This Market Model Appraisal Process (Crossroads) has been developed by a Certified Residential Appraiser with over 10 years' experience in response to industry needs for quick turnaround with supported adjustments that are credible.

Introduction:

Crossroads is a custom software application that allows for a long-awaited upgrade in residential home appraisals and valuations traditionally performed by individual appraisers. Crossroads applies typical appraisal methodology and principles in analysis of comparable sales but incorporates enhanced extractions of amenity values as indicated by buyer and seller market activity. This is achieved by comparing the neighborhood (or other appropriately defined market) sales data to itself, thereby removing individual bias and revealing more accurate amenity values.

Crossroads value generation fits the description of an Automated Valuation Model (AVM). However, due to the appraisal methodology and analysis applied by qualified appraisers when populating the database, the value generation is superior to what is usually achievable by an AVM. Typical AVMs use an export of a data set into the AVM software, with whatever filtering capability is available. Many times, the data set contains too many variables to be reliable. The Crossroads database has been professionally managed to reflect a particular market segment. When the subject data is inserted into the valuation interface, the model instantly generates a supported and credible value that is derived from the demographic from which the subject is being compared.

Crossroads will allow multiple stakeholders to duplicate subject valuations and receive instant and supported values from the same database and parameters. This will discourage manipulation and will allow overseeing entities to have a clear understanding of valuations being presented.

Background:

Ideally, appraisals are generated by qualified and geographically competent individuals trained to make market-derived adjustments supported with data. The appraisal then reflects the value of the property in the current market. Although the appraisal should be supported by multiple data points, the reality is that a large portion of adjustments rely on subjective appraiser assumptions or are from paired sales developed in the particular grid analysis being used at the time. In other words, whatever adjustments that worked to either meet value or allow the adjustment percentages fall within an acceptable range are applied and may or may not be the same adjustments used the next time that particular comparable is utilized.

Occasionally a matched paired sale is found but the question remains: Is it really a market reaction or is it a coincidence? For example, in some matched paired sales analysis some amenity extraction values appear credible and others defy logic (i.e., a beneficial view may appear to have a detrimental impact on the value of the property). In addition, a large portion of paired sales analyses involve some degree of secondary pairing, such as GLA, view, land value, etc. When an occasional paired sale appears credible, it is often used across a variety of property types and neighborhoods where it may not be applicable, such as the matched-pair value of an additional garage bay from a Q5 property applied to a Q3 property. This is problematic since economics would predict that effective purchasing power would be more in a

higher-end market, therefore that particular amenity may have less contributory value in a lower end market. The use of the value from this paired sale could result in undervaluing the Q3 property. If the inverse of this is applied, it leads to an over value of the Q5 property.

Function:

The database for Crossroads is appraiser-developed from property sales, predominantly from MLS information. Each sale is analyzed similarly as when used in a traditional appraisal. Specifically, appraisers use their expertise to apply judgements of quality, condition, land value and defining amenities that contribute to value.

In Crossroads, properties that have standard amenities for which no adjustments are made are considered "predictor properties" and are assigned to like neighborhoods. These set the benchmark values that are used for comparison when determining amenity values that are not standard. Specific attributes of each amenity, including size, function, quality, and condition are assigned a monetary adjustment in the Crossroads software. This allows for more thorough analysis of property data than is typically achievable in a traditional appraisal. It reveals market reactions to the amenities and supports or disputes the appraiser opinions of quality, condition, and amenity values. The Crossroads software is not immune to the problems of limited data. However, when data is available, a much more logical and supported analysis occurs when compared to a traditional appraisal. Importantly, valuations also become more reproducible.

Appraisal data using the sales comparison approach is, by definition, historical. A transaction must occur and finalize prior to being used to determine current Opinion or Model Generated Value. When developing a traditional appraisal, time analysis and adjustments are applied by appraiser determination on an as-applicable basis. Time adjustments may be necessary if the market is rapidly increasing or the comparable sales available have closing dates that are old enough that they may not represent the current market. Most instruction for deriving a time adjustment involves the use of data that includes a variety of land values and various non-standard amenities that influenced sale prices. This variety of values is difficult to determine if the trend increase or decrease is the result of a market movement or of data that had differing sales prices due to differing amenities. Crossroads reduces the gross sales prices to basic improvement sales prices, without land and non-standard amenities and converts these sale prices into an established benchmark that significantly equalizes economy of scale influences.

Appraisal report data and conclusions are stored for future reference in the Crossroads software creating a dynamic resource for future appraisal assignments and tracking market reaction to the property data. Effort spent on locating, verifying, and entering accurate property data is rewarded with the opportunity for multiple uses in the future.

Advantages of Crossroads:

1. Increased Accuracy and Flexibility: The comparable sales data is analyzed against itself and reveals greater fidelity to true market reaction due to repetitive applications of similar property sales. It allows comparison across different neighborhood markets as well as quality and condition comparisons within the same neighborhood markets. Additionally, it allows different property types to be analyzed against each other by utilizing a larger segment of sales data and providing a dynamic model to determine market trends. The valuations generated by Crossroads are derived from a professionally managed database developed, analyzed, and maintained by qualified appraisers having geographic competence in specific areas. When a knowledgeable user (such as a loan professional) is operating the software, the valuation report

produced is similar to an appraiser-generated value. Experience with Crossroads reveals that valuations are often more accurate than those of traditional appraisals. These valuation reports, in some instances, could be an alternative to a formal appraisal which would relieve time delay in loan finalizations due to appraisal deficiencies.

2. <u>Reduction of bias and discrimination</u>: Crossroads has been developed and tested in markets with a high degree of buyer diversity. Aside from reducing subjectivity through automation, disparities in value determinations for minority borrowers are reduced by applying a consistent and methodical approach to identification of comparable properties. Additionally, rapid access to market-derived property valuations within a chosen neighborhood improves checks and balances needed to make the home buying process more equitable.

3. <u>Independence from Lender:</u> The Appraiser independence from the origination lender is enhanced due to sales data being previously analyzed from within a database specific to a property type. Crossroads also reduces the contact between the market participants while enhancing Lender confidence in their collateral base.

4. <u>Time and Cost Savings</u>: When the subject property data is known, a knowledgeable user can retrieve a value instantly from Crossroads. This not only saves the user time and effort but can greatly reduce backlog and the time needed for lending and financing decisions. The valuation may also be used by an appraiser to efficiently aid in generating a traditional-style Appraisal Report, Desk Top Appraisal Report or Exterior Only Appraisal Report which will add to overall cost savings.

5. <u>Market Updates</u>: Changes in the market response to a specific property can be tracked in Crossroads when a valuation for a particular subject occurs at different time intervals. When the original property specifications are re-entered at a later date, an updated effective date will produce an amended valuation based on the changes in the market from the previous valuation date. This allows for valuation updates on any time increment.

6. <u>Appraiser Availability:</u> There is a stagnant trend in available appraisers even as purchase and refinance volumes are increasing. Crossroads allows for more efficiency in the available workforce, while creating new interest in the industry by modernizing the process. Fewer appraisers would be needed to effectively maintain Crossroads as a valuation tool.

Addressing Risks and Limitations:

1. Crossroads represents a degree of modernization that requires training for appraisers and users of the software. This is important to maintain the integrity of the database and achieve credible results. For appraisers, competency could be achieved with an estimated 8-16 hours of hands-on learning. Client users would likely require an estimated 2-4 hours of in-service training.

2. Data entry is necessary to build the Crossroads database for a particular geographic region. This involves chronological data input and sales analysis to be functional. It is worth recognizing that as the database matures and evolves it becomes more accurate. Time to database functionality will be slower in areas where there is little market activity or unique properties. A staged implementation would be a sensible approach, with active market segments being ready for query before those with fewer sales or outlier properties.

3. Circumstances of limited data will require users to rely on more traditional techniques. Crossroads will alert users when data is limited and will not return a value if there is not enough supporting data to produce a credible valuation.

4. Buy-in from appraisers, customers, and clients may be gradual. Understandably, Crossroads is a new product in an established profession. Credibility of the software would necessarily need to be proven.

Conclusion:

Test regions for Crossroads have produced superior results compared to those of a traditional appraisal when supporting adjustments and considering appraisal generation time. Crossroads has consistently demonstrated accuracy and flexibility in adapting to new requirements and markets. Crossroads current focus is on single family residential properties. Under development are models that focus elsewhere such as land, mobile homes, condominiums, income producing properties, commercial, and high-density urban areas. We would appreciate feedback and questions you might have; please email kwells.mmap@gmail.com for more information.

Following are comments in regard to the questions from the REQUEST FOR INFORMATION ON APPRAISAL RELATED POLICIES, PRACTICES AND PROCESS.

Question A1.1 Is there is a need to provide new valuation solutions that address industry identified issues of appraiser capacity, turn-times, training, and rural and high-volume market coverage? What are those potential solutions? What are the risks of these policies and the challenges in implementing them?

Crossroads alleviates the demands on appraiser capacity, turn-times, and has been found to be reliable in rural and high-volume markets. It requires new training and analysis techniques for appraisers and other users such as banks, lenders, real estate professionals, etc. The risks and challenges are that Crossroads is a new system that will evolve over time and poor operation skills could lead to some erroneous outputs if not monitored closely.

Question A1.2 Are there opportunities for process improvements that allow non-traditional valuation services (inspection-only, desktop, exterior-only) to augment traditional appraisals? Please elaborate on the risks, challenges, and benefits. Separately, are there opportunities to improve traditional appraisals to mitigate problems and concerns that have been observed to date?

Crossroads enhances valuation services, such as desktop and exterior only, in that it allows for instant valuation generation against a large pool of data and properties, and a comparison of possible differences in condition. This would assist the Client in determining whether a full interior and exterior appraisal could be warranted. Pre-Appraisal valuation by lenders, sellers, buyers, real estate agents, or those considering re-financing may be available to those with access to Crossroads. This has merit, by assisting with a decision for whatever action is being considered, where the property value is paramount as an indicator of probable value that would be derived by an appraisal.

Question A1.3 Do appraisal waivers have a place in Enterprise appraisal policy and process, and if so, for what segment of loans? What are the current risks to Enterprise safety and soundness in how appraisal waivers are offered? Would caps or other limits on their usage be appropriate?

Crossroads offers trusted values for users who become skilled in its use, allowing GSE's to quickly and economically generate a trusted value which will assist them in determining if a waiver is an option.

Question A1.4 Would utilizing alternative inspection workforces, such as insurance adjusters, real estate agents, and appraisal trainees assist with addressing appraiser capacity concerns? Are there risks of using third-party non-appraisers? If yes, How?

Our belief is that licensed, and geographically competent Appraisers are the best option, but supervised Appraiser Trainees would be more appropriate for gathering information for maintaining the Crossroads database or confirming data for other appraisal types, than any third-party entity.

Question A1.5 Is there a need for additional policies and controls to balance potential risks with efficiency benefit from appraisal modernization? If yes, please provide your recommendations.

The presentation of the Crossroads concept is from a valuation focus. It has been found to be reliable and more supported than most traditional appraisals. This is due to the gathering and analysis of a larger data set than is typically utilized by appraisers in their daily operation. Only a minimal amount of the reporting side of the appraisal process is currently applied. This could lead to misleading conclusions by intended users. The development of the reporting is currently being pursued.

Question A1.6 Do the objectives as outlined for the UAD update and forms redesign meet the current and future needs of the mortgage industry? Are there opportunities for refinements or additions?

The current UAD forms will not function with this system. An entirely new form and presentation is necessary.

Question B2.1 How could the Enterprises make additional data available to appraisers while promoting appraiser independence without crowding out other data providers? What additional challenges arise if the enterprises provide data to appraisers?

Crossroads would likely promote appraiser independence with current data available due to the data analysis being predominantly performed prior to analysis of the subject. It minimizes the interaction between appraiser and client therefore reducing potential bias. In addition, interested third parties can have instant and similar access to the valuation for planning purposes. Examples include: choosing a selling price, considering a refinance decision, a loan renewal, a remodeling decision, and any other circumstances involving a property value. If the Enterprises provide data to the Appraiser maintaining the Crossroads database, it would enhance the confidence in that database.

Question B2.2 How can the Enterprises improve their collateral tools currently available to lenders?

Market participants can have instant and similar access to the valuation for planning purposes. Examples include: when setting an asking price to sell a property, considering a refinance decision, a loan renewal, a remodeling decision, and any other circumstances involving a property value.

Question B2.3 How do Enterprise appraisal waiver offers differ between Freddie Mac and Fannie Mae? Are both Enterprises equally likely to offer a waiver on a given property? Please elaborate.

Crossroads will give the Enterprises a valuable tool that will assist them in determining if there should be variations for individual properties when considering a waiver offer.

Question B2.4 How can lenders manipulate automated underwriting systems when seeking an appraisal wavier? For example, lenders changing the loan amount, submitting data changes multiple times, or submitting to both Enterprises and delivering to the one who offers the waiver? How do the Enterprises minimize this manipulation?

Crossroads will allow Enterprises to quickly compare sales data and valuations against automated underwriting systems. At the present time, there is no provision for enhancing current underwriting systems but the type of data collection and analysis being performed in Crossroads could be programmed for another level of monitoring.

Question B2.5 What are the challenges associated with quality of service, enforcement and consumer protections related to non-appraiser entities providing property inspection data?

Appraisers operate under a code of ethics and have a personal and financial interest in maintaining a high quality of service and good consumer relations. Any non-appraiser entity will have less ownership while the bulk of accountability still lies upon the appraiser.

Questions B2.6 Is there any data or evidence you could share regarding the performance of alternative appraisal solutions versus traditional appraisals?

Crossroads has been in tested in diverse markets and has been found to be superior to a traditional appraisal in determining a value supported by data. There are situations where this system does not produce credible or supported Automatic Model Generated results due to lack of data for an area, but 100% of the time it will increase the support of Opinions and Conclusions of an Appraiser when developing a traditional appraisal.

Questions B2.7 Should Enterprise type COVID-19 appraisal flexibilities be part of an updated appraisal process to address disasters and other events to lessen market impacts?

Crossroads reduces the impact of a pandemic (or other circumstances precluding onsite contact with the client) by providing an accurate valuation remotely.

Question C1.1 What do you envision the impact of appraisal process improvements as described in this RFI to be on the appraisal industry? What impact, if any, has increasing use by the Enterprises of alternative appraisal solutions had on the availability and/or quality of traditional appraisals?

The impact of Crossroads is anticipated to permanently alter the traditional appraisal analysis and presentation. Currently, appraisal information gathering analysis and presentation are significantly influenced by methods, techniques and presentation originally put in place in the 1980s. Crossroads applies current technology to more effectively collect, analyze, store and report results quickly and economically. It also allows significantly more industry users to have access to data and analysis that influence their daily routines. This is also useful in diverse communities in providing opportunity for choices in valuation comparison.

Question C1.2 What would be the impact of appraisal policy and process improvements to the mid or late career appraiser? Do you believe late career appraisers would delay retirement if they could focus on specific valuation services like desktop appraisals? Or alternatively, would late career appraisers cease operations due to technology adoption challenges?

Among seasoned appraisers, use of Crossroads gives an opportunity to level up their career both in interest and profitability. It will also encourage qualified appraisers to take on more trainees since this process will function more efficiently with a team effort. The implementation of Crossroads will alleviate an upcoming industry problem where many of these late career appraisers will leave the industry and there are not enough new appraisers to fill market need. Those reluctant to take on an entirely new process could have limited access to Crossroads to augment their traditional appraisals.

Question C1.3 Do you believe appraisal policy and process improvements would have a positive impact on access to credit, including for rural and underserved markets by providing additional valuation services that serve the needs of these markets?

Crossroads has shown to be highly effective in reflecting rural and underserved markets. This is due to good time applications which allows for use of older data. In addition, Crossroads allows for comparison of overall market trends from higher volume areas, that will support or dispute time applications for rural and low volume areas.

Question C1.4 Is there discrimination in current collateral valuation practices? If you believe there is discrimination, describe the impact. Please provide any relevant data or analyses to support your position. Conversely, are there concerns that alternative or automated solutions could have a discriminatory impact?

Bias is a constant concern for conscientious appraisers who should ask themselves: "Is this my perception of market reaction, without the influence of my personal tastes?" Crossroads allows for an additional level of checks and balances in market comparison that removes a significant amount of personal bias. It also allows for additional judgment from other market participants to detect possible appraiser bias.

Question C1.5 What are the fair housing impacts of current FHFA and Enterprise policies and procedures on appraisals and valuations, and how can these policies change to further fair housing? Please provide any relevant data or analyses.

Crossroads reveals a much larger data base for neighborhood comparisons of property values and trends. This will assist in developing policies and procedures to keep the "fair" in fair housing.

Question C1.6 Do you have any additional feedback on issues and questions raised by this RFI?

It seems all the issues and questions raised are legitimate and current. Many of them are not new and many of them are expected to continue. Presently, the appraisal industry is very splintered with appraiser independence being expressed to the extreme. Independence is paramount, but combining knowledge and data is also paramount. It is believed that the system and process being developed and utilized by Crossroads will maintain appraiser independence but will also foster cooperation and teamwork to make the industry better represent all participants.