REQUEST FOR INFORMATION ON APPRAISAL-RELATED POLICIES, PRACTICES, AND PROCESSES
December 28, 2020

Geospan Response on Appraisal Policy and Process Improvements

Accurate property information is critical to making sound business decisions for appraisal and mortgage companies. Appraisal, assessing and underwriting processes traditionally assess value by means of in-person customer visits or in some cases by procuring property characteristics from data providers to perform desktop appraisals. While physical visits return better-quality data, as it relates to condition, they usually require more manpower and a longer turnaround time.

During 2020 Covid-19 accelerated most property industries into adopting some form of desktop or remote servicing to maintain their ability for safely and accurately assess property valuations. Today, new digital technology and analytics is making more data available to the Enterprise appraisal process. For example, a building's measured footprint can be compared real-time to the Gross Living Area (GLA) on record for validation which is a critical driver to derive correct valuations.

Background: Geospan is a geospatial mapping and property data analytics company, using proprietary technologies to provide remote geospatial property information management from the desktop or the field. Geospan augments its solutions with remote data analytics services to contractors, insurance claims adjusters, underwriters, appraisers, local governments, and the real estate market. Geospan's proprietary tools dramatically reduce the time and cost to provide GLA and related sketch documentation used in Appraisal Reports. Geospan is in partnership with Vexcel who maintains an oblique aerial library representing 80% of the population located in the continental US, which is updated on an annual basis. Geospan also has resources to expand the rural coverage to meet the needs for more complete coverage. The required imagery is currently available to provide remote measurements and validation of existing sketch data.

Geospan: Potential Technology for Appraisal Modernization.

Automation through machine tools to support existing property sketch validation and/or updates to reduce time and cost to perform on-site property sketching

- Existing property sketches from previous Appraisals can be validated and/or updated to reduce time and cost to perform on-site property sketching
- Existing property sketches from government sector Assessors can be validated and/or updated to reduce time and cost to perform on-site property sketching

Virtual Gross Living Area (GLA) estimator

- When no property sketches are available an approximate GLA can be calculated virtually If determined that on-site sketches are still needed, then GLA estimator sketches are validated and/or updated rather than starting a sketch from scratch

3D wireframe generator to better visualize total GLA

- Incorporates existing sketches of multiple levels to calculate GLA

Prebuilt 3D wireframes with precalculated GLA

- Still incorporates existing sketches of multiple levels to calculate GLA
- Projecting 3D wireframes into current imagery confirms accuracy

Example use of technology in support of virtual appraisal

- If prebuilt 3D wireframe exists, then GLA is used after visual validation from current imagery
- If property sketches exists, GLA is used after auto sketch generation is completed to validate and/or update with current imagery
- If neither 3D wireframes or property sketches exist, then Virtual Gross Living Area (GLA) estimator is used

Example use of technology in support of on-site appraisal

- If prebuilt 3D wireframe exist, then GLA is validated during on-site
- If property sketches exist, then auto generated sketches are validated and/or updated rather than starting a sketch from scratch
- If neither 3D wireframes or property sketches exist, then Virtual Gross Living Area (GLA) estimator sketches are validated and/or updated rather than starting a sketch from scratch

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?

Question A1.1 response:

Covid has proven the value of remote servicing technologies that can be integrated into appraisal processes. Having the ability to validate the exterior condition and size of a property from high quality imagery appraisers can have confidence that properties accurately match what

is on record to what is on the ground. Risk: The imagery should be current and of high enough quality to allow accurate measurements while assessing conditions.

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?

Question A1.2 response:

Technology that allows desktop appraisals saves time and money. For example, GeoAssist is a change management system that is a valuable tool originally created to support tax assessors for valuing structures. Simply put, GeoAssist compares what is on the tax role to what is on the ground. There are times homeowners make additions and do not pull permits or even when permits are pulled the assessor isn't notified by the building department. Either way the property data is inaccurate creating tax revenue leakage. GeoAssist compares county sketches to measured imagery to find inaccurate data thus validating a structures valuation.

In the same way those types of properties that fit the criteria of desktop appraisals could use the same proven sketch verification and validation system in GeoAssist.

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?

Question A1.4 response:

There are several opportunities for the appraisal process to use alternative systems such as virtual inspections as mentioned in 1.2 or even third-party inspectors. The insurance industry is shifting toward using third-party inspectors for claims and underwriting. These third-party inspectors are trained "data gatherers" and most often times not licensed adjusters. It means they are the eyes that allow adjusters to settle a claim from the desk. Additionally, several products have been developed to allow the homeowner to interact virtually with an adjuster via video chat or by documenting the interior condition and then uploading directly to their claim. It is conceivable that an appraisal inspection could be done virtually both on the exterior and interior in this manner. Just as with claims adjusting a qualified appraiser is the best person at creating the final valuation.

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?

Question B2.1 response:

A major challenge of any platform that is aggregating data sets and providing it to the end user is doing so in an intuitive and efficient manner. The right information at the right time. Also, maintaining the integrity of the different data sets is important along with conflict resolution strategies when data sets do not match, GLA for instance. The GeoAssist Community provides the data aggregation and sharing of the data. Subscribers can take advantage of critical new technology to reduce time and costs for appraisals to provide visual confirmation of accuracy.

Question 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?

Question B2.7 response:

Covid proved that a lot of professional services can be done virtually, even showing and selling a house. If it can be done efficiently with little loss in quality or the customer experience, then it is a good thing for the industry.

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?

Question C1.2 response:

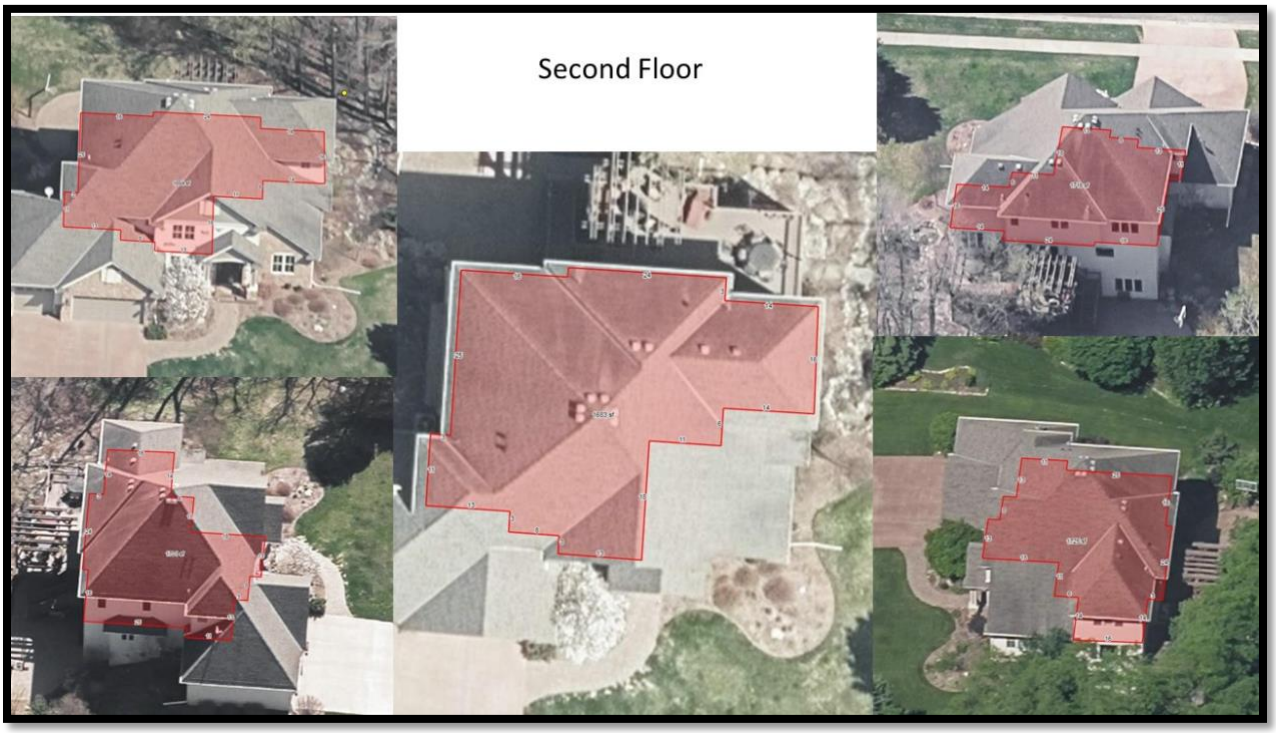
Over the last 10 years several technology companies have researched the adoption of technology and found high resistance among appraisal and assessing professionals over the age of 60, many of whom refuse to give up using the "Big Brown Book"! Second, industry professionals are either to busy to endure the learning curve of new technology/systems or fear marginalizing the value of their expertise by utilizing automated solutions. Site visits cannot be fully eliminated, and it will take many years to transition to an optimal desktop solution. Appraisers that are unwilling or unable to make the transition will be still be able to perform site visits for property that cannot be validated at the desktop.

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?

Question C1.3 response:

Process improvements are generally positive and would likely open underserved and rural communities to more choices during the appraisal and underwriting process. It is possible that technology will also help reduce conditional bias that may exist in certain economic areas as well. An on-demand service can be provided for validation without a repository of sketches. A national repository will be particularly beneficial to local government and insurance companies to reduce their costs and associated risks.

Virtual Gross Living Area (GLA) Estimator Screenshots



Virtual Gross Living Area (GLA) Estimator Screenshots