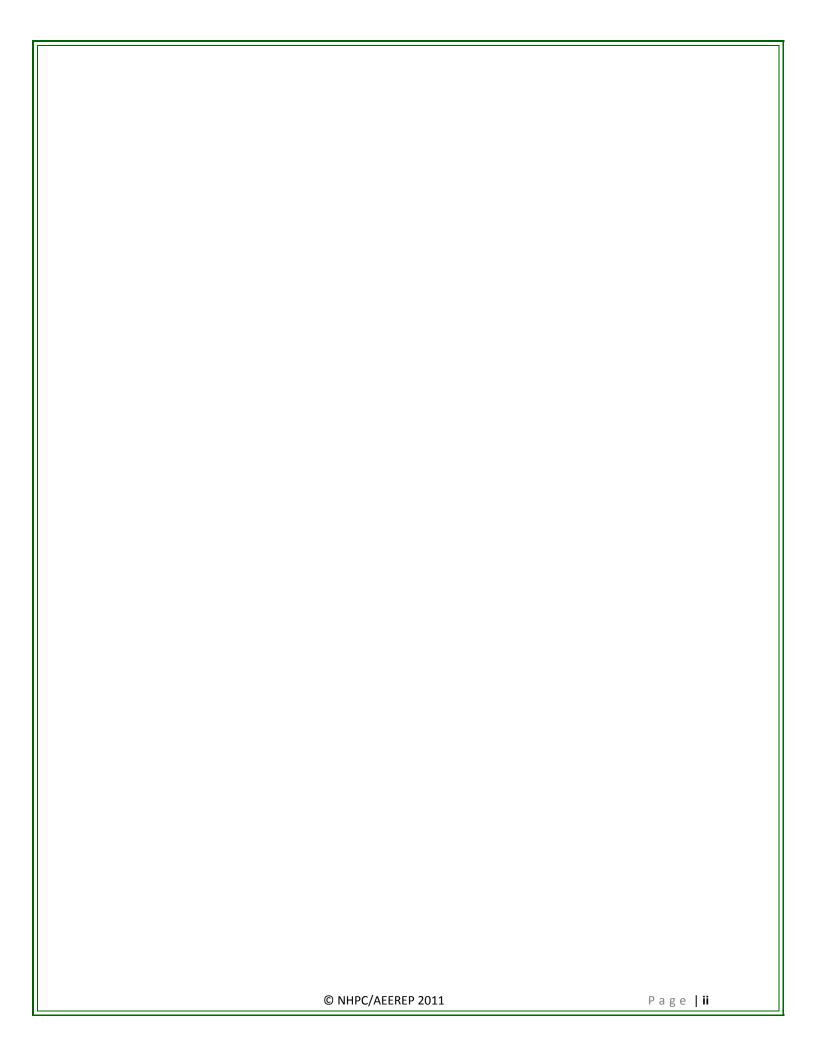
UNLOCKING THE FULL VALUE OF GREEN HOMES;

Why Green Multiple Listing Services are the Key to Residential Energy Efficiency

By

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WHERE'S MY GREEN REAL ESTATE PREMIUM?
MULTIPLE LISTING SERVICES AND COMMUNITY STAKEHOLDERS HOLD THE KEY

The "green premium" is a crucial key to unlocking a more energy efficient future for America's residential buildings. When builders and homeowners become confident that energy efficient, environmentally sustainable homes will sell for a higher price, sell more quickly, and/or sell at all relative to otherwise identical homes lacking these features — the "green premium" — they will have a real, market-driven incentive to invest the resources necessary to build green homes and carry out energy efficiency retrofits. When homebuyers become confident in the existence of a "green premium," they will be able to justify paying higher purchase prices for energy efficient, environmentally sustainable homes on the grounds they will be able to recoup their investment when they sell. They are also able to enjoy "green" features such as high-quality, non-toxic indoor air and consistent heat and cooling at lower cost in the interim. The stakeholders who buy, sell, build, and retrofit green housing stock must come together to document the reasons for a green premium and capture the information in localized, user-friendly, highly credible databases that allow for complete property disclosure and informed consumer decision-making.

To date, verifying the existence of a "green premium" has challenged industry experts. Although anecdotal information exists in abundance, few rigorous studies can demonstrate "green" features consistently add value to a home. In fact, some data suggest that green features are frequently misrepresented, misunderstood, or entirely ignored. This implies that improvements are only as good as the training of those who enter and interpret the data, and building improvements are only as good as ongoing training to ensure quality assurance, quality control, and proper reporting (documentation) of the performance measures in the first place.

The inclusion of a limited set of data fields that are easy to understand, explain, and compare within a significant number of MLSs would do more than any other single action to quantify and validate the existence of a green premium.

Multiple Listing Systems (MLSs) grew out of the need for real estate agents to promote properties they list (advertise) for sale. The MLS systems provide information in an organized and searchable fashion for the other agents in the market area, for appraisers, and for potential buyers of the properties.

Most MLSs have not been "greened"[1] to date because they are independently owned, and their ownership structure does not lend itself to easy change. Moreover, not all members of the real estate brokerage community see the short-term value of "green" MLS fields. Incorporating "green" fields into each of the nation's approximately 860 MLS systems one at a time is a Herculean project that would take many years to complete. The complete and thorough property disclosure implications of such a feat are, needless to say, daunting to some and inspiring to others.

 New templates for addressing these issues rapidly and effectively are under development. Among others, the State of Colorado and a partnership of private-sector partners have created and implemented a process for convening key stakeholders and modifying MLSs across a state of independent MLS structures. Can this be replicated and scaled across the U.S.? Are there better ways to do it? Experienced actors can effectively replicate this strategy in other States and to some extent (to be determined) across the nation— rapidly building a critical mass of "green MLSs."

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[1] "Greening the MLS" as used in this paper means incorporating searchable data fields that capture verified data regarding a home's performance with respect to energy consumption and environmental impact – typically in form of third party certification programs and labels.

This paper describes the stakes and stakeholders involved in greening the MLS systems, analyses the challenges involved, and summarizes what the green building stakeholder community can learn from Collaborative Green MLS Enhancement Model. This discussion concludes with a proposed framework for replicating collaborative stakeholder approaches, suggesting we're close to a breakthrough where states can now truly draw from the precedents to implement changes with speed and to scale.

WHAT IS THE GREEN PREMIUM AND WHY IS IT IMPORTANT?

The green premium is a market-driven increment to the pricing of new and existing homes that contain specific energy efficient characteristics and other environmentally-sensitive features.[2] The green premium is realized when homebuyers pay more (pay a premium, buy more quickly, and/or buy at all) for green-labeled homes and/or homes with energy and environmental features preferentially over traditional homes without green features. This premium would be a strong motivator for new homebuilders and owners of existing homes to incorporate green features in their properties. If a homebuilder, homeowner, or the real estate agent advising a homeowner can provide clear evidence that a higher performance home sells for a measurably higher price than a similar traditionally equipped home (or sells more quickly and/or sells at all), the buyer or owner has a clear and compelling reason to add those features to a property. This incentive exists whether improvements are made before or after a point of sale and/or through the tenure of home occupancy.

The Green Premium exists when homes with environmentally sustainable features for more (or more quickly or at all) relative to otherwise identical homes lacking these features.

Historically, the green premium has been difficult to recognize because it often (although not always) involves "invisible" improvements. The advances in building science are simply not as visible or as "sexy" as granite countertops and stainless steel appliances. Home buyers often need to "see it" and "feel it" for a feature to have value and justify a higher price. A well-sealed building envelope and a carefully designed HVAC system are often too abstract to produce the green premium alone. They can be made more tangible by comparative data backed up by third party certification, an energy evaluation, and/or through demonstration of increased value. Standardized "scoring" of home performance can create this basis for comparison if the scoring is generated by a trusted source and is readily available to the buyer. However, with a range of labels and scoring systems in use, and new ones coming on-line (including from the U.S. DOE) there is reasonable confusion in the market.

To date, there have been only minimally available sources for comparative data to separate the green premium value from the broader market in local real estate transactions. This paper asserts that greening the MLS at the local level can provide the missing link between green characteristics and market value, ultimately justifying the green premium.

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[2] Some might be tempted to say environmentally-sustainable, and others are professionally cautious about using the term sustainable.

The MLS is the primary source of information about properties and neighborhoods for real estate agents, appraisers, and ultimately for consumers.

The MLS is a local tool widely used by real estate agents and buyers investigating the market. It is the primary source for information about neighborhoods and individual properties. Until the local MLS systems contain specific factual information about the green features of residential and other properties, the energy and environmental benefits of these properties are relatively invisible to the market. A buyer is not likely to add dollars to an offer for a feature that was not included in marketing data. At best, the buyer may recognize a green feature in a home and see it as an incentive to purchase that home rather than another one. In other words, home sellers are not yet able to reliably capture a "green premium."

The residential real estate market has many stakeholders focused on delivering houses to consumers and/or improving existing housing of consumers, for sale or rent. Homeowners, real estate agents, builders, contractors, lenders, and appraisers all play key roles in designing and delivering green housing products. Those stakeholders who are seeking to provide a superior green product each have a contribution to make, but each faces unique challenges to realizing a green premium that are rarely overcome alone. Addressing the limitations of most current MLS systems by adding "green" data fields can play a crucial role in addressing the different needs of each of these stakeholders.

HOMEBUILDERS, ENERGY RETROFIT CONTRACTORS, AND BUILDING PRODUCT MANUFACTURERS
believe they should be able to capture a "green premium" as compensation for the additional investment necessary to build and produce to higher performance specifications. These builders, contractors, manufacturers, and the homeowners who benefit from their work, are justified in this belief, but they are frustrated by the mechanisms that drive values in residential real estate. The ultimate determinant of value is the price buyers will pay for a particular property with its unique set of characteristics and features.

Prior to the residential market collapse, an unpublished independent market survey in Colorado for a homebuilder's trade organization (Built Green) specifically targeted homeowners who had purchased a certified green home in the previous year. Of those purchasers, nearly 50% of respondents indicated they did not even know the home was certified. The remainder enjoyed the greener features, but stated they based their choice on other features such as location, schools, style and floor plan, and more visible features such as granite countertops and stainless steel appliances. Further study indicated that, as perceived by the purchasers, the project sales staff had not presented the green certification as important. This reluctance to present the certification was probably related to concern by the sales staff that: a) they would face technical questions they were not prepared to answer, and b) they could sell the homes in a strong sales market without reference to the green certification. Until green certification produces a green premium, builders don't have a motivation to feature their greener products, and buyers will not understand the benefits of energy efficiency and environmental stewardship.

The green MLS is the source from which stakeholders involved in residential real estate transactions can obtain reliable factual information to recognize the advantages of greener homes, inform the buying public, and begin to realize the green premium. Without reliable data, the quality builders and contractors cannot achieve the green premium in the pricing of properties with green features over traditional properties.

APPRAISERS
have professional responsibility for developing a supportable professional opinion on property, value based on local market conditions, and using long-standing, standardized methodologies. Are appraisers really the source of the problem because they don't know how to evaluate green properties? Emphatically, no! Appraisers do not "set" or "determine" value. They use the available data to make educated assessments. Most residential real estate transactions involving a mortgage require an appraisal, and the methods used are well defined for most such appraisals.

Simply put, appraisers establish their value estimates based on the market selling prices of similar properties near the "subject property" of the appraisal. The valuation will be most accurate when there are a number of comparable properties close to the subject and when those properties have sold within a reasonable period of time of the current appraisal. Generally, appraisers estimate the market value of the property's specific features through the comparison of similar properties that differ primarily as a result of the presence or absence of the feature in question. The value of a third garage parking space, for example, is determined by the difference in the sale prices of two similar homes in the same neighborhood under relatively stable market conditions, one of which has a two-car and one a three-car garage.

However, for value of a feature of a home to be calculated in this fashion, a large data set that includes specific details about the homes being valued must be collected. This is the crucial role of the MLS. The MLS is the repository for the many points of information about a residential property that, together, hint at its value. Determination of the value of individual features of a home is made through statistical calculations based on this MLS dataset. At this time, most MLS systems do not capture reliable data on green features and properties. The valuation of specific green features then requires substantial independent research and the data to allow for specific comparisons. Often, there are very few "comparison" properties that meet the other criteria for a valid comparable property with green features. Residential loan appraisal services are under considerable pricing pressure and the amounts paid for such an appraisal seldom justify the extra time to develop comparison data on green features. While many appraisers realize that a more efficient property should in theory command a higher value than a less efficient but otherwise identical property, they cannot assign value to a green feature without supporting data. These data must be included in a standardized format within an MLS before an appraisal can effectively assess the value of "green" features. It's all about the data.

The inclusion of green features and performance characteristics in the local MLS will allow both buyers and appraisers to recognize the differences that exist between properties with green features and more traditional properties. In residential properties, the appraiser can only recognize decreased operating expenses of green properties as adding value to the property if empirical data show that buyers have actually paid higher prices for MLS-listed properties with specific green features. As buyers become aware of the green features and favor the greener properties, the difference will show up in market valuation, and will then be recognized in appraisals.

As a result, until the MLS systems identify green features, thereby allowing for quantification of the green premium through the methods accepted by the appraisal industry, it will be difficult for appraisers to properly include the value of energy efficient and environmentally-sensitive property characteristics in their appraisals. Appraisers strive for accuracy and full disclosure in their work, but they must be able to support their opinion of value through accepted valuation methods.

> **LENDERS AND LOAN UNDERWRITERS** are under increasing pressure to provide clear factual data to support the collateral value of the properties on which they make loans. Unfortunately, those factual data are hard to find. The fact that a builder or homeowner spent $12,000 to install photovoltaic panels does not mean that the property would bring $12,000 more if the lender needed to foreclose and sell the collateral. Compelling market sales data are needed to show the value increase due to the solar electricity installation. If the lender cannot justify a higher collateral value and a correspondingly higher loan amount, the property will not be able to sustain a higher market price.

Most lenders also require a secondary market investor willing to accept the loan in an investment pool. At this time the secondary market of investors willing to accept such loans is limited. Loans with FHA insurance including FHA insured Energy Efficient Mortgages are quite readily accepted, but other forms of green loans (such as portfolio products held by specific lending institutions) are still more difficult to place due to the lack of accepted best practices in structuring and underwriting the loans. As the residential mortgage secondary market stabilizes, data collected by the local MLS and aggregated into national sources will provide substantial support for underwriting standards incorporating the green premium that are acceptable to both public and private secondary market providers. For both lenders and the secondary

market, the data provided by MLS systems is the key to changes in underwriting practices that recognize the value of energy efficiency and other "green" features.

> **REAL ESTATE AGENTS** play a key role in the vast majority of real estate sales and can be a crucial factor as advisors to the homeowner throughout the ownership cycle. In the normal process of marketing their services, real estate agents are in continual (lifelong and routine) contact with potential sellers and buyers of real estate in their local market. They often provide newsletters and other forms of advice with tips on everything from gardening to favorite recipes. They are a trusted resource for many homeowners, but they are only rarely perceived as knowledgeable in energy efficiency and building science. Education of real estate agents and the availability of quality comparative information in the MLS can help overcome much of the perception that these agents are not a knowledgeable resource. For the real estate professional, the trust she has built with the consumer (over what in some cases can be a lifetime) is both one of her most important assets and one of the biggest elephants in the room. The elephant-size unspoken issue is that both the real estate professional and the consumer know she has to do every thing she can to help the consumer at least maintain (or, better, enhance) the value of the consumer's property over the course of the homeownership. Why? Because if she doesn't help the owner maintain and/or improve the value of the property, and the owner must sell the property for $100,000 less than it's original purchase price, it is definitely less likely the owner will be able to look the real estate agent in the eye at the closing table, let alone list the property with her in the first place. This unspoken yet powerful alignment of incentives creates a substantial trust, and the best of real estate professionals leverage this trust to encourage home energy upgrades.

Real estate agents are also properly concerned with professional liability. The majority of claims to the providers of professional errors and omissions insurance for real estate licensees involve claims of misrepresentation of some feature or characteristic of a property. Many of these claims are not sustained as the responsibility of the real estate agent, but they still exact a cost in time and reputation. The highly technical areas of home performance and building science have long appeared quite risky for the vast majority of agents who are not technical experts and fear the myriad of additional energy and environmental questions from both sellers and buyers. Consistent information, provided and verified by technical experts, and made available in the MLS, provides a direct solution to this problem.

Real estate agents and their trade associations are often perceived as reluctant to accept changes requiring new disclosures. As real estate agents make a living by earning commissions on successful transactions, they are concerned about the success and timing of transactions. The vast majority naturally resists limitations imposed on real estate transactions that may slow the process or reduce the success rate. For this reason, the vast majority of agents do not generally support "point of sale" mandatory requirements for: a) minimum energy performance or b) mandatory audit and reporting of performance data. Information that is available and disclosed early in a transaction is less likely to cause any delay or unexpected cost. The best place for that disclosure is in the listed information provided by the local MLS. If the listing information discloses a Home Energy Rating System index or score, for example, the appropriate supporting documents can be provided along with explanatory material to assist the potential buyer and his or her real estate agent.

Given the state of confusion in the marketplace, informed real estate agents can play a crucial educational role. The new home buyer or the homeowner considering upgrading energy performance needs clear concise guidance with reliable data about the performance of different energy upgrades. Performance should include considerations such as the decrease in operating costs between the energy efficient property and its less efficient counterparts, as well as the impact of energy efficient and green features on the future market value of the property. This information needs to come through trusted channels and be specific to the individual situation. The real estate agent is perfectly positioned to provide this information: if he or she has it available through the MLS.

> **HOMEOWNERS** are in a position similar to the green builder. They must weigh the costs and benefits of an energy upgrade because these directly impact the homeowner's bottom line. Homeowners have been relatively

slow to select higher performance new homes or to perform energy upgrade projects on their homes. The reluctance boils down to motivation, money, and time. Most homeowners do not understand the benefits of energy efficient upgrades and they do not choose to invest their limited funds or time in a project of unknown value. They may also look at a rough payback period calculation and compare that with their likely remaining tenure in the property. Since the average ownership tenure (period) for a U.S. residence is about 5 years, if the payback period for an energy efficiency improvement extends beyond five years, owners often conclude, reasonably, that they won't even get their investment back. If, of course, they are planning on staying longer and/or perceive it as likely the next owner will also assign value in the improvements, these considerations may play a factor in the homeowner's decision-making. If the MLS can help demonstrate a green premium (of one sort or another), the property owner may also factor the prospect of a premium (may sell for more, sell faster, or sell at all) into her calculation, and tip the balance in favor of the energy upgrade.

The bewildered homeowner may buy the HD television instead!

The innate complexity of green home improvement and the many seemingly competing options create confusion in the minds of consumers. Confusion leads to inaction. Should the homeowner install more efficient windows, or would solar panels be better? Would more insulation be appropriate, or should he/she invest in geothermal energy (whatever that is)? With all of these options requiring costly upgrades, the homeowner holds back. A project perceived as expensive, with unknown benefits and an uncertain future value, does not attract the homeowner's money or time. He or she may opt for the HD television instead.

Several studies in local markets have indicated that certified third party-verified green properties sell more quickly and in some cases show a higher price per square foot than uncertified properties. These studies have been made possible because the local MLS added data fields for the certifications several years ago. The number of properties is still small, and the studies are valid only in limited areas, but they show the type of information that can be derived from a green MLS.

The higher price per square foot is consistent with the market reality that a buyer enters the market with a fairly constrained target price range. If a buyer is seeking a $250,000 home, he or she will not arbitrarily move to $350,000 to get a green certified home. Studies of the Portland, OR and Seattle areas suggest instead that buyers will purchase a smaller property with more efficient green features if they can find one; that is, they pay more dollars per square foot while staying within their price range. When they can identify the certified home and its benefits, they will pick higher quality in a smaller property. This is the steak vs. hamburger choice. These studies suggest a consumer preference for green homes, but it is difficult to translate these observations into a higher market pricing until an adequate database allows for comparison of the smaller green home with similar smaller traditional homes. Most such homes studied are new construction, because it is difficult to trace the green features and certification in the resale market without more detailed green data fields in the MLS. Again, the database of the green MLS provides the answers: a buyer can identify properties with green features and comparisons are available to support higher pricing, faster sales, and/or merely sales.

An online article by the Earth Advantage Institute states:

A recent study in Portland and Seattle that compared certified home values to conventional home values suggests that Portland certified homes fetched 3-5% more than conventional, while Seattle homes commanded up to 10% more. The most recent RMLS data for greater Portland and Vancouver, Washington (May 2010) suggests the average new home may have sold for 18% more than a conventional home, while the average existing certified home may have fetched a sales price of 23% more than a conventional home, even during a slow market. This is good news for builders and homeowners.

http://www.earthadvantage.org/building-green/value-of-building-green/economic-benefits/

In short, each of the stakeholders discussed above — builders, contractors, manufacturers, appraisers, lenders, real estate agents, and homeowners — is capable of recognizing the benefits of energy efficient and other "green" features for their interests, but needs a green premium for their interests to be fully realized. In each case, **the solution to demonstrating the existence of the green premium is the Multiple Listing Service.**

THE GREEN MLS SOLUTION

WHAT IS AN MLS?

Multiple Listing Systems grew out of the need for real estate agents to promote properties they list for sale. The MLS systems provide information in an organized and searchable fashion for the other agents in the market area, for appraisers, and for potential buyers of the properties. Once physical books, most MLSs are now sophisticated computer databases that contain large quantities of detailed information about clearly identified individual properties. When a sale is completed, the selling price is included in the data available to members. The data are used in both searches and statistical analysis regarding the values of specific residences and their features, as discussed above. In many cases the information is considered confidential and access is limited. Members of the system, including agents and appraisers, have access to the information and are responsible to abide by rules and limitations imposed by each individual system. Many systems (including national websites) also have a "public" side presenting selected information that is available to the public. Green building industry audiences are often surprised when they hear real estate industry professionals can be fined for inputting property data improperly.

Individual member agents routinely enter the data they have to describe a property they have listed. Typical fields include neighborhood, schools, architectural style, construction type, finished living area plus other unfinished areas, type of heating and cooling systems, property tax information, number of bedrooms, bathrooms and other living areas, and dozens of other features in specific data fields. The agent enters what is requested by the structured fields in each MLS, and omits other information. The accuracy of the information is the responsibility of the individual agent and brokerage company and is not often verified by the MLS. Inevitably, some factual and clerical errors occur in the systems, but they are typically identified and corrected as other agents use the information to help buyers select properties to view and buy.

Understanding MLS Structures

There are currently over 860 individual MLSs operating across the United States. Over 70% of these are affiliated with a local Realtor® Association[3]. These MLS businesses are not directly controlled by the National Association of Realtors®, but by a local board of directors and administrative staff. The remaining MLS providers are privately owned corporations that recruit members and provide services as private businesses. A larger MLS may have an entirely independent data system with internal staff for both administrative and information technology services. Other MLSs contract with national or regional providers for the data management system while they administer the membership locally and specify how services will be provided.

These various systems and providers have grown quite informally over a half a century, starting in the 1950's. The services owned by local Realtor® Associations are typically controlled by directors, elected from and by the real estate agents who receive services from the association in question. These directors typically serve on a volunteer basis and attempt to meet

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[3] Realtor® refers specifically to members of the National Association of Realtors® (NAR) and its state and local affiliated Associations. NAR is a private trade association. Each state regulates the licensing of real estate professionals, and state licensing does not equate with membership in NAR.

the needs of the members in their territory with the resources provided by member fees. Because these systems have developed so independently, each has its own unique rules and practices, and its own information technology system (in some cases incompatible with other IT systems). The National Association of Realtors® provides some general guidance documents for these locally controlled MLS systems, and encourages compliance and cooperation among them. However, NAR does not hold an ownership stake and cannot require compliance.

Localized MLS data systems form the basis for marketing both existing homes and new construction. These local tools support property searches, as buyers do their own research and as they work with professional real estate agents to locate and compare properties. The same tools are essential to the residential appraiser in analyzing the market to arrive at a supportable opinion of value for purchase decisions and mortgage lending. Analysis of the information also provides builders and re-modelers with guidance on the features valued by the local market. All these stakeholders derive benefits from MLS operations, and each has incentives and priorities when it comes to how MLS structures incorporate green features (including labeling and other specifics).

IS THERE A NATIONAL MLS, AND WHAT WOULD THE STAKEHOLDERS SAY?

There isn't really a national MLS at present, though a growing group of sites have some semblance of national and even international capability. While there are national aggregators of some of the data, the basic information content is collected on a local level and only shared with national organizations under agreements with each local MLS. Realtor.com is an example of an aggregator with broad cooperation from local MLSs, but only limited specific data is collected and made publicly available. Private organizations, such as Trulia and Zillow, contract with local MLS operators for specific parts of their data, and make that information and some analytical findings available to the public. No one of these aggregators controls the collection of the data or the formatting of the initial data collection. Most of these aggregators deal with properties currently on the market or very recently sold. Most do not as yet routinely maintain data on other properties.

The National Association of Realtors® is currently using its resources to produce a Realtor® Property Resource (RPR) database that will be available only to members of the National Association of Realtors®[4]. This database will contain and continually update information on properties including those currently on the market. Much of this information will be drawn from public records as well as cooperating MLS operations. This database is not intended to replace local MLS operations and will not collect property data directly. As green feature data fields become more commonplace and uniform in local MLS systems, this RPR database is expected to contain selected green fields aggregated from the local MLS as well.

In the absence of a nationally coordinated database, each of the nation's approximately 860 MLS systems must decide whether and how to incorporate "green" fields — unless a way can be found to make these changes in many MLS systems at the same time. The "data stakeholder" numbers are likely to continue to grow in this respect, as even national energy rating and other public and private sector energy and environmental industry partners are building databases to house, aggregate, and disseminate building performance data, property improvement records, and building labeling data.

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[4] Somewhere close to a third to a half of the total population of licensed real estate professionals in the U.S. are NAR members and pay for the right to call themselves Realtors®. The rest of the licensed real estate professionals in the U.S. and beyond make up the remaining population of professionals who can serve as licensed representatives for real estate clients and customers.

DOES A GREEN MLS SUPPORT OTHER PROPOSED SOLUTIONS?

Many useful and appropriate strategies for promoting residential energy efficiency through market transformation have been proposed and implemented. These include: inclusion of energy costs into standard mortgage loan underwriting considerations, public and private sector incentives for energy efficiency and other energy and environment improvements, stronger building codes, and labeling. A green MLS that collects data following the implementation of these strategies complements many of these solutions, and would actually be a necessary support for some initiatives to function successfully.

The need for specialized green financing will ultimately disappear when high performance homes are the market, and unimproved homes are simply obsolete. At this point, as Doug Seiter (U.S. DOE, Green Real Estate 2008) suggests, "we won't call them green buildings, we'll merely call them buildings." In the meantime, differentiating these properties with MLS data will permit selective lending and underwriting to promote and accelerate the improvement of the national housing stock. Proposed programs to include energy cost savings as a factor in loan underwriting and qualification will depend on MLS marketing systems to identify the properties that would benefit most from the enhanced underwriting. As an example, proposed legislation would establish a standard methodology for including an energy performance factor ("E") within the qualifying ratios now limited to Principle, Interest, Taxes and Insurance (PITI) as a percentage of monthly income. The energy factor calculation starts with a third party rating (such as a HERS rating) to compare the calculated energy consumption costs of the property with energy efficiency features to average energy consumption figures and costs from the U.S. Department of Energy. Energy costs below the average are reduced to a net present value, which is added to the property valuation by the appraiser or the loan underwriter. The higher value then produces a more favorable loan-to-value ratio, indicating a more favorable loan and easier qualifying by the buyer. A green MLS could capture information about which properties may be eligible for the beneficial E factor. Many stakeholders will have to play a role in getting a credible system of this nature out to the street, and working with all the interests involved.

Incentives for energy efficiency and other performance enhancing changes provide an important motivation for consumers, but in most cases the consumer must still use his or her cash, together with the incentive, to pay for the energy efficiency improvements. The decision to spend on an energy efficiency modification will be far easier if the property can be reasonably expected to have an improved equity value when the project is completed. The green MLS will recognize the improvements and provide the information that enables the marketplace to define the value.

Changes in building codes and product standards clearly drive better performance in new homes and equipment replacement, but they have only so much impact on the envelopes of existing housing stock beyond setting the accepted minimum performance. When MLS information clearly identifies properties with up-to-date performance and equipment, the market will provide additional incentive for owners to improve the performance of their properties. Homeowners will have additional incentive to recognize that an unimproved home will suffer in the marketplace once improved homes can be differentiated. Some initial data are suggesting improved properties may sell more quickly, closer to the asking price, or sell at all, relative to properties without performance-related improvements. These can all be considered examples of a green premium.

Uniform home performance labeling programs will create a common vocabulary to describe performance. With the labeling in place, MLS fields can be added to capture the labeling and its qualitative and quantitative impacts. Making that information available allows buyers to seek the higher-performing properties. Without the green MLS, buyers and real estate professionals seeking higher performance homes have more difficulty finding them among the many properties on the market.

As a national home performance database is developed, those data can support tools such as the Realtor® Property Resource and allow real estate agents and property owners to verify the information by consulting credible databases. The MLS and its aggregated data still provide the primary marketing information for buyers and agents at the local level. A

reliable national home performance database will allow verified information to be incorporated into routine marketing of homes for sale.

GREENING THE MLS SYSTEMS

The lack of a national MLS and the fragmented, local nature of the nation's 860 MLSs means that changing the "MLS system" — i.e. the way in which most MLSs do business – is not a swift or easy proposition. The MLS providers are an extremely important stakeholder in this process, with a great deal of history and understanding as to how things work in the property representation space. To date, most efforts to green the MLS system have been undertaken within individual MLSs in a single local market. The current implementation is slow, spotty, and irregular. The data captured are hard to compare from one system to another. Clearly, a strategy for rapidly greening many MLSs must be developed and implemented. This implies not only surveying and summarizing the successes achieved in greening MLSs to date, but carefully looking at how it happened, which stakeholders were involved, who needs to be engaged, and how to scale the momentum.

As local MLS members and administrators seek to implement green fields for their local MLS, their process will no doubt encounter some of the impediments that have slowed down many of the early adopters. As an example, several have initially encountered:

- Member resistance due to a lack of understanding of the purpose and benefits of these unfamiliar concepts;
- Legal caution from attorneys working with members and those advising the MLS operators to avoid creating liability by seemingly verifying information through inclusion in the MLS information;
- An inability to agree on the specific items that should be documented. Many stakeholders have specific suggestions for a great variety of specific, favorite features and performance measures that are beyond the technical expertise of real estate professionals and/or that do not often have third party verification;
- A justifiable concern on the part of MLS members that they will not have the knowledge to utilize the data fields correctly, thus risking potential liability and possibly doing a disservice to clients and customers through unintended "greenwashing";
- The pressures of the daily real estate business that overwhelm the decision making of the MLS operators and the directors who guide them;
- The high level of independence of real estate practitioners and the relative lack of organizing forces when compared to corporate governance. Cooperation is voluntary for any items not mandated by law.

Many MLSs have spent as much as two years deciding what to do, and an additional two years getting it into the field; only to find that they did not foresee the need for some specific policies and safeguards to ensure the smooth gathering of meaningful information.

The collaboratively-built Green MLS Toolkit available at www.greenthemls.com and the successes in many progressive MLS areas point the way to working through these potential barriers.

Leveraging much of the experience to date, a recent initiative has demonstrated a feasible strategy for moving the greening of MLS systems much more swiftly and effectively. This initiative, involving: statewide cooperation, a proven set of initial data points, and mentoring by a trusted local organizer bringing the accumulated experience of well over 100 of the nationwide MLS systems, can serve as a model for other states. This model may allow MLS systems to avoid dedicating the time, effort, and expense experienced by the successful early adopters. The balance of this paper describes this model and what stakeholders have contributed and accomplished to date.

The accumulated experience (and problems) of over 100 MLS early adopter systems will help other MLSs in avoiding unnecessary time, effort, and expense.

One of the most significant initiatives to encourage MLSs to work collaboratively in the future and incorporate green features at a significant scale has been developed in Colorado. In early 2010 the Governor's Energy Office of the State of Colorado (GEO), recognized the significance of greening the state's eighteen MLSs to support energy upgrade efforts through recognition of a green premium. The GEO convened a group of stakeholders to develop a process to "green" all the state's MLSs in a fairly short time frame. Over the course of the subsequent six months, the diverse group of stakeholders created an approach that allows the local MLS operators to implement changes compatible with their specific systems, while creating data fields with enough common elements to permit comparison between systems.

The "Colorado Model" used a process that can be replicated in other states and areas. The key to this approach is getting multiple MLSs to coordinate efforts and "green" their systems through a process that builds off previous lessons learned. Convening multiple MLSs can generate a group dynamic that builds momentum, a feeling of "security in numbers," and hence, opportunities for economies of scale.

This model offers these key components:

- ✓ **A set of committed local stakeholders who represent all key interests in greening the MLSs;**
- ✓ **The mediation of a trusted, "neutral" party (the Colorado GEO);**
- ✓ **MLS members willing to push the process forward from within;**
- ✓ **Recognition that the greening process should focus on a limited number of data elements that are easily standardized and easy to understand and explain;**
- ✓ **Professional expertise regarding the specific "green" data points for inclusion in the MLS;**
- ✓ **Education and training support for MLS members.**

A diverse set of strong, local stakeholders representing all key interests in the State's MLSs;

One of the most important keys to "greening" multiple MLS systems is to convene the correct stakeholders. As discussed earlier in the paper, many institutions have interests in whether and how an MLS incorporates "green" elements. Ideally, each of these institutions should be at the table in any discussion of how to "green" multiple MLSs within a given state or region.

In the case of Colorado, the GEO reached out to a broad range of stakeholders and opinion leaders, formed a working committee, and charged the committee with designing the solution that would fit in Colorado. The committee rapidly adopted the goal of "greening" the state's MLS systems and organized to provide a statewide model for the 18 independent MLS providers in Colorado.

The membership of the Colorado committee included all major stakeholder groups. A contractor who specializes in green building and renovation and works closely with the U.S. Green Building Council LEED for Homes certification program

chaired the committee. Other members included appraisers, MLS operating staff and directors, real estate agents (MLS customers) with specific experience in green real estate (including several EcoBroker Certified® agents), lenders, utility representatives, local government planning and code officials, energy raters, representatives from the USGBC Colorado Chapter, representatives from building materials producers, and representatives from the Association of Energy and Environmental Real Estate Professionals (AEEREP). Representatives from EcoBroker® International with experience in the implementation of green data fields in other markets and with founding experience on the ad hoc national committee responsible for the www.greenthemls.org website and the *Green MLS Toolkit* also provided support and guidance.

The group identified thought leaders and decision makers and recruited them to support the effort in each of the state's MLS territories. The stakeholders quickly realized that even within a single state, no single solution would fit all MLS needs. A flexible solution, available for voluntary adoption, stood the best chance of acceptance.

The mediation of a trusted, non-interested party (the Colorado GEO);

Trusted local leadership is essential for effective implementation. Ideally, the leader(s) acts as a champion of the project: convening stakeholders, mediating discussions, keeping the process moving forward, and possibly providing staffing or other resources. The leader must understand the unique characteristics of the local markets. Most importantly, the local leader(s) must have the confidence and trust of the stakeholders; it is crucial that the leader not be seen as either biased or self-interested in the outcome of the initiative.

The Colorado model is a statewide process led by the Colorado Governor's Energy Office (GEO). All parties involved recognized GEO as having the broad goal of promoting the green MLS, but has no other specific "agenda". Other stakeholders may be perceived as having some organizational or commercial agenda that could interfere with the process. The GEO made it clear throughout the process that it has no jurisdiction over the MLS operations, and that any changes made would be voluntary and contingent on approval by the MLS in question.

The GEO provided limited grant funding for the actual costs associated with the implementation programming and management of the new data fields. The group was organized and encouraged by GEO staff. The GEO also provided grant funding for the development of a variety of training tools, including presentation materials to explain the process to local MLS administrators and directors, classroom training for MLS members to support the transition to the new fields, and training materials to remain available for reference and for future new members of the MLS. This range of support helps improve the likelihood the changes made to the MLS systems will be maintained and used over the long term.

At strategic points in the collaborative process GEO officials merely let the discussion evolve between the local MLS administrators and those in the room who represented their real estate customer base, customers with experience in greening MLS structures in other MLS operation territories in other states.

MLS members willing to push the process forward from within

The presence of experienced local real estate brokerage professionals deeply involved in the process provided representatives from the committee the credibility needed to speak effectively with the MLS operators in diverse market areas across the state. The local Realtor® associations served by these MLS operators protect the needs of their membership and are very reluctant to accept mandated changes not approved by their members. This is true now more than ever. The MLS operators are subject to the same market forces that have affected the real estate industry over the last several years. Their resources are stretched thin and they have plenty to do without taking on new challenges. In many cases, the MLSs may not be convinced that their membership wants the changes. The pressure for change must come from within through the real estate professionals in each community.

Historically, EcoBroker Certified® agents and recently some others also trained in real estate-related energy and environmental issues have been instrumental in promoting the adoption of new "green" data fields within the MLS systems. These trained agents can continue to play a key role in efforts to "green" multiple MLSs within a state or region.

The Colorado process benefitted from the fact that several large and visionary MLS systems within the state were strongly supportive of the GEO initiative. The leaders of these MLSs, who are well respected within the real estate community, constructively urged their peers to consider the benefits of the process. The Colorado Association of Realtors® also provided support. An EcoBroker Certified® professional, with more than 30 years of relationship with the Colorado MLS administrators, played an important role in the process; this familiarity with the actors and the process facilitated the convening process and created an atmosphere of trust in which the MLS administrators could have confidence their historic interests and systems would be understood and respected.

Recognition that the "greening" process should focus on a limited number of data points that are easily standardized and easy to understand and explain;

The legal liability issue is important, as mentioned above. Does the MLS operator or its member become liable if inaccurate information is listed in the MLS? There is no clear legal answer to that question, but most stakeholders acknowledge that the information must be carefully collected and verified. The structure of the data fields and the rules for their use must be designed to prevent fraud and limit greenwashing. The Colorado solution includes a small number of data fields for home performance certifications with third party verification available in various Colorado markets.

Professional expertise regarding the selection of the specific "green" data points to be included in the MLS

The Colorado stakeholder group reviewed the Green MLS Toolkit guidance and consulted with several individual MLS systems that have implemented green fields before specifying the fields recommended for inclusion across Colorado.

The data selected for inclusion in the Colorado MLSs include:

☐ **HERS Rating** with a mandatory box for the year rated and the score obtained.

> The HERS rating may be from one of the certification requirements or simply a rating provided by a qualified RESNET, BPI, or other approved rater. Documentation is required in the form of the rating certificate scanned and uploaded for electronic access. Most MLS systems have this upload capability, but if a system does not, the listing agent must be responsible for providing the documentation to back up green claims.

☐ **ENERGY STAR® Qualified** new home, again with the year certified and required documentation

> The requirement for documentation is designed to limit "greenwashing" with unsubstantiated claims or an untrained agent misunderstanding the fields and using them improperly. Apocryphal stories from early adopter MLS systems include homes built in the 1950s and listed as ENERGY STAR® Qualified. Without documentation, those properties would not get listed in the Colorado plan.

> ***Greenwashing*** *is the practice of using generalized statements to attempt to imply that a product or practice is resource efficient and may be energy efficient. Greenwashing has received, and indeed initiated, much public skepticism about the veracity of many claims in the green building and energy efficiency fields.*

☐ **LEED for Homes** with the year certified and required documentation

☐ **NAHB / NGBS-ICC 700** with year and documentation

These certifications all require third party verification and have published recognized specifications or standards.

In addition, because of Colorado's statewide emphasis on solar energy, specific checkboxes are allowed for:

☐ **Solar PV** with the year installed and the KW rating from installer or manufacturer documentation – again, uploaded to the MLS for validation

☐ **Solar Thermal** with the year and the basic system type plus documentation from the installer or manufacturer

Many other possible items were discussed by the stakeholder group, but the decision was to limit the searchable check boxes to recognized certifications with third party verification that are in common use across Colorado. This simplicity reduces agent and MLS liability and encourages accurate data collection and a specific education process to support the data collection. The documentation element helps reinforce that "it's not solar merely because it has a lot of windows."

☐ **Green Features Uploaded?**

In order to satisfy the desire of listing agents and sellers to identify other features and characteristics in a less formal way, the committee suggested an optional Green Features sheet. This sheet is a checklist on which a seller may indicate the presence of specific features. Certain items still require supporting documentation, but third party certification of performance is not usually present. The Green Features sheet may be uploaded to the MLS database in a PDF format to make this expanded information available to buyer's agents and appraisers. There is no warranty of specific performance by the seller providing the information. This information is not presented in data fields and is not typically searchable. The buyer's agent or appraiser is alerted to the Green Features sheet by marking a searchable checkbox in the basic MLS listing.

The stakeholder group also incorporated advice from the Colorado MLS systems that have already implemented green fields, as various fields have been tried over the course of several decades. As noted above, the GEO provided some limited grant funding to the MLSs for the actual costs associated with the implementation programming and management of the new data fields. These costs vary from system to system, depending on the complexity, though there may be some economies of scale where MLS structures can work together as system distinctions and similarities allow.

Note all MLS systems are created equal, and sensitivity to their differences will undoubtedly help us find common ground, features we can fix across varied platforms, and other elements we can improve.

The data fields as they appear in the MLS system of Information and Real Estate Services, LLC (IRES), which serves a large population of professionals in northern Colorado:

Figure 1 Screen Shot from IRES MLS. Courtesy of IRES

Education and training support for MLS members.

In the spirit of stakeholder sensitivity, building science, green building certifications, and building performance measurement are not familiar topics for most MLS staff, managers, or members. The GEO working group agreed that the knowledgeable stakeholders should ensure knowledge and experience are passed along to the MLS participants through concise and relevant training opportunities. MLS members, who will be entering the data, must understand the data with which they are working, and what documentation is needed to confirm the information. The training products must be flexible, so that they can be adapted to each MLS implementation, while providing the common information needed by all students. Experienced real estate brokerage professionals have substantive credibility in presenting this training to their peers, since they can relate immediately to the daily business of the real estate students. If the training is to succeed with actual behavioral change, it must be simple, relevant, and timely. The MLS members do not need highly technical information: they need to be able to recognize, define, and verify various types of features and information (where appropriate with the help of qualified third parties). They need to know how to answer questions from consumers who may know more than they do about specific topics, and they must learn to answer accurately with verified information.

The GEO provided grant funding for the development of a variety of training tools including materials to explain the process to local MLS administrators and directors, classroom training for MLS members to support the transition to (and use of) the new fields, and training materials to remain available for reference and for future new members of the MLS. This support helps ensure that the changes made to the MLS systems will be maintained and used over the long term.

In the months since the GEO convened the Colorado stakeholders, Colorado has moved rapidly towards inclusion of green data fields in MLS systems across the state. Progress to date includes the following:

- Northern Colorado's Information and Real Estate Services (IRES) MLS has already implemented a data entry page in its system and is involved in immediate education and training for the users of the MLS with its new fields. Some such MLSs will be the leaders in implementation for a variety of reasons, including stakeholders, advancements information technology platforms, and other factors.

- Metrolist, Colorado's largest MLS, which serves the greater Denver area and other central Front Range communities, is planning implementation in the spring of 2011 and will schedule training as the new features are made available. Such larger MLS structures are also capable of innovating and implementing green MLS initiatives.

- The Pikes Peak Association of Realtors® serves the Colorado Springs market and is planning implementation during 2011. Smaller MLSs can benefit from a collaborative green MLS process, where resources are shared across a range of neighboring MLS providers and other stakeholders.

- The Colorado Real Estate Network (CREN) serves seven local Realtor® Associations in Western and Southern Colorado. This coalition has received funding through a GEO grant to offset some implementation costs and provide education. They are preparing for implementation during 2011. Again, such smaller MLSs can benefit from a collaborative green MLS process, where resources are shared across a range of neighboring MLS providers and other stakeholders.

- Other MLSs are watching, as the Colorado Collaborative Green MLS initiative creates precedence for a series of statewide MLSs working together to share resources yet implement green MLS fields in such a way as to be sensitive to the needs and information technology nuances of each individual MLS.

The first three MLS systems alone serve the majority of listings (properties for sale) in Colorado.

The end goal of the process of greening the MLS systems is not only to collect data, but to analyze it. In Colorado, analysis has already begun with a review of the quantity and quality of data entered in the Northern Colorado's IRES system. IRES and the subcommittee are working on strategies to encourage participation by member real estate agents and to improve the quality of the information input to the data fields. Education on the proper use of the fields and the professional advantages of understanding green real estate is ongoing.

The stakeholder working group and specifically several of the participating stakeholders are also seeking to provide public information through community seminars, press releases, and local media coverage to establish consumer demand for the green information.

It is too early to determine whether a "green premium" can be detected in any of Colorado real estate markets, but this offers us the classic "work, wait, and see" opportunity. In Portland, OR; Seattle, WA; Atlanta, GA, and elsewhere where green data fields have been incorporated into the local MLSs for some time, the data indicate that buyers are seeking out properties with green features and selecting them over similar properties without the energy and environmental advantages of the performance properties. These homes with green features appear to sell in fewer "days on the market", and in some cases may bring a higher price per square foot. Initial indications appear to suggest buyers are spending their

available purchase dollars to select the more green and energy efficient properties that are on the market in the buyer's price range.

BUILDING AN APPLIED STATE MODEL FOR SPEED AND SCALE

Three key lessons can be drawn from state and local experience. First, the process of greening the MLSs within a state or region can be accelerated by convening multiple MLSs specifically for this purpose. Second, for the convening to work, an appropriate leader must play a driving role in the convening process. And third, all stakeholders with a meaningful interest in the process must come together to the table. If the stakeholder convening is successful, the specific details of the process – which data fields to include, how to address liability issues, training, etc. – while important, can be addressed with appropriate technical assistance.

The success of these efforts is likely to encourage additional initiatives over a relatively short time period. As the "Colorado Model" is tested and proven-out, stakeholders in other states will be more willing to adopt similar statewide or regional approaches. The success in a range of different geographic areas with different market conditions will increase interest and acceptance by a wide range of stakeholders.

Deployment of a Colorado-like Model, in which multiple MLSs work together to green their MLS systems, will also have the benefit of contributing to the standardization of data collection. As discussed above, although a small percentage of the nation's MLS systems have adopted environmental- and energy-related fields, there is wide variation in what has been adopted. This significantly complicates comparison of findings between markets. Rigorous data analysis is crucial for these initiatives to achieve two of their primary goals: a) ultimately helping consumers, and b) identification and quantification of any existing "green premium." By encouraging coordination and standardization (with allowances for regional variation) of the "green" data fields incorporated into each MLS, the Colorado Model can make an important contribution to the capacity of researchers and practitioners to study the impact of green features on housing prices and sales time.

To encourage state- or region-wide processes, interested parties in the public and private sector should support the formation of a tactical team with the capacity to bring this program to many more MLS service territories throughout the U.S. in the near term. This tactical team can immediately supply a framework for organizing local assets and a working model solution to emulate. The momentum of success will rapidly spread the green MLS movement across the U.S. with speed and scale, as more MLS operators in new territories emulate the success of their peers with little perceived risk and a great potential local benefit.

A national tactical team approach would involve the following next steps:

- Identify 4-14 states or regions most likely to adopt a Collaborative Green MLS model;

- Identify a "champion" (or champions) within each target state / region;

- Identify the key stakeholders who must be at the table;

- Identify the financial and other resources necessary to make the local effort a success, and secure them to the best extent possible;

- Develop a training schedule and provide training to ensure appropriate customer interactions and data entry following the "greening" of collaborating MLSs

- Provide extensive technical expertise throughout the convening process in one or more of the following areas:

- o Selecting the appropriate fields for inclusion in the MLS;
- o Modifying the MLS systems;
- o Appropriate advertising to create local "green" demand;
- o Analysis of the new data collected through the MLS
- o Training to support quality assurance and quality control regarding data collection and entry.

Following a collaborative green MLS model, a national task force could make significant progress greening the nation's MLS systems within a two-year period. Moreover, it is vital to incorporate technical assistance into the process. This extends beyond volunteer peer-to-peer training, to ensure lessons previously learned can be fully transmitted. The technical assistance requirements for each initiative can be modest and administered cost-effectively.

Throughout the process of greening MLS systems, it must be kept in mind that the adoption of green data fields will not be universal or immediate. The complexity and diversity of the MLS provider networks requires time, patience, and extensive stakeholder involvement. Training requirements mean the process is likely to continue over multiple years. Greening the nation's MLS will provide public goods greater than the many benefits it provides directly to homeowners and stakeholders. Increasing the energy efficiency and renewable resource components of America's residential properties will reduce pollution, benefit national security, provide for fewer blackouts, create jobs, and strengthen the economy.

As for the green building industry's aspirations regarding a green premium, lessons on the ground are suggesting we carefully articulate the metrics and definitions. Though many are tempted to look for a green premium solely in the form of increased purchase price, the market is telling us that the metrics will undoubtedly have to include: the price at which the property is purchased, the speed with which it sells, and frankly (in some cases) whether it sells at all. Any and all progress made in building the next generation of Collaborative Green MLS initiatives helps affirm any and all green premiums (regardless of the market metrics).

MOVING FORWARD

The green premium is a key to residential energy efficiency. If builders and homeowners know that they can capture the value of green improvements in a home's selling price (or in its speed of sale and/or in its ability to sell at all), it makes sense to build green or to make green improvements. However, the green premium will not materialize out of thin air (even in the Rockies). One of the most important points of this paper is that the green premium must be demonstrated by market data. Once there are clear, compelling data showing that green homes sell at a higher price (or sell faster, or sell at all), then, and only then, will the green premium be recognized by the stakeholders in the appraisal community. Once this key hurdle has been met, however, a cycle may be created in which market recognition of a green premium encourages more buyers to consider purchasing green homes and/or upgrading their current ones because they recognize the potential for future value and current comfort and other benefits.

If a key to residential energy efficiency is the green premium, the key to the green premium is the Multiple Listing Service. MLSs are the key, and a critical means by which consumers, real estate professionals, and appraisers recognize and/or interpret value. "Greening" the nation's MLSs, then, should be a critical goal for national and state-level energy policy.

However, the process of greening MLSs and collecting the data to justify the green premium is neither simple nor straightforward. Greening an MLS can take an immense amount of time and effort, often requiring years of development and years of follow-up. Current precedence suggests a way forward that, while still demanding, offers some real opportunities for achieving speed and scale in efforts to green MLS systems — efforts that, as we know, are central to the larger goal of increasing residential energy efficiency and the use of renewable energy.