

Montana Chapter Newsletter

UPCOMING CLASS! Litigation Appraising: Specialized Topics & Applications

October 1, 2015

GranTree Inn, 1325 N 7th Avenue, Bozeman, MT 59715

[CLICK HERE TO REGISTER!](#)

This two-day course provides an overview of business opportunities in specialized types of litigation other than eminent domain in which the valuation of real estate is frequently an issue. Examples of topics covered include environmental contamination, ad valorem tax assessments, construction defects, bankruptcies, fraud and misrepresentation cases, income and estate tax disputes, and divorces. Through problem-solving activities, participants will apply new concepts and address how to best handle valuation and reporting issues in a professional legal setting. Participants will gain an understanding of the terminology and concepts involved in litigation valuation services in specialty areas and will learn about the many opportunities available for expanding their practices in litigation valuation.

Upon completion of the course, participants should be able to:

- Understand how to advocate the use of a particular valuation methodology without advocating the position of a particular litigant
- Identify issues related to preparing appraisals for litigation assignments involving bankruptcy, tax appeals, environmental issues, fraud, construction defects, etc.
- Plan and develop effective exhibits and other demonstrative evidence

Note: This course is in the [Litigation Professional Development Program](#). For more information, [click here](#).

AI CONNECT Hotel Reservation Deadline June 24!

If you're planning to attend AI Connect this July, don't forget to make your hotel reservations. Group rate for hotel rooms ends June 24! [Click here for full info](#).

Table of Contents

1-2...Upcoming Events & Important AI Information

3...What's Up With the FHA?

8...Regression Software Programs – What's the Best One for You?

29...Redstone Regression Software: Will It Work for Your Appraisals?

37...A Closer Look at Listings

Appraisal Institute Releases 45-day Notice

At its July 30-31, 2015 meeting in Dallas, Texas, the Appraisal Institute Board of Directors will consider proposed amendments to the Bylaws and Regulations concerning:

- Honorary Members Category;
- Related Entities; and
- Revising Admissions Regulations to Reflect New Definition of Standards

[Click here to view the 45-Day Notice](#)

If you have any comments on the proposals, please contact your elected Directors and/or send your comments via email to 45daynotice@appraisalinstitute.org. Comments sent to this email address will be compiled and distributed to the Board of Directors for its review and consideration.

Are You A Practicing Affiliate Whose AI Cycle Ends June 30?

If you're a Practicing Affiliate whose AI CE Cycle ends June 30 of this year, be sure that you're up to date on your requirements (*USPAP, Business Practices & Ethics*, and 350 points of AI CE). If you're unsure, log into [MY AI ACCOUNT](#) and click on the link on the left sidebar: **MY AI CE STATUS REPORT**.

Those not complete by June 30 will have their membership suspended (including privileges such as reduced course tuition). Those not completed within 6 months following suspension will have their membership terminated.

To submit completion certificates, ask further questions, etc. contact ce@appraisalinstitute.org

2016 Capstone Program Dates Are Here!

[Registration for the 2016 Capstone](#) is now open. See schedule below. Please note, enrollment is limited and the early classes fill up quickly!

Capstone Location	Webinar 1	Webinar 2	Classroom Dates
Los Angeles, CA	Jan 8, 2016	Feb 2, 2016	Feb 22-28, 2016
Tampa, FL	Jan 8, 2016	Feb 2, 2016	Feb 22-28, 2016
Chicago, IL	Jan 8, 2016	Feb 2, 2016	Feb 22-28, 2016
Savannah, GA	Mar 11, 2016	Apr 5, 2016	Apr 25 - May 1, 2016
Cincinnati, OH	Mar 11, 2016	Apr 5, 2016	Apr 25 - May 1, 2016
Synchronous	Mar 11, 2016	Apr 5, 2016	Apr 25 - May 1, 2016
San Francisco, CA	May 27, 2016	Jun 21, 2016	Jul 11 - 17, 2016
Newark, NJ	May 27, 2016	Jun 21, 2016	Jul 11 - 17, 2016
Nashville, TN	May 27, 2016	Jun 21, 2016	Jul 11 - 17, 2016
Dallas, TX	Aug 5, 2016	Aug 30, 2016	Sep 19 - 25, 2016
Denver, CO	Aug 5, 2016	Aug 30, 2016	Sep 19 - 25, 2016
Synchronous	Aug 5, 2016	Aug 30, 2016	Sep 19 - 25, 2016
New York, NY	Sep 23, 2016	Oct 18, 2016	Nov 7 - 13, 2016
Charlotte, NC	Sep 23, 2016	Oct 18, 2016	Nov 7 - 13, 2016
Pittsburgh, PA	Sep 23, 2016	Oct 18, 2016	Nov 7 - 13, 2016

AI Education Trust Scholarship Deadlines July 1

The next Appraisal Institute Education Trust Scholarship deadline is July 1. Three scholarships are available to eligible Candidates for Designation:

- Candidate for Designation Scholarship
- AI Course Scholarship
- Minorities and Women AI Course Scholarship

To learn more, visit <http://www.aiedtrust.org/> or e-mail educationtrust@appraisalinstitute.org

What's Up With the FHA?

By Douglas G. Smith, SRA

"The appraisal process provides the Mortgagee with necessary information to determine if a property meets the minimum requirements and eligibility standards for a Federal Housing Administration (FHA)-insured Mortgage and will serve as adequate security for a specific FHA-insured Mortgage. Mortgagees bear primary responsibility for determining eligibility and the sufficiency of collateral; however, the Appraiser provides preliminary verification that the Property Acceptability Criteria have been met and an appraised value for the property."

-Handbook 4000.1 Effective date 09/14/2015

The Department of Housing and Urban Development published the long-awaited revised and consolidated 560 page FHA Handbook 4000.1 on 03/18/2015 to a firestorm of comments by appraisers who instantly interpreted portions of the revised Handbook as marching orders to enlarge the overall Scope of Work of FHA appraising to now include the functions of a home inspector and protocols that not only complicate the inspection and reporting process but take more time to complete. This article will address these concerns and summarizes where to find the latest information.

Extended Effective Date

A starting point is to bookmark the FHA Single Family Housing Policy Handbook ([HUD Handbook 4000.1 Information Page Link](#))

On April 30, 2015, FHA announced that it has extended the effective date for the policies contained in the SF Handbook from June 15, 2015 to **September 14, 2015**. All existing Single Family Handbooks, Mortgagee Letters and other policy documents remain effective until superseded by specific sections, subsections, and/or appendices of the SF Handbook on its effective date. This is the website that leads to not only updates and revisions but to Handbook Resources, Policies and Regulations including the Handbook but also Mortgagee Letters and forms.

At this point, it would be well to click "Subscribe to FHA INFO Announcements." Subscribers receive FHA INFO announcements and information about Mortgagee Letter issuances, procedure updates, and training & events via email.

Frequently Asked Questions

The next step is to click on "[Frequently-asked Questions](#)" At the time this article was written this page was updated May 15, 2015.

One piece of essential information on this page is that the effective date of September 14, 2015 sets the beginning of the implementation of the new Handbook 4000.1. All current policies and protocols remain in effect until September 14, 2015.

The following are key policy revisions and clarifications to the Appraiser and Property Requirements section that are included in the published version of the Appraiser and Property Requirements for Title II Forward and Reverse Mortgages (Appraiser and Property Requirements)

- Properties with a Legal Non-Conforming Use: requiring the appraiser to comment if improvements can be rebuilt by right.
- Accessory Dwelling Units: emphasizing Highest and Best Use to determine property type of classification.
- Attic and Crawl Space Inspection Requirements: clarifying that FHA requires an inspection.
- General Acceptance Criteria, Property Eligibility, and Non-residential Use of Property: ensuring that mixed use properties comply with zoning.
- Cost and Income Approach for Value: clarifying that ALL appropriate approaches must be utilized when applicable.
- Sales History of Comparables: Requiring three years or more, instead of one year, and requiring due diligence by the appraiser for analyzing prior sales of comparable properties.
- Energy Efficient Building Components, Solar Systems, etc.: requiring that contributory value of building components that enhance efficiency or energy savings must be analyzed and reported. FHA requires that the appraiser utilize all appropriate methods of valuation and does not restrict this to only a matched pairs analysis.

Curiously, FHA confines enumerating the details of changes to the above list, stating that it is important that appraisers and mortgagees read the section in its entirety to understand the policy within the context of the entire section, and the larger Origination through Endorsement section. However, Mortgagees, FHA Roster Appraisers and other stakeholders are encouraged to view FHA's self-paced, recorded Origination through Endorsement training modules. These training modules provide greater detail on FHA's Appraiser and Property Requirements policies. These modules are available at

http://portal.hud.gov/hudportal/HUD?src=/program_offices/housing/sfh/events/sfh_hb_webinars

The following is recommended:

MODULE 3A-B: Appraisals (Recorded on 4/2/15): Discusses the Property Acceptability Criteria for FHA mortgage insurance under this section and details on the Minimum Property Requirements (MPR) and Minimum Property Standards (MPS). **Webinar/Module duration:** 31 minutes and 117 minutes. Registration is required and course material may be downloaded, saved or printed out.

These modules represent an investment in time and they are no substitutes for reading the actual manual. Therefore, some planning is in order well before the September deadline. The supporting material is available on the website and may be filed away in a file folder or printed out. Part 3B has 93 pages so it is not very practical to print out the slides used in the presentations. One additional site is worth bookmarking, the FAQ Bulletin Board. Link:

<http://portal.hud.gov/hudportal/HUD?src=/FHFAQ>

One proviso in the section on appraisals is that this section is set apart and thus is subject to change at any time. This will require appraisers set up a system of updating and staying current.

What Does It Matter?

Most everything from the past Handbooks and mortgagee letters has not changed. There are new items introduced and some like the three year sales history on Comparable Sales do measurably increase the Scope of Work of FHA appraisals. There is now more emphasis on such items as the inspection of attics and crawl spaces and the requirement to address the condition of built-in appliances. The focus of all items addressed in the new Handbook is risk evaluation. Over time, it has become more evident that there is simply no substitute for an appraiser in the field on the ground reporting on the components and elements of the collateral. HUD, in Handbook 4001.1 repeats the importance of the Three S's. HUD requires every property to be safe, sound, and secure to be eligible for FHA insurance. The implied concern is that the potential borrower not be burdened with unexpected repair costs or be exposed to unwarranted health and safety risks. Established appraisers, as well as those considering entering the profession register concern about the future. There could not be any stronger evidence that the sum total of all the appraisal issues addressed in the new Handbook requires a knowledgeable and competent appraiser going to the property and reporting on all risk factors. Each appraiser must look at the realities of HUD requirements; evaluate some in light of taking on additional liability, address the USPAP Competency Rule, consider time management and study fee schedules. In the end, some may decide to leave FHA appraising to others. The new Handbook, however, is convincing evidence, that there is real need, in some ways, a beneficial societal need for appraisers to remain on the job representing the lending community providing their services.

Nature & Degree

In one of the first FHA phone-in presentations, there was a lot of talk about “common sense” on the part of the presenters. Callers were chafing about so-called “home-inspection” issues and asking about specifics about attic and crawl space inspections. The reality is that not much has changed. There is more emphasis on providing photographs of attics and crawl spaces and being able to access the areas. This is probably one of the best examples of where it is important for an appraiser not to rely on hearsay but to not only read the section but to listen to the verbal presentations listed above. The instruction to make a head and shoulder inspection of the attic is not new. What is new is that this access not be obstructed and that a clear photograph of the area be taken. In addition, if the attic cannot be accessed, the appraiser need only report and in addition supply the underwriter with the information as to whether an inspection of the area is appropriate. The appraiser is cautioned not to call for an opening where one does not exist. The appraiser is reminded to stay up-to-date on the latest construction techniques particularly when in come to advances in energy efficient homes. It may be that the attic is encapsulated to protect the insulating integrity of the home. In this case, requiring access to the attic may compromise the integrity and warranty of the attic area. In Montana, some older houses have Vermiculite Insulation, some of which may contain asbestos. In this case, when an attic is nailed shut, the appraiser might report that an inspection was appropriate. In every case, FHA lays out the role of the appraiser and defines responsibilities.

Property Condition Requirements

- Determine the overall quality and condition of property
- Identify items that require immediate repair and are **Defective Conditions** (health & safety, structural soundness).
- Identify items where maintenance has been deferred, which may not require immediate repair.

The nature and degree of any noted deficiency will determine whether the appraiser addresses the deficiency in the narrative comments area under “condition of the property” or “physical deficiencies” affecting livability or structural soundness. The appraiser must address the nature of the deficiency in the appraisal where physical deficiencies or adverse conditions are reported and require inspection, if appropriate.

The watch word is appraisers must take a “common sense” approach to all that is in the Handbook. There are some new items in the handling of the appraisal of manufactured homes. A manufactured home is manufactured to HUD standards and bears a HUD Certification Label (Red tag). The label number must be reported and if missing must be obtained from IBTS.org. The manufactured home is produced to HUD standards. The home, then, may be accepted as built but any additions whether they are porches, decks or enclosed rooms are not. The appraiser has no expertise to accept these additions. If the appraiser observes additions or structural changes to the original house, the appraiser must condition the appraisal upon inspection by the state or local jurisdiction administrative agency that inspects Manufactured Housing for compliance, or a licensed structural engineer may report on the structural integrity of the manufactured dwelling and the addition if the state does not employ inspectors.

Another wrinkle in appraising Manufactured homes is that at least two of the comparable sales must be closed manufactured homes. Again, common sense prevails. These sales may be older sales but sales that support market activity of manufactured homes.

Other examples of conditions that require an inspection by qualified individuals or Entities include but are not limited to:

- Standing water against the foundation and/or excessively damp basements;
- Hazardous materials on the site or within the improvements;
- Faulty or defective mechanical systems (electrical, plumbing or heating);
- Evidence of possible structural failure (e.g., settlement or bulging foundation wall, unsupported floor joists, cracked masonry walls or foundation);
- Evidence of possible pest infestation; or *Leaking or worn---out roofs. *Chipped, Peeling, Loose Lead---Based Paint (on homes built 1978 or prior)

The reason for or indication of a particular problem must be given when requiring an inspection of any mechanical system, structural system, etc.

Summary of Enhancements to Note:

- Now requires appraiser to comment if improvements can be rebuilt.
- Stationary Storage Tanks – No distinction for above--- or below---ground. Rejection is based on a tank of at least 1000 gallons within 300 feet of the subject.
- Accessory Dwelling Units – Emphasizes Highest and Best Use to determine property type of classification.
- Attic and Crawl Space Inspection Requirements – Clarifies that FHA requires an **inspection**—more than just “head and shoulders” if possible.
- General Acceptance Criteria, Property Eligibility, Nonresidential Use of Property – Making sure that mixed use proper ties comply with zoning.
- Cost and Income Approach for Value – Clarifies that **ALL** appropriate approaches must be utilized when applicable.
- Photograph Requirements – Interior photos are required, as are photos of the a\c and crawl space. – Spells out all requirements in one place.
- Sales history of Comps – 3 years+ instead of 1 year. – Due diligence by the appraiser for analyzing prior sales of comparable proper ties.
- Measurement and Reporting of Contributory Value of energy efficiency components or alternate systems (solar, etc.): – Valuation of Solar Components is not limited to paired sales only.

- Appraiser must follow proper appraisal practice including: Contribution (Principle of Contribution); Contributory Value; Direct Sales Comparison Approach; Cost Approach; Income Approach; and Reconciliation of the Approaches.
- High Voltage Transmission Lines – The Appraiser must notify the Mortgagee of the deficiency of MPR or MPS if: The Overhead Electric Power Transmission Lines or the Local Distribution Lines pass directly over any dwelling, Structure or related property improvement, including pools, spas, or water features; or the dwelling or related property improvements are located within an Easement or if they appear to be located within an unsafe distance of any power line or tower.
- Mineral and Oil Reservations – If currently under lease, the appraiser must analyze and include a summary of the effect on the property. – Appraiser to comment on: Impairment; Property damage; or Environmental Concerns
- A separate legal description for the surplus land is not required. – Highest and Best Use (HABU) test of additional parcels or larger than typical sites determines whether excess or surplus applies (reminder---all FOUR tests of HABU).
- Leasehold Valuation – Reminder that appraiser to analyze terms of ground lease and Mortgagee must ensure that appraiser has a copy.
- Methamphetamine Contaminated Properties – Contaminated properties have potentially significant environmental risks due to use and/or storage of dangerous chemicals on the property. – If the Mortgagee notifies the Appraiser or the Appraiser has evidence that a Property is contaminated by the presence of methamphetamine (meth), either by its manufacture or by consumption, the appraiser must render the appraisal subject to the Property being certified safe for habitation. – The Appraiser must analyze and report any long---term stigma caused by the Property's contamination by meth and the impact on value or marketability.
- Valuation Approaches – Reminder to follow Uniform Standards of Professional Appraisal Practice (USPAP) – apply all **APPROPRIATE** methods.
- Roofs Covered with Snow – Reminder to report what can be seen inside the property
- Manufactured Home Additions – Appraiser to require inspection by State Agency if any Additions or Structural changes are observed.
- Manufactured Homes in Approved Condominium Projects – Condo must be an FHA---approved condominium project. – Reporting instructions require use of 1004C form **PLUS** the condominium project data as would be found in the project section of the 1073 form.
- New Building Components – Contributory value of building components that enhance efficiency or energy savings must be analyzed and reported. – FHA requires that the appraiser utilize all appropriate methods of valuation and does not restrict this to only a matched pairs analysis.

In summary, new winds are blowing from the U. S. Department of Housing and Urban Development. The great change-over from the old Handbooks and periodic Mortgagee letters is afoot with now greater responsibilities thrust upon appraisers in the field. The new information requires a solid effort to not only read and digest the new Handbook but also to avail oneself of the updated Webinars and Frequently Asked Questions posted on the HUD site. Scope of Work has become greater and calls for more preciseness and increased research which cuts into an appraiser's work day. Responsibilities have also shifted for FHA Underwriters and accordingly, appraisers must expect some interpretation conflicts that will arise from some of the changes and enhancements. At base, it is all about risk management and when it comes down to it, the new Handbook offers solid support that risk management requires

the active participation of educated and competent appraisers in the field. With the renewed emphasis on the Three S's, safety, security and soundness, appraisers are reminded of the worthwhile benefits to society and the important role they play in the community.

Regression Software Programs – What's the Best One for You?

By Ann O'Rourke – Editor & Publisher of Appraisal Today

For several years, some state regulators have expected to see adjustment support in appraisal work files. I don't know when, or why, this started.

This month I focus on regression software for adjustments and sent surveys to all the vendors I could locate. I was very surprised to see the difference in the various software. This gives you a choice in which one you decide to use. At the bottom of this article I suggest what software may be best for you, depending on what you want. Some are newer and others have been in use for a while.

Adjustments - Changes Over Time

I have been appraising for almost 40 years, starting at an assessor's office, where no sales comparison grid with adjustments was used. I started doing Fannie forms 30 years ago when I started my appraisal business. When I began doing them I asked other appraisers how they determined adjustments.

The only answer I heard was matched paired sales, which seldom work. I just assumed this lack of support for adjustments was a standard practice for lender form appraisals. Over the years, some appraisers used Excel software and/or Cost Approach methods, but most appraisers just guessed or used adjustments they were given when they started appraising.

With the recent implementation of Fannie's Collateral Underwrite that reviews appraisal adjustments on adjustments for specific UAD coded items, focus on adjustment support has dramatically escalated. Although CU does not require that appraisers include support in their appraisals, many underwriters and reviewers are expecting to see this support.

Now, many reviewers are expecting to see support for most, or all, adjustments. More Scope Creep.

In the March issue I discussed written sources of adjustment methodology. The best is Mark Ratterman's book, Valuation By Comparison, available from the Appraisal Institute. In April, I reviewed three adjustment webinars. The best was Richard Hagar's, available at www.workingre.com.

Future articles will include reviews of regression software, the pluses and minuses of the software, what state boards want to see, etc.

Software Survey Summary

I recently sent a survey to vendors of "off the shelf" regression/statistical software programs. I did this to give them an opportunity to provide information about their products. I did not test any of the software. I cut and pasted their responses into this article. In future articles I will test some of the software.

I was surprised to see that most of the online products were first available very recently. Bradford's Redstone was developed from their previous products, such as CompCruncher, first available 5 years ago. The two CD desktop products have been available much longer.

See the Summary below:

Software Survey Summary

Notes: information provided by the vendor. "Many" refers to any adjustments or data sources. No survey returned by Savvi as of deadline. Information from Savvi website.

		CDPrice	ments	Sources	Available for Purchase?
Redstone Report	Web	\$5 per	Many	Many	5/15 Predecessor -5 years
Statwing (appraisers)	Web	\$50/mo	Many	Many	Early 2015
AppraiserGenie	Web	\$5 each \$100/mo	11	Many	Late 2014
PAIRS(™)	Web \$50/mo	\$3.25 ea,	Many	Many	15-Jan
Appraisal Tool	CD	\$225	Appraisal	Appraisal	2 years ago
Regression Plus	CD	\$249	Many	Many	2008
Savvi	Web	\$5	n/a	n/a	n/a
		0/m			
		o			

Free trials

Appraisaltool has a 30 day refund policy, but no free trial period. Redstone, charges \$10 for 10 reports. All the other vendors have free trials.

Software updating

All the Web-based products are updated regularly. The CD products are updated occasionally.

Type of statistical software used

All the software except PAIRS use regression software of varying types. PAIRS(™) does not use regression and uses statistical modeling of matched paired sales on "big data".

Any additional services besides adjustments?

Many calculate the 1004MC. See the software descriptions below. Appraisal Genie offers integration with a la mode software, including Cost Approach, extraction and matched paired sales for adjustments, etc.

Data sources

All except Appraisaltool allow data from MLS and other sources. Appraisaltool only uses data from your appraisal.

Is Excel required?

All the software except Redstone uses Excel, primarily for inputting and leaning/scrubbing data. Appraisal Genie uses Excel for doing the analysis. PAIRS(™) does not require Excel.

Videos and sample reports

All vendors have videos and/or sample reports online.

What about interface?

I did not look at the interfaces for the different products. Decide which ones you like, then go to the web sites and see how they look.

What about MLS import?

Some require you to export into another format (i.e. Excel) and import into their software. Others will setup MLS import or already have it for your MLS.

How much statistics do you need to know?

Almost all the vendors recommend statistics knowledge and/or classes. All the products use statistics, so you should know the basics, at a minimum. Even if it is not recommended, you should know the basics so you can understand it better and explain it to your state board or client. For the more sophisticated regression software you will want to know more.

What if you are in a rural area?

Software that requires large numbers of sales, such as 200 minimum will probably not work. Non-regression products may work better such as PAIRS™. Appraisertool only requires the comps from your appraisal. See the vendor comments. Test the ones you prefer and see if they work in your area.

Types of statistical analyses

All except PAIRS™ use varying types of regression. Redstone uses a multivariate regression model. Savvi uses "M-estimation" and does not use stepwise regression. Appraiser Genie uses multivariate regression analysis (Excel). PAIRS™ is not a regression platform. It is an alternative statistical modeling platform based paired sales analysis. Appraisertool analyzes 3-6 comps from your appraisal report.

Data sources

Most of the software accepts import of "Any data", such as MLS, public records, etc. directly or from an Excel file. Some require exporting into a database format and then inserting into the software. Others will directly integrate with MLS and/or public records.

Forms software integration

Appraiser Genie integrates with a la mode as it provides additional integrated services. Redstone integrates with Bradford software. All the reports from any of the software products can be scanned into forms software or inserted as a PDF. Redstone integrates with Clickforms. Reports from all the vendors can be inserted into appraisals, scanned and/or PDF.

Bradford Software - Redstone

Web based Contact info: www.bradfordsoftware.com/redstone

Bradford Technologies, Inc. Sales: 800-622-8727

Pricing: Redstone Level 1: the cost is \$5 per analysis. Redstone Level 2 and 3: pricing still to be determined. Discounts are available for high volume users

Testing and demos

We are just finalizing the free sample report and demo video, approximately 15 minutes long. For "live" testing, we are offering a special introductory promotion "10 analyses for \$10". This is a savings of \$40.

Appraisers can test the software using the practice properties included with the software. For live tests in their local

market, they can purchase a package of 10 analyses for \$10 or 1 analysis for \$5.

How long does it take to learn to use the software?

Our tests have shown that it takes about 15 minutes to learn the software. We are fine tuning a longer "training" video that will also be available on our website.

What type of reports are produced?

The analysis report is three pages long. It consists of an addendum to support market analysis, an addendum to support comp selection and an addendum to support adjustments.

Integration of the report with forms software

For ClickFORMS users, the Redstone report can be transferred into ClickFORMS by simply "copying" the analysis in Redstone and "pasting" it into ClickFORMS. The Redstone clipboard data format is open so the report can be pasted into ACI and a la mode form fillers as well. Or a PDF can be created and inserted into appraisal reports in that format.

How long have you been working on Redstone?

Redstone is a Bradford Technologies product. We have been incorporating Regression Analysis in our CompCruncher software for more than five years. Redstone uses this same technology.

How well does your software work in rural areas or small neighborhoods with very few sales?

Reasonable results can be obtained with small datasets. Redstone does not require the appraiser to have datasets of 200 or more properties.

Assistance if state appraisal board has questions about an appraiser's use of your software - how does it work, etc.

We are willing to help the appraiser defend their Redstone results with documentation and direct communication with the appraisal board, if necessary.

What about graphs and charts?

Maps, graphs and charts are generated in Redstone to provide a visual representation of the analysis. Some of the charts and maps are also provided in the report pages.

Do you have comp ranking?

Yes.

How appraisers interpret the results

The results are visually intuitive. If the appraiser takes advantage of the training and education resource we have on statistics, they should not have any problem interpreting the results generated by Redstone.

Regression method used

The regression used in Redstone is a multivariate regression model with a 95% confidence factor. The appraiser can control the variables used in the model by simply excluding or including the most common characteristics of a property

What level of statistics knowledge is recommended?

We recommend that an appraiser has good knowledge of statistics and is able to understand and to explain the results of the regression model. We offer online statistics education.

What variables does your software calculate?

The Redstone regression model is based on the most common property characteristics that contribute to value. The user has the option of including or excluding these characteristics. Note that Redstone does not include Bedroom

count due to its collinearity with GLA.

Do you need to own and know how to use Excel on a basic level?

No. Redstone is a standalone program and does not rely on Excel for its regression capability.

Do you have any basic statistics training available? Or anywhere you recommend getting it?

Yes, on our website. We have basic statistics videos and a “white paper” on how regression works in appraising.

How does your software handle CU issues such as comp selection, support for adjustments, etc.

Support for adjustments is based on regression which is used to identify the most significant features that contribute to value and provide a range of acceptable adjustments.

Regression also provides an indicated sales price for the subject.

Support for comparable selection is based on three factors. A similarity score that measures how well a property compares to the subject; a nearness score that measure the proximity of the property to the subject and how recent the sale occurred; and the appraisers local expertise and knowledge of the property.

How does it compare with Fannie's CU interface available to underwriters?

Redstone's comp selection interface is very similar to the interface that underwriters see from CU. CU does not have an adjustment interface for underwriters.

Is a 1004mc automatically generated? Are listings imported from MLS?

Yes, a 1004 is automatically generated for the appraiser. Listings are imported from the appraisers local MLS. Bradford Technologies has mapped the output of over 950 MLS systems to make it easy for the appraiser to import sales and listings into Redstone.

Data importing. How long to learn and how long to do on each appraisal report.

The appraiser exports the data from their MLS. (We provide a list of data points to export). Then they import that file into Redstone. Because we have mapped over 950 MLS systems, Redstone easily translates the MLS data into a format usable for the analysis. This process takes as long as it takes the appraiser to export the data from their MLS. Importing into Redstone is instantaneous.

Can you import data from different data sources into the same analysis (useful in areas with a lot of non-MLS sales)?

Yes. Data from different sources can be blended (accounting for duplicate properties in both sources) or simply appended.

How many sales are required?

At least 10 sales are required for regression.

Is data scrubbing available? If so, how does it work?

Yes. A major component of Redstone is identifying outliers and errors in the data. Charts, trends, histograms are created of the data to indicate issues quickly so that the appraiser can deal with them appropriately.

Do you have a peer database?

No. ClickFORMS uses a comps database that will check for consistency of properties between uses of the same property in different reports.

How is data, maps, etc. entered and imported into your software?

Redstone is capable of importing and using 12 different data sources for maps, aerial imagery, public records and current sales and listing information.

How can appraisers select data?

Appraisers can select the data to be used, by selecting the Redstone Analysis Level. Current released is Level 1. Level 2 and 3 are planned for later in the year.

Multiple data sources for a specific property?

Yes. All data sources are provided to the appraiser, but it is the appraiser who chooses which dataset to use or not to use.

Statwing

Web based Contact info:

<http://try.statwing.com/regression-based-adjustments/>

e-mail: contact@statwing.com

Pricing

\$50/user/month with no commitment

25% off (\$37.50/user/ month) if a year is paid for ahead of time

Unlimited analyses, no per-use charge

Discounts are available for purchases of 4+ licenses at once

Free trial

One-week free trial.

How to get a sample report(s) and see a demo

Either attend a webinar about regression and Statwing: <https://www.statwing.com/regression-webinar> Or just sign up and give it a try for free. Or, <http://try.statwing.com/regression-based-adjustments/> <https://statwing.wistia.com/medias/x1xfbsdtx4> It's a recording of our free webinar. First 20 minutes are education about regression then there's a 30-minute demo of Statwing.

When was it developed and available?

Statwing is a "cloud"-based system, so it doesn't have versions. Statwing was publicly launched in 2012, then customized for appraisers at the beginning of 2015.

How often is it updated?

Statwing is a "cloud"-based system, so it is constantly updated (on a roughly daily basis).

How well does your software work in rural areas or small neighborhoods with very few sales?

Our software uses the same regression math as all the other tools, so the degree to which one works better than another in rural areas or small neighborhoods is basically marketing. That said, we work reasonably well in those situations. For example, our longest-standing appraiser customer appraises properties on a small island off the coast of Washington state, Whidbey Island.

Assistance if state appraisal board has questions about an appraiser's use of your software - how does it work, etc.

Statwing is an easy way to do statistical computations to come up with adjustments. In the same way that one might rely upon Marshall & Swift to come up with cost figures, but you wouldn't bring them in to communicate with the appraisal board, we don't communicate with appraisal boards.

What level of statistics knowledge is recommended?

None needed.

What variables does your software calculate (bedroom, bath, GLA, pool, etc.)

If your MLS has a variable for it, we can calculate an adjustment for it.

Do you need to own and know how to use Excel on a basic level?

No. We replace Excel entirely, both for regression as well as for a lot of other common data analysis techniques, like charting your data.

Do you have any basic statistics training available? Or anywhere you recommend getting it?

Yes, we run a webinar that teaches the basics, everything you need to know to get going.

How does your software handle CU issues such as comp selection, support for adjustments, etc. How does it compare with Fannie's CU interface available to underwriters?

Statwing does not have any impact on comp selection. Statwing is an ideal support for adjustments. We're not entirely sure what Fannie's CU interface looks like, but we (like other competitors) are likely using underlying similar mathematical techniques.

Is a 1004mc automatically generated? Are listings imported from MLS?

No, Statwing doesn't produce 1004MC output. Regression should use very different sets of data from that required for a 1004MC. Listings are imported from your MLS.

How long to learn to use software?

Very hard to say. Obviously easier for folks who have done regression, but most have not. It's easy to get some results in your first try, but it takes a few different appraisals before users get comfortable with the more advanced things they can do in Statwing.

What is in the report(s) and how long are they?

The report can be customized to show whatever kinds of analyses you'd like (for example, many appraisers attach "histograms" that show the breakdown of, say, ages of properties in the area).

What about graphs and charts?

Sample report contains a lot of charts and graphs

Do you have comp ranking?

This shouldn't be relevant in a strictly regression context, regression should take into account a lot of properties that aren't comparable.

How appraisers interpret the results

Webinar gives the appropriate training. We also have a 30-minutes tutorial video that walks appraisers through regression. All of our adjustments include a "confidence interval" that gives a sense of how unsure the math is about the regression's results. Regression method used.

Regression math is the same in any of these tools. What varies is the interface and flexibility, whether the appraiser is given the opportunity to use their appraiser judgement to tweak and refine results. We use a newer mathematical technique called "M-estimation", and improvement on the typical "OLS" technique. We don't brag about this much because it's so technical, and in reality the math that any regression tool uses is going to be pretty similar to that used by another. We do not use "Stepwise" regression, which automatically determines which variables are important instead of letting the appraiser decide.

Instructions for importing. How long to learn and how long to do on each appraisal report.

The first import can take 10 minutes if the MLS in question needs a custom report created (about half of them). After that, import is trivial-search your MLS, click "Export", then drag the file into Statwing.

Can you import data from different data sources into the same analysis?

Statwing takes data from any data source (e.g., realist). We've even had some appraisers hand-label their data with UAD scores, though that's very uncommon.

How many sales are required?

Since we use the same math as the other tools, you can use the same amount of properties as you can with any tool. To get the best possible results, hundreds of properties is ideal, though frequently people end up with 100 or less by the time they've narrowed things down a bit.

What if data is weak?

We encourage appraisers to go back in time or widen their geographical area to bring in more data. You can always control for time or location in the regression. Since Statwing is very flexible, appraisers can continue to tweak and refine and filter until they get good results.

Is data scrubbing available?

If the user removes properties or outliers, those changes are all recorded as "filters" and end up in the resulting report.

Do you have a peer database? What data is used?

Import data from an MLS export (either cut-and-paste or drag-and-drop). Many non-comparable properties should be included so we can get a good range of values with which to run the regression. Appraisers can also upload their own databases, though this is less common.

How can appraisers select data?

Pull from MLS in the usual fashion.

Data for a specific property? Can the appraiser choose which data to use? MLS, public records, appraiser's database...

Appraisers can use any of those as they please (though MLS is by far most common).

PAIRS™) – Gandysoft

not regression, uses statistical analysis of paired data

Contact info:

www.gandysoft.com support@gandysoft.com Facebook:

www.facebook.com/gandysoft

Pricing

Three pricing options for PAIRS™):

The software is currently being offered for free under the PAIRS™) Free for Now program in an effort to avail the software to professionals to explore statistical modeling for adjustment support.

Billing will commence within the next few weeks. <https://gandysoft.com/pricing>

1. \$50 per month unlimited usage
2. \$550 per year unlimited usage (discounted \$50 from the per month unlimited)
3. \$3.25 per use

Two pricing options are available for PAIRS(™) Export (free with a PAIRS(™) subscription):

1. \$20 per month for unlimited usage
2. \$1 per use

Additional products will be available, with separate pricing where applicable. Corporate/multiuser pricing has not yet been confirmed.

Free 14 day trial

A trial period of 14 days free will be granted to newly registered users, providing unlimited use of the product(s).

How to get sample report(s) and see a demo Sample reports are available on Facebook:

<https://www.facebook.com/gandysoft>

1. Full demos are available in video form on the GandySoft YouTube channel:

<https://www.youtube.com/user/gandysoft>.

2. Weekly webinars demoing the product are given to registered users. Invitations are sent after registration. Registration is free and users are under no obligation after registration.

Assistance if state appraisal board has questions about an appraiser's use of your software - how does it work, etc.

We do not have an assigned person for communicating with appraisal boards. Should it come to pass that we do get direct questions from a state appraisal board, we're prepared to answer any questions that they may have.

Can I test it before I buy to see if it works in my area?

Software is currently being offered for free under the PAIRS(™) Free for Now program in an effort to avail the software to professionals to explore statistical modeling for adjustment [support. Billing will commence within the next few weeks.](#) <https://gandysoft.com/pricing> We anticipate always offering a free trial period of 14 days after billing commences.

The product is designed to work in all U.S. markets, and mapping to MLSs or other data sources may be required. GandySoft provides this mapping free of charge upon request and receipt of the necessary information. If the product does not work immediately in a given market, we have processes in place to extend support to additional markets.

When was it developed and available

It was developed by Michael Gandy, an appraiser for 26 years. The software was developed over the prior year and released for private beta in October, 2014 and for public use in January 2015. PAIRS(™) is an original product, with patent pending technology. There is no predecessor to this product.

How well does your software work in rural areas or small neighborhoods with very few sales?

Like all methods, when dealing with smaller data sets or rural data, correlated data is key and excluding outliers prior to analysis is an important step. Very credible results have been compiled with limited data sets with good correlation, though cleaning/scrubbing the data is advised to account for variances in the data.

PAIRS(™) can also provide statistical support for manual (externally sourced) adjustment values, such as land sales, depreciated cost, or even traditional matched PAIRS(™) derived from model matches.

How does your product differ other software?

PAIRS(™) is NOT a regression platform. Regression requires extensive knowledge of statistics to decipher results, confidence factors, etc., and is fairly difficult for the average appraiser to explain thoroughly with confidence.

The PAIRS(™) method is an alternative statistical modeling platform based on paired sales analysis in the first phase, synthesized with allowable tolerances and manual adjustment values. The iterative method is employed in subsequent phases to refine the results for stronger statistical analysis.

Much like regression, PAIRS(™) is intended to be used on "big data" to analyze the market for the subject property, not just the subject's comps.

What level of statistics knowledge is recommended?

As with any statistical method, a basic understanding of statistics is beneficial and necessary, though not as robust of an understanding as should be employed when utilizing regression software.

The user should have a basic understanding of statistical measures such as: mean? median? trimean? standard deviations?, etc. The user is not required to explain the results in a statistical way, and the reporting is designed to explain the results to upstream readers at a glance, whether they're statistically trained or not.

What variables does your software calculate (bedroom, bath, GLA, pool, etc.)

PAIRS(™) will allow for the testing of any variable available in your MLS, whether a distinct field OR from list fields. We require mapping of MLS systems to ensure the professional has the ability to test/solve for any significant variable available in their MLS. We currently support over 1,200 different variables commonly found in various MLSes, and many of these variables can be used to provide a solution.

PAIRS(™) can solve for various condition values, including New Construction, Updated/Remodeled properties, and FixerUpper properties. Where available, this information is extracted from the MLS data, and may be augmented by the appraiser, as necessary.

Do you need to own and know how to use Excel on a basic level?

Knowledge of Excel or other spreadsheet programs is useful for cleaning/scrubbing data or creating custom variables (variables NOT available in an MLS) for analysis, but is otherwise unnecessary.

Users have the ability to set filters at present. Inline cleaning to be introduced shortly, which will completely eliminate the need to use Excel for any purpose.

Do you have any basic statistics training available? Or anywhere you recommend getting it?

We do not currently provide full-fledged training. We are currently developing various training programs, specifically oriented to appraisers,, including an introductory course in statistics.

We are working with various industry trainers and highly recommend using Continuing Education to get a basic training in statistics and the use of statistical analysis software. Additionally, there are numerous online resources that provide excellent education, including Khan Academy (www.khanacademy.org) and Learners TV (www.learnerstv.com).

How does your software handle CU issues such as comp selection, support for adjustments, etc. How does it compare with Fannie's CU interface available to underwriters?

We do not yet provide a comp selection feature. PAIRS(™) provides adjustment estimates intended for use in an appraisal, and reports that can be included directly in the appraisal addendum to communicate the method used to produce the adjustments. PAIRS(™) is not comparable to Fannie's CU interface, as they are completely different technologies.

Is a 1004mc automatically generated? Are listings imported from MLS?

This feature is coming soon and not yet deployed, though in development.

Integration of the report with forms software or how to include it in the appraisal report.

PAIRS(™) currently produces a separate report that is included as an addendum in the appraisal. The recommended

approach is to copy/paste the report as an image directly into the addendum, although a PDF version may be attached if the user prefers that approach. Integration with formfiller software may happen in a future release.

How long to learn to use software?

An experienced statistical user can typically learn to be effective with the software in a matter of hours. We have numerous examples of users that are familiar with other statistical methods that have become effective in the process on the first day of use. The biggest impediment to mastery is typically Unlearning concepts and practices that other methods endorse, such as manually reformatting data to suit regression, or using the 'radius tool' to select a market area.

Beginner users suffer from all manner of learning requirements, starting with how to gather data in the first place. We do provide some free setup assistance to help those who don't know where to start, as well as a series of introductory videos on our YouTube channel to show how the process works.

We offer free technical support, and while we don't conduct training through that channel, we will answer direct questions and refer the user to the right place(s) to learn more.

We conduct live webinars each week that cover beginner and intermediate use. Each webinar is different than previous weeks, and each webinar is recorded and published on our YouTube channel.

The GandySoft YouTube channel can be found here:

<https://www.youtube.com/user/gandysoft>

What is in the report(s) and how long are they?

PAIRS™ currently has 2 report options. One is worthy of inclusion in an appraisal report that validates a user's adjustments (only validated if the value specified fits within the statistically supported range). This removes any ambiguity to the end user and validates the professional's assigned value. The other report is a work file retention report which outlines multiple statistical data points for variables included in the model and corresponding information.

Both reports notate the effective date of the analysis, the date of the analysis, any market rate applied, the statistical filter (if any) chosen to the results, the number of properties included in the analysis, some general parameters (ie. livable area between 1000-1800 sq.ft., lot sizes, ages).

What about graphs and charts?

We currently offer multiple charting options relative to price trends. We have additional charting and graphing in development which will be deployed when tested and complete.

Do you have comp ranking?

This feature is coming soon and not yet deployed, though in development.

How appraisers interpret the results

Regardless of method, the reliability of adjustments can only be made when 2 actions occur:

1. The appraiser validates that they're credible (USPAP AO18)
2. The application of adjustments demonstrates that they're credible in the market

We typically recommend that the appraiser pay attention to the count of PAIRS™ used to estimate the adjustment, the histogram explaining the distribution, the accessory statistics panel, as well as the statistical relevance of the variable's data itself (e.g. one pool in a market of 200 properties cannot be statistically relevant).

What about a record of what you do/changes you make?

PAIRS™ reports the full final set of model parameters on the adjustment report that gets included in the appraisal. Few or no changes are able to be made that don't get exposed in the report. PAIRS™ does not currently keep prior versions of a report. We recommend that the user create an additional report and use both side-by-side to demonstrate differences.

Statistical method(s) used.

PAIRS™ is not regression, but a distinct statistical analysis approach. PAIRS™ uses statistical modeling of matched paired sales on "big data" to produce a robust statistical analysis, followed with the iterative method to refine the results.

Does your software provide a land value (residual) for the Cost Approach and cost based adjustment methods?

PAIRS™ does not provide cost based adjustments. PAIRS™ does determine residual land value of residential properties in the model by default, and can be used separately to determine the adjustment value solely of land sales.

Instructions for importing

After mapping an MLS system, a user needs to create a custom MLS export including the fields specified for that MLS. Once that is complete, a user simply does a typical MLS search in an area with the parameters they choose, exports the results in the custom export and saves the file.

We have multiple videos crafted for different MLS systems (fusion, matrix, paragon, etc.) [available on our YouTube channel at: https://www.youtube.com/user/gandysoft](https://www.youtube.com/user/gandysoft)

How many sales are required?

Small sets of correlated data will render very credible results, though small sets of data with wide variances will be problematic. Of course, the law of numbers applies and larger sets of data are easier to navigate as more balance is typically achieved.

That being said, large sets of data with wide, unaccounted for deviations in pricing and features can equally be challenging. The bedrock of good statistical analysis is a good/clean set of data going in.

What if data is weak?

Similar to other methods, such as regression, weak or non-correlated data will render results that a professional should easily be able to identify as non-credible. When this happens, you either need to clean the data, attempt to acquire more/similar data, or you may encounter times where statistical data is not practical (limited data, limited correlation, etc.). The user must identify if the results are credible, if not, then they need to choose the proper steps going forward.

Is data scrubbing available?

The user has the ability to filter from any variable in the data set, as well as sales prices, sales prices per sq. ft., dates of sales, etc. These filters can be employed to remove outliers or properties with specific features that are not wanted in an analysis. At present, we do not have inline cleaning for the data and the user is expected to clean/scrub their data in Excel or other program, save the data, and then load the data for analysis. Inline cleaning/scrubbing is in development and has not yet been deployed.

Do you have a peer database? If so, where is the data coming from and how much do you have?

We do not yet have a peer database, although it is on the horizon for the product.

How is data selected?

Selection of the properties is done from the data source (MLS, public records source, or aggregator), and we provide instructions on how to do this for each data source that we support. We allow importing from different data sources. We also provide videos to demonstrate how to set up custom exports and export data for each major MLS software vendor.

How can appraisers select data? What criteria are available?

PAIRS(™) analyzes data uploaded by the user, from their MLS at present. No data is provided from us for analysis at present, though subject to change. We recommend that the appraiser select the market suitable to the subject property, using the tools available from their data source. We actively encourage using custom map area selection, census tract, and "area".

Appraiser Genie

integrates with a la mode, regression plus other integration features

Contact info

Appraiser Genie

www.appraisergenie.com

info@appraisergenie.com 325-704-2592

Pricing

1. \$5 per report or \$100 per month unlimited per appraiser, limit 1 appraiser per subscription
2. Discounts for purchases of multiple uses
3. 10 pack for \$45, \$100 per month unlimited per appraiser, limit 1 appraiser per subscription

Our software works with any MLS system. When we go into a new area we ask the appraiser to setup an MLS export using our export setup guide and send us a sample. We format the Genie to work with their MLS, including scrubbing the export to be UAD compliant, at no charge.

Free trial?

2 week free trial through a la mode.

How to get a sample report(s) and see a demo

Our demo video is on our website, www.appraisergenie.com. It goes through the entire process from beginning to end. www.youtube.com/watch?v=Y0h6ZeVDN1E

Can I test it before I buy to see if it works in my area?

That's why we offer two free weeks. It gives us time to format the Genie to make sure it works 100% in the appraiser's area. We guarantee it to work. With MLS data being so sketchy, we spend a great deal of time formatting the Genie to scrub the data to be UAD compliant and appraisal report friendly.

Assistance if state appraisal board has questions about an appraiser's use of your software

The Genie originated from our owner having a complaint with the board. The complaint was over value and was ultimately dismissed, but the board wanted more documentation in the work file for adjustments.

During the 2007-08 period our owner/appraiser experienced 4 complaints, all over value. So our owner set out to build the ultimate bullet proof work file. The Genie was included in the last 3 and all were won and dismissed with no exceptions. He sits on the Association of Texas Appraisers Board and has testified at the Texas Appraisal License Board concerning the complaint process.

The owner will gladly communicate with any board. In addition, the Genie is locked upon exporting so the board will know its original data and analysis which are time stamped. We recommend saving a copy of the Genie in your work file, in a la mode this is done automatically.

When was it developed and available

The Genie has been in use and developed for 3 years in my appraisal business. We started selling a standalone version Sept. 2014 and got so many requests to integrate with the form fillers that we redesigned the Genie to completely fill out the form in a la mode reports. We are working on ACI and Bradford versions to be released early summer 2015.

How often is it updated?

We have an automatic updater, we push updates up immediately when needed. If that's once a week or twice a day, we fix all issues immediately.

If not available yet for purchase, when will it be available?

Currently we are in a live trial with a la mode and will be open to all users at the end of April. Anyone interested in a free live trial can email info@appraisergenie.

Who developed your product?

Our product was developed by a working appraiser. Currently we use excel's analysis toolpak for regression analysis.

How well does your software work in rural areas or small neighborhoods with very few sales?

The Genie was designed to work in rural areas. We include extraction and matched pairs methods to help with small markets with very few comps.

How does your software compare with others?

The Genie does all of the following for \$5 per report.

1. Types the report and automatically exports back into the report.
2. Automatic 1004mc with comments and checkboxes
3. Automatic cost approach through Craftsman/Building Cost.net
4. Automatic scrubbing of MLS data to make it UAD compliant
5. Adjustment support through, multiple regression analysis, extraction and matched pairs
6. Peer database included that displays an average of what appraisers peers are saying about a comp.

Graphs

1. Complete work file documentation for all adjustments,
2. Highest and best use as improved
3. By the end of April, Genie will include automatic public record verification through Corelogic Realist.

What level of statistics knowledge is recommended?

The Genie performs the regression automatically, but interpreting the results takes some training. We do not recommend using regression analysis unless the appraiser has been trained to be in compliance with competency requirements of USPAP.

What variables does your software calculate

GLA, bed, bath, ½ bath, fireplace, garage, carport, pool, age, concession, site.

Do you need to own and know how to use Excel on a basic level?

Excel 2013 is needed. No experience with Excel is needed, other than opening a file in excel. The Genie has 15000 lines of computer code that runs behind excel to automate the process.

Do you have any basic statistics training available? Or anywhere you recommend getting it?

We recommend AI's or any college. We don't emphasize statistics since we also include extraction and matched pairs. We recommend analysis of all 3.

How does your software handle CU issues such as comp selection, support for adjustments, etc.

The Genie is setup to import the complete neighborhood search with no search parameters in order to perform an analysis of the entire neighborhood. On the 1st page of the Genie, the appraiser selects the search parameters to narrow the search to truly compatible properties. The comps are then sorted, most recent sale with the least adjustments on top, then active, pending, expired, etc.

All of our adjustments are supported with full details in writing by at least two of our 3 methods, extraction, and regression or matched pairs. Our Genie Peer Database reports back an average of what your peers are reporting about a particular comp address. In addition, the Genie keeps a running average of what the appraiser has used as an adjustment in the past, i.e. \$37 per sf for \$75-100k homes in the past.

Is a 1004mc automatically generated? Are listings imported from MLS?

1004mc is automatically generated with checkboxes and comments. All of the data is imported from the appraiser's neighborhood search.

Integration of the report with forms software

Does it just provide a separate report or integrate with the form, i.e. 1004mc or cost approach. Currently the Genie fully integrates with a la mode, wintotal, aurora and total. It completes the form for the following areas:

- Neighborhood trends
- Effective age
- Market value
- Reconciled value
- Cost approach
 - 1004mc with comments and checkboxes
 - All comps are typed and exported to the report.
- Sales/listings on top of page 2.

Which forms software it automatically integrates with.

Currently a la mode, aurora, wintotal and total. We are working on ACI and Bradford which will be released this summer.

How long to learn to use software?

Training time for software and for different users can vary widely. Since the Genie is automatic, the training is limited. We have trained support people on our staff to assist with any issues. Once the MLS is formatted the user simply clicks next and selects from drop downs the needed information. Very little user input is required other than 1 page with 25 fields. The Genie uses an algorithm that runs behind Excel to perform all analysis. The user does not need any experience to use the Genie, only needs training to read the results correctly. We have a YouTube demonstration video and are working on more videos coming in the near future.

What is in the report(s) and how long are they?

We don't add a report, we save a copy of the Genie in the work file and include graphs.

What about graphs and charts?

Graphs are included and are automatically placed in the report.

Do you have comp ranking?

Comps are sorted by most recent sales date, with least adjustments on top.

What about statistics training?

We haven't developed a training, that's why we recommend AI's class.

What about a record of what you do/changes you make?

The only changes we make are deleting comps with blank cells. We note how many comps were deleted. Once we integrate with Realist we don't anticipate deleting any comps. Since the Genie performs the analysis in an algorithm, there are no changes.

Regression method(s) used.

We use multivariate regression analysis provided in Excel's analysis toolpack.

Instructions for importing. How long to learn and how long to do on each appraisal report.

We have an export guide we send to every user. If they don't know how to setup an MLS export, we will set it up for them free of charge. Once the export is setup, the exports and importing are automatic. The user only needs to know how to browse to the saved export with the window that opens in the Genie.

Can you import data from different data sources into the same analysis?

The user can type in the additional data, or if they have it in a form we can import we will help them to get it working. We can automatically import .csv(comma), .txt(tab), and .tsv(tab) delimited files.

How many sales are required?

Up to the user, we can import up to 5 years and 500 comps. But we have a disclaimer when less than 25 comps are imported that the data is not statistically significant enough to be reliable.

What if data is weak?

That's why we have extraction and matched pairs analysis included on the same data.

Is data scrubbing available?

The Genie scrubs the data to be UAD compliant, no comps are removed. Prior to regression being performed, the user can narrow the comp search by selecting all and the unselecting the outliers, they are then automatically removed by clicking a button.

Do you have a peer database?

We have an automatic peer database, the data comes directly from the appraisers comp database. We import the comps from the appraisers report and keep a running average of what other appraisers are reporting about a particular address. When the user selects the comps to include in the report, the Genie first checks the users comp database in their form filler, if found the Genie uses that data, if not the Genie uses MLS data and then searches the Genie Peer Database(GPD) and if found the GPD data is displayed next to the comp, every field that is in the grid.

What data is used?

Once the import of the MLS data is done, the user selects checkboxes of the comps to type for the report. The Genie

allows the user to adjust up to 15 comps and select as few as 3 to export to the report. When the Genie is exported back to the report, the type comps are exported to the GPD and averaged in to what other appraisers are reporting about that particular property.

When the subject is exported, it overwrites any prior saved data for that particular property and the actual GLA, room count etc. is reported back to the user. No proprietary information is kept linking the GPD back to the appraiser and Appraiser Genie will not sell this information.

1. Select comparable properties, such as you would do for an appraisal report. Comps are selected from the import by clicking check boxes.
2. Only directly from appraisal report. Import or rekey. The subject and comps are exported from the appraisers report to the GPD when the Genie is exported back to the report.

How can appraisers select data? What criteria are available?

The users select the data in their MLS search, they define their own search, and the Genie imports the results of their search.

Can the appraiser choose which data to use?

The appraiser select comps from their import to type and adjust. After clicking next, the Genie automatically checks the appraisers comp database to see if that comp has been used before, if found the comp database information is used in the grid, if not the MLS info is used in the grid. By the end of April, the Genie will next verify all subject and comp information with public records through Corelogic Realist and, if discrepancies are found, that field will be highlighted and both sources reported, i.e. M 1450/P1530 GLA, (M= MLS, P=Public Record) the appraiser can then select which information to use in his report.

Appraisaltool

<http://Appraisaltool.net>

Contact info:

Paul Smith, p.smith64@integra.net
952-447-4423

Pricing:

One price for CD: \$225

Updates

No updates have been necessary at this time, but if a major update was needed it would be free.

Any discounts/trials for new users

Yes, all have a 30 day trial period and, if for any reason they are not satisfied, they will get a full refund upon returning the CD.

Discounts for purchases of multiple users

Yes, we have been offering a 10% discount with purchases of 10 or more.

How to get a sample report(s) and see a demo:

Both are available are the website

Who developed your product?

Appraisaltool was designed and developed by myself which took over two years to do.

How long has your product been available for purchase?

It has been available for purchase for two years.

How well does your software work in rural areas or small neighborhoods with very few sales?

Appraisaltool was designed to work off the appraiser's sales grid on the form.

What level of statistics knowledge is recommended?

Appraisal tool does all the statistical work in the program which allows all appraisers the ability to use it. Appraisaltool is based on sound appraisal principles which are taught to appraisers. However, they would spend hours calculating these where appraisaltool software does it in a matter of seconds.

What variables does your software calculate?

The software is designed to be flexible enough to make all the adjustments usually found on a typical form appraisal like a 1004. Adjustments for any type of improvements that can be measured with a unit value can be done. It does not get into the subjective items like view and quality of construction.

Do you need to own and know how to use Excel on a basic level?

Yes, however, it is usually included in many computers when purchased.

Assistance if state appraisal board has questions about an appraiser's use of your software - how does it work, etc.

Appraisaltool software comes with an explanation as to the principles and theory behind the workings and how it is used by the appraiser. This is what the appraiser can present to the board to explain their adjustments. I am available for communicating the workings if any questions should arise.

Reports

This program is designed to provide a report as to how the adjustments were made.

Which forms software does automatically integrate with

Appraisaltool is designed to work off of the appraiser's sales grid and is usable on all forms. It provides the appraiser with a report which he can put in his work file and scan into her/his appraisal.

How long to learn to use software?

Appraisaltool comes with a manual which is very simple to use and most appraisers do not have any problems. The key to this software is the appraiser's ability to use the best and most similar comps for his sales grid. A novice can use this program, you don't need statistical software experience to use it. At this time I am working on developing a live class for webinar which, hopefully, will be finished by the end of summer.

What is in the report(s) and how long are they?

The report is an explanation of the adjustments used in the appraisal. A sample appraisal report is available at the website for review.

What about graphs and charts?

Appraisaltool does not have either one of these.

Do you have comp ranking?

No, it is the responsibility of the appraiser to provide the best comps he can find.

What about changes you make to data or other criteria?

Changes on either the data or criteria will be of the final adjustment used in the appraisal. This is something all appraisers are faced with when coming up with a reasonable adjustment for amenities. It has been tested and usually changes in the data or criteria has very little effect on the appraiser's final conclusion.

Regression method(s) used

The regression method is based on the comparables used in the analysis. It is very similar to Hedonic Regression and multiple regressions.

How many sales are required?

Three is the minimum and nine is the maximum, however, I recommend six.

What if data is weak?

The data used must be explained by the appraiser as to why it is the best at this time. The software is based on sales grid of the appraiser, so the better the comparables the better the appraisal.

Is data scrubbing available?

The software allows the appraiser to do reasonable scrubbing, if necessary, to meet their market.

Do you have a peer database?

Yes, I have a peer base which is made up with other appraisers friends, professional contractors and land developers, The data was collected over the past 30 years of appraising and developed into a program that allows for adjustments so it can be used in different markets.

Manually rekey?

Yes, for every new appraisal the three categories must be reentered from the appraisal sales grid.

Regression Plus - David Braun**Contact info**

Regression Plus - software and training Automated Valuation Technologies, Inc. www.AVTtools.com David A. Braun, MAI, SRA david@AVTtools.com
(865) 679-4785

Pricing

\$249 plus shipping/handling for first time users must purchase all three modules. The prices are one-time fees - there are no per use charges. Significant discounts are offered for multiple users. The USL can be purchased separately for \$99.00 + S&H. There is no charge for updates to correct major bugs, however there is if the update is for major enhancements of the product.

Demo and refunds

There are full functioning demonstration software on the web site that runs for 2 weeks. There are no refunds- all sales are final.

Description of product(s)

Our philosophy is that the appraiser must understand that regression analysis is just a small part of statistical analysis. This means that over time the appraiser should increase his/her knowledge of statistical principle that relate to valuation. To this end, first time purchasers of the Regression Plus must purchase the All-in-One product (\$249.00 + S&H) so they get the training material. All-in-One Product includes: Regression Plus, Regression theory & training

material, USL Documenter, and the Fusion report builder.

1. Regression Plus is a traditional regression program based on the sum of the least squares of a straight line that is enhanced with special features for valuing property. This software allows the appraiser to totally and completely control the analysis. The appraiser decides which comparables to use, which property characteristics to consider, how the data is scrubbed, and performs the analysis. This allows the appraiser to explain to the client, reviewer, Appraisal Board, or judge exactly what was done and why. There are many automated features to do the actual work for the appraiser once he/she decides on the methods. A multi-page report is produced which can be included in the appraisal report or work file.
2. Regression theory & training material includes over 100 pages with 19 videos. This material is about how and why regression analysis works. It also covers the skill sets appraisers need to run regression analysis.
3. USL Documenter is a program that helps appraisers document any appraisal report for USPAP requirements, Supplemental standards, and Liability management. This program that can be used stand-alone or in conjunction with the Fusion report builder and the Regression Plus.
4. The Fusion report builder is a free application that combines the regression analysis with a qualitative adjustment grid and creates a USPAP compliant appraisal report via the USL Documenter for non-FIRREA (Evaluation) assignments. It does not produce a cost or income approach, but the appraiser can complete those in Excel and add them to the report when needed. This product does have built in tools to evaluate which of the comparables used in the regression program should be selected for the quantitative grid.

How to get a sample report(s) and see a demo and get training?

Sample reports are available on the web site. There are numerous videos on the website showing various aspects of the programs. It is especially important to watch the FAQ videos (these are in cartoon format) for each of the applications. In addition, there are fully functional demo versions of the Regression Plus and the USL Documenter (these run for 2 weeks).

When was it developed?

David Braun designed and developed the prototypes for each product. AVT sold its first software product in 2006 (9 years ago). We sold our first regression program in 2008 (7 years ago).

How often is it updated?

There are no updates scheduled for any of these products.

Does it work in rural areas?

The answer to this question is that it depends. To cover all of the "depends on what" would take several pages. For example, finding value requires fewer sales than extracting adjustment amounts. The quality of the data has a lot to do with the number of sales that are necessary. The Regression Plus will work as well as any other regression analysis program in rural areas. I sell a regression program, but what I am pushing is statistics knowledge and use in general. I would say that a rural appraiser should be able to explain why they didn't use regression. To do this they will have to have an understanding of regression and statistics.

What variables does your software calculate (bedroom, bath, GLA, pool, etc.)

The appraiser can use any and all factors and property characteristics. The appraiser is fully in control of this.

Do you need to own and know how to use Excel on a basic level?

While the use of MS Excel is not required, it is best to begin the process by exporting the MLS comparables onto a spreadsheet. The website has several free Excel templates for download.

Assistance if state appraisal board has questions about an appraiser's use of your software - how does it work, etc.

This is not an issue because the Regression Plus is a traditional regression program which the appraiser completely controls. So, there is no black box to explain.

How long to learn to use software?

Appraisers who have experience with regression analysis love the built in automated features in the regression Plus. So, my product is easy to learn and use. However, regression analysis techniques take weeks not days to learn. This is why I include over a hundred pages of regression analysis training materials with 19 short videos.

What is in the regression report(s) and how long are they?

A multi-page report is produced which can be included in the appraisal report or work file

What about graphs and charts?

Included in reports.

Regression method(s) used.

This is traditional multi-linear regression which calculates on the sum of the least squares method. This means it is powerful, but understandable.

What data is used? How is it entered and imported into your software?

The appraiser controls what data is used. Any source is fine. The comparables used should be loaded in an Excel spreadsheet. This data will have to be scrubbed, but most of that can be done in the automated in scrubber feature built in the Regression Plus. The data is loaded by copying it via MS clipboard. There is a button that will paste the data into the program. The data can be transferred directly from a .csv file.

How many sales are required?

The Regression Plus has no requirement about the number of sales. I think it does require six to run.

What if data is weak?

My program will run with poor quality data, but like all traditional regression programs- garbage-in-garbage-out.

Is data scrubbing available?

Data scrubbing can be done by the appraiser.

Savvi

Note: did not return survey by deadline. Information from web site.

www.savvianalytics.com info@savvianalytics.com

Price: \$50 per month **Trial:** 10 pack for 35.50

Description:

Savvi 4V - A cloud based, MLS driven platform where the appraiser can upload a csv file and have their data standardized, normalized, indexed to property record data ranked with outliers eliminated. Once the data is scrubbed, the appraiser can easily make their data selection in a mapping feature using imagery. Once selected, the entire dataset of no less than 200 comparables are then converted into a csv file to be uploaded to your preferred appraisal software program where we will populate your grid and insert an addenda addressing your "Fourth Approach to Value" using our proprietary Hedonic Regression.

What software is best for you?

Most important, see which work best with the data from your area. David Braun's comment is excellent "My program will run with poor quality data, but like all traditional regression programs - garbage-in-garbage-out."

Read the article and decide which software you want to try. Chose 1 or 2 to start. See how long they take to use and how much statistical expertise is required by looking at demos and videos from their web site. Also check their user interface - how easy it is to use and understand.

If you are experienced using statistics and don't want to use a "black box", you may prefer a product with a lot of options you can do such as data scrubbing, lots of charts and graphs, changes in criteria, etc. Regression Plus is an example.

If you want to learn a lot about statistics from the vendor, Regression Plus may work.

If you only want to pay once, and not per use, use Regression Plus and Appraisaltool which are only available on CD.

For matched paired sales methods, PAIRS(™) will work.

For software integration (currently) Appraisal Genie integrates with a la mode and Redstone integrates with Clickforms.

If you want to use only comps from your appraisal, Appraisaltool will work.

If you want software that is based on a product with many users and has CU-related features, developed by a forms software company, Bradford's Redstone may work.

Statwing uses a newer regression method, non-stepwise, which you may prefer.

Redstone Regression Software: Will It Work for Your Appraisals?

By Ann O'Rourke – Editor and Publisher of Appraisal Today

In last month's newsletter I wrote about 7 regression/statistical software programs. They were very different from one another.

In future articles I will be reviewing other software. Also, I will write about USPAP issues (only AVMs are discussed in USPAP) and responding to state board questions about adjustment methodology used in regression software. I will also write about doing your own regression using Excel. Plus, what you need to know about statistics and regression and where to get instruction. The information was provided by the vendors.

This month is my first review of Redstone by Bradford software. Redstone also includes other features that can help reduce the number of requests for more information. See below.

Many of the features in Redstone were developed first for Compcruncher, created 5-6 years ago and still in use. This software is used for completing driveby and desktop appraisals, and uses statistical analysis. Redstone is much simpler and easy to learn, as it is not used for producing appraisal reports. See below for Compcruncher vs. Redstone. Redstone calculates the 1004MC, it imports listings and pendings as well as closed sales.

Redstone uses MLS data, using a custom MLS export so the data matches the fields in Redstone. Bradford will give you instructions on how to do it, or will do it for you.

We all want regression software that will calculate all of our appraisal adjustments. The regression software do the calculations, of course. But, the results can be not usable because of data limitations - lack of enough good data. Above ground GLA adjustments are typically the most reliable, assuming the data source is reasonably accurate. But, for example, basement data may be limited or unreliable in the MLS you use, so the regression software cannot determine a reliable adjustment.

Why did I select Redstone for my first review?

I selected the easiest one for me to review. Redstone has a predecessor product (Compcruncher) which has been used for 5-6 years so it is not a totally new product.

I wanted to start with Redstone as it uses multiple regression software, which I first used it 1980 and am familiar with it. I have used Clickforms for over 20 years and am familiar with it. Also, I have known Jeff Bradford, the president, for a long time. He is used to my tough questions.

What does it cost?

- Redstone costs \$5 per property. You can get a trial package of 10 reports for \$10.
- Redstone - regression plus more features
- Redstone was developed by Bradford Software, which started doing appraisal forms about 30 years ago and is very familiar with AMC/lender issues.

It focuses on helping appraisers deal with AMC/lender issues, as well as providing adjustments. For example, producing an appraiser selected list of comps, similar to how Collateral Underwriter compiles its list, including allowing underwriters to change the criteria.

Hopefully, this report will cut down on requests for revision or more information.

What does Redstone include?

I was surprised to see that Redstone does more than calculating adjustments. Redstone includes:

- Adjustments using regression - standard multiple regression calculations.
- List of your best comps, using a method similar to CU. This gives the underwriter/reviewer a list of comps you consider the best to compare with the list that CU provides.
- 1004MC, based on methodology from the Appraisal Institute.

What is in the 4-page Redstone report?

The "Advanced Appraisal Analytics" report includes: Page 1 - Market Area Statistics (age, bedrooms, baths, etc.) for listings and sales, plus a map with data points Page 2 - Comparable Sales Selection - criteria used and list of comps plus map showing market area used Page 3 - Market Adjustment Factors - graphs and regression results. Time adjustment percent by month for 1004MC. Page 4 -

Compcruncher vs. Redstone

Since many of Redstone's features were first developed and tested in Compcruncher, this makes the software more reliable than recently developed software. Learning to use Compcruncher required training sessions and quite a bit of time as it produces a driveby or desktop appraisal, plus statistical analysis, including a page of regression analysis. A sample report I downloaded had 19 pages. Compcruncher is used primarily for HELOCs. Bradford developed custom

Compcruncher reports for its partners. Redstone reports are only 4 pages. Very little time is required to learn how to use it. The 1004MC is automatically produced and you can easily choose your criteria for comp selection. Redstone is \$5 per appraisal. Compcruncher is \$25.

Importing the Redstone report into your forms software

It is a PDF file so you will be able to add it to your appraisals whatever forms software you use. If you use Clickforms you can include it automatically in your appraisal reports.

How to see if you will like Redstone

Go to www.bradfordsoftware.com/redstone and watch the 33 minute video "Advanced Analytics for Appraisers". Go to www.appraisalworld.com and join to download the Redstone desktop software and try the practice properties.

I first started with the Redstone software and used several of the 13 included practice tutorials from around the country. You don't need to worry that they probably are not from your local market. They are samples from conforming tracts, rural, unusual, etc. and give you a good idea of what works, and what doesn't work well with Redstone.

I didn't watch the video first - a mistake. I strongly recommend watching the 33 minute video, then keep it open while trying one of the included sample reports. This is a very easy way to see how it works without having to set up exporting from your MLS. You can test removing comps, removing outliers, etc.

The only problem I had was that I didn't know it was slow to load as it uploads all the data, maps, etc. first. I have a very fast computer and thought I was doing something wrong.

If you like it using the practice properties, then purchase the 10 for \$10 offer and try it on your data. If you decide you want to use it, the price is \$5 per property.

Tech support

Fortunately, Bradford does not outsource tech support. I sometimes have difficulty understanding non-native English personnel over the phone when discussing technical issues. For my first call, about why it was so slow, I received a call back within 15 minutes.

My next call was about "massaging" the comps to get more adjustments. My call was immediately answered. Neil, the tech support person I spoke with, was very knowledgeable and patient with my questions about bizarre adjustment factors.

Workfile or list of changes for regression to support how Redstone determined your adjustments

Reviewers and underwriters (and state appraisal boards) want to know how you did your analysis. Redstone's imported MLS data is available in the Redstone appraisal file. However, when doing regression, there is no history of changes that you may have made, such as removing outliers and sales, etc. For now, you should keep a manual list of your changes in the appraisal file. Compcruncher produces a workfile, including the changes you made, so Bradford could add the feature to Redstone, if appraisers want it.

What can be printed from Redstone?

Only the 4-page report can be printed as a PDF. Other screens, such as histograms and any thing displayed on your screen cannot be printed. You can only get copies by using a screen shot software such as Snag-it, which is a hassle. I did not see any way to export the final sales and listings, but this information is saved in your Redstone file for the subject property.

Bradford chose to keep the Redstone report brief, at the request of many users. But, the software could be set up to allow including additional pages in the report, similar to how forms software allows you to choose what it in an appraisal report. CompCruncher's very long reports included lots of this information, so this feature could be added.

How is the MLS export/import set up?

To import your MLS data, it must be "mapped" to Bradford's database criteria. Bradford has mapped many MLSs, so they probable have yours already mapped. If not, they will map it for you. You can do your own mapping. Bradford will send you instructions. However, I strongly recommend paying \$50 to have them do it. When they set up mapping for my MLS by working through my MLS account, the tech person found a few tricky fields that she had to adjust. Both Bradford and I are located in the San Francisco Bay Area, so I am sure the techie had experience with my MLS, but still had a few problems.

MLS search for regression data vs. searching for comps for an appraisal - very different

You choose the criteria, just like when you do an MLS search. However, more data is better than less data. For example, when doing an MLS search for an appraisal I typically look in a range of GLA, site size, etc. I also use a smaller area. For regression this is not recommended. I tried using my typical geographic search criteria and did not have enough data to get good results on my adjustments. When I expanded my search, the adjustment results were much improved. You will probably need to see what works best for your MLS and different types of properties.

What about non-MLS data?

You can import any data, such as public records or your own database. This is important in areas where there is no MLS, MLS is very unreliable, or there are lots of private sales, etc. You need to be sure the data matches Redstone's data fields. That can be done by setting an excel spreadsheet template. Or, you can cut and paste into your Redstone MLS import.

How far back in time can you go for regression data?

Although many AMCs/lenders limit how far back in time you can go for appraisal comps, there are no limitations for regression comps. For regression, you can go as far back as you need in Redstone.

As we all know, when there are few sales, or you are appraising in a rural area or an unusual property, one year back is inadequate. For your adjustments, you can go as far back as you want. Just set up your MLS to export older data.

The 1004MC only goes back one year, so often only one year of MLS records is selected by the appraiser for export.

Redstone adjustments

The available Components of Value (adjustments) within the Redstone and CompCruncher regression analysis include:

- Gross Living Area (per sq. ft.)
- Bathrooms (each)
- Site Area (per sq. ft.)
- Garage (per bay)
- Carport (per bay)
- Basement Area (per sq. ft.)
- Basement Finished (per sq. ft.)
- Year Built (per year and should be a negative adjustment)
- Fireplaces (each)
- Pool
- Spa

- Sales Date (per day on market, can be negative or positive adjustment)

Note: Bedrooms are not done as many appraisers consider it a "double adjustment" as number of bedrooms affects GLA. In my market, number of bedrooms is very important as there are many 2 bedroom homes, so I will use another method for this adjustment.

In addition, there are other market factors that are not included or taken into account within a Redstone regression analysis. These factors/attributes include:

- Condition
- Location
- View
- Quality of construction
- Proximity to areas that increase or decrease the marketability of a given property i.e. busy streets, commercial property, schools and parks

Market Conditions (Time) adjustments - 1004MC vs. regression

I was confused about time adjustments until I figured out that there are two very different methods used in Redstone. The 1004MC uses median sales price per month for the past year. Regression uses the same method for time adjustments, GLA, garages, etc. It is determined by the standard multiple regression software in Redstone, which includes all the MLS data, not just median price per month.

Don't get me started on the limitations of 1004MC! Fannie Mae requires that appraisers use it and has no plans to change it. On the plus side, before the 1004MC was required, many appraisers would not use time adjustments as lenders did not "like" them. This had been going on for decades in many areas.

How does Redstone determine the accuracy of the adjustments?

Redstone uses p-values. P-value definition: "A particular statistic that measures the significance of a variable in a regression analysis. The statistic is important in inferential statistics for hypothesis testing in regression analysis. The PValue is a measure of the randomness of a component used in the regression analysis."

"When evaluating p-scores, a value closer to 0.00000 is more reliable than a score closer to 0.99999. A p-value of <.05 means the probability that the recommended adjustment is random and is quite small. For each of the calculated Components (adjustments), the significance of the Component of Value will range from:

- Very High Less than 0.01
- High 0.05 through 0.0099
- Moderate 0.15 through 0.0499
- Low 0.3 through 0.1499
- Very low 0.99 through 0.2999
- Insufficient Data
- Excluded (due to MLS inaccuracies or negative value."

I really hated getting very few low p-value scores. This meant I could not use the adjustment. I definitely will have to practice setting my geographic area in different ways.

Factors affecting adjustments

"Many factors contribute to the results obtained from the data:

- Variety of property configurations

- Accuracy
- Quantity of properties included in the sample
- Market variability

Note: When selecting the neighborhood for the analysis, select ALL properties of the same type, Single Family, Condominium, etc. The analysis is of the surrounding properties and is unrelated to the selection of comparable properties. DO NOT exclude properties based on the attributes of the subject property."

What about adjustments (Probable Value Range) that don't make any sense?

On my first tests, I had GLA adjustments much higher than I typically use. To me, it meant I needed to rethink my adjustments as GLA is a very straightforward number that almost all the properties will have. (I excluded properties with no GLA.)

When changing the data search criteria, it was still higher than I have been making with values of \$164 and \$194 per sq.ft. I will check using another method, but I am sure I will need to increase my adjustment. Of course, the smaller the home the higher the GLA adjustment, which few multiple regression softwares considers.

Time adjustments are the easiest adjustments to make. You should already have a good idea of what they are in your market. A few times I needed to expand my geographic area to get a larger sample and a lower p-value.

Other adjustments could not be correct, such as a \$73,000 fireplace adjustment. In my market, due to air quality issues, few people use their fireplaces. The median sales price for my market is around \$750,000. It was some type of data issue I assume, maybe because there was not a lot of variation in the number of fireplaces in the properties.

The garage adjustment was \$50,000. This may be accurate as there are many homes without garages (or off street parking) because many homes were built prior to 1920. The garage adjustment I have been using may be low. I will use other methods to check this result. Matched paired sales would probably work for this adjustment.

The bathroom adjustment was \$35,000. My adjustment may be too low. Many homes in my market have only one bathroom. A second bath is definitely important to buyers. Matched paired sales would probably work as a double check.

See what happens in your market. Try different search criteria and different properties.

Where does Redstone work well?

Just like AVMs, it works well in conforming tract areas with relatively new homes. In my city there is a small project with homes built since 1975 and a median price of \$935,000. The sample size was 116 properties. Three adjustment factors had .0000 p-values: GLA, site area, year built and sale date. No other adjustments worked, such as bathroom and fireplaces, probably because there is not much variation as the homes are very similar. There are no basements. No adjustments for view were calculated, which is a major factor in this market. Another method would have to be used.

Regression - the key to accurate results is the data

Why aren't AVMs, such as Zillow's, very accurate? The Data.

Property data varies widely and has many, many different ways of categorizing. There are some small areas where MLS data is not online or there is no MLS data available. I'm sure your local MLS information drives you crazy sometimes.

Public records has very limited data, may not be accurate, and varies widely. For example, assessors' offices have different ways to measure GLA. It may, or may not, match with how GLA is determined in your market. Redstone imports MLS data from your MLS vendor. As we all know, MLS data varies widely among MLSs and can vary widely among geographic areas, depending on the accuracy and reliability of the data source. There are no national data standards for MLS. MLS data is used for listings in the 1004MC. In my geographic area, some agents are accurate and some "massage" the information for listing purposes. As a regular user of an MLS, you know which cities, agents, etc. are the most reliable. With Redstone, you can change the MLS data before importing or after importing.

Where did the name Redstone come from?

"Redstone missiles played an important role in the early years of the space race. Modified Redstone rocket technology flew as both Jupiter-C and Mercury-Redstone space launchers."

Regression Fundamentals - Bradford's very good 11-page discussion of regression issues

The quotes above and below are from this document. To download it, go to <http://appraisalworld.com/i2/docs/Redstone-regression5-15.pdf> It is free. Click on the Regression Overview icon.

Objective vs. Subjective Qualities within a Regression Analysis

"Regression analysis does not take into account, condition, location, quality or views. It is advisable not to combine properties with substantially different qualities with other types of properties due to their having qualities not accounted for within the regression. Foreclosures, fixers, lake view properties, gated communities and exclusive communities may be removed from the analysis, unless these types of properties are representative of the market. Exclusive communities may include but are not limited to senior housing, low income housing or golf course development. "

"In some circumstances perhaps when there is not a lot of activity in a market, the appraiser may go back 24-months (or further) instead of 12 months to obtain an adequate number of sales in order to complete an analysis on exclusive communities. Sample sizes can range from 40 to 300 properties. Normally, the larger the sample the more accurate the analysis."

Sample size and what to not include

To obtain an adequate sample, a larger geographic area may be needed that is larger than would be considered appropriate for the selection of comparable properties. A larger sample is recommended. A larger sample size is more likely to provide adjustment ranges for more Components than a smaller sized sample. Properties to consider removing from the sample include:

- Foreclosures and other non-arms-length sales may be removed from the sample if they are an insignificant part of the market.
- Properties significantly different from the other properties in the market due to: view, location or attribute (Gated Community, Senior Community and Golf Course Communities).
- Ranch properties and Farms are different than smaller lot properties and are difficult to compare

Using a regression analysis due to the complexity of their configurations. See the links above to download the full report.

Using the Regression Analysis for the Subject Property

"When the analysis is done, the subject property is not even a consideration. Basically, components of value are determined by using all the properties in the area to determine a value range for each component. In order to

complete an analysis, variety not similarity is needed. Regression works best when the neighborhood is made up of various types of homes rather than similar types of home. ..."

Some Limitations of Redstone Analyses

"Rural areas with limited number of sales may need to cover a larger area than what would be used for selecting comparables. Often several communities are combined."

"Manufactured homes, multi-family, income and commercial properties are outside the scope of the regression analysis used in Redstone and CompCruncher. Properties of this type require a different configuration of components of value to complete a viable analysis on properties of this type."

"Regression analysis is not appropriate for all SFRs and condos in all situations. Properties located at the high or low end of a value range are much harder to evaluate using regression analysis. Acreage properties with additional attributes, such as, out-buildings are inappropriate for regression analysis."

"Appraisers will develop a feel for typical PVRs upon completing numerous regression analyses within their market area where sufficient data is available to calculate PVRs with a satisfactory p-value."

"Unusually high or low adjustment values may be calculated through regression analysis. Though the calculations are correct mathematically, the appraiser may opt to exclude the component of value from the analysis. If used, the appraiser may state that the adjustment may be affected by other factors that result in an unusually high or low value for the specific component of value."

"The regression analysis will not provide information for determining all adjustment due to the quantity and quality of available data. Some adjustments, such as condition, location, view and etc., are beyond the scope of available data obtained from your local MLS."

"The appraiser will need to combine personal knowledge of the market, results of other relevant regression analyses, and the data provided within a given report to determine the adjustment amounts used for each property valuation."

"Though regression may not always provide an adjustment for every Component of Value it is a methodology the appraiser may use as evidence of applying mathematical analysis to the available market data to determine adjustments."

Note: There are some very good examples of how the data affects the adjustments in the document.

Should you use Redstone?

Read this article and see if Redstone will work for you. Try a few of the sample properties. Buy the 10 reports for \$10 and see if it works in your area. Even if you decide to not use Redstone for your appraisal adjustments, you will learn a lot about multiple regression by using the sample properties in the Redstone downloadable software. Plus, the document referenced above has very good tips applicable to all regression software.

If you want more information, Go to www.appraisalworld.com/redstone. Registration is required but is free.

A Closer Look at Listings

By Douglas G. Smith, SRA

By any measure, most residential markets around the country are experiencing a surge in the number of properties listed for sale. Properties are also remaining on the market longer. The analysis of these listings is taking center stage in the scenario of determining the health or frailty of the local market. One after another, lenders are asking for market value trends and supply and demand trends. One major lender recently issued these instructions, *“By comparing the total number of closed sales over the last 12 months to the number of current listings in the same market area, the potential supply can be determined.”* The instructions go on to comment, *“If the supply of properties for sale reflects an over-supply for the subject market, the appraiser should provide comments that explain how that over supply impacts market value.”* While the focus may be on the number of listings and lenders are requesting a quantitative analysis of listings, appraisers must be careful not to overlook the qualitative analysis of listings. To the appraiser, listings may not be what they seem and understanding the inner workings of real estate being offered for sale allows insight into the true condition of the current market and in some cases may suggest where the market is going.

Coming to terms with supply and demand

Lenders refer to the quantitative analysis of listings as a supply and demand analysis. In traditional economic terminology these terms are a mischaracterization when applied to housing. The required analysis is more appropriately described as an inventory analysis. The terms supply and demand refer to a relationship of price and quantity of an offered product or service. Demand refers to how much (quantity) of a product or service is desired by buyers. The quantity demanded is the amount of a product people are willing to buy at a certain price; the relationship between price and quantity demanded is known as the demand relationship. Supply represents how much the market can offer. The quantity supplied refers to the amount of a certain good producers are willing to supply when receiving a certain price. The correlation between price and how much of a good or service is supplied to the market is known as the supply relationship. Price, therefore, is a reflection of supply and demand. The relationship is typically shown with supply on an upward slope. This means that the higher the price, the higher the quantity supplied. Producers supply more at a higher price because selling a higher quantity at a higher price increases revenue. In housing, the only portion of the so-called supply of housing is that which is new housing supplied by developers producing homes to meet demand at an acceptable price. Appraisers, with an economics bent, however are fighting a losing battle as lenders have the upper hand when labeling their own requirements.

Two issues split the analysis of the number of homes offered for sale in any market. The first is the make up of the listings in terms of the intent of the sellers and the second is the part of the analysis that defines the market area from where the listings are drawn. Appraisers best define the market in traditional terms by identifying the market forces that are existing in a specific neighborhood. This is commonly referred to as granularity.

Granularity

The business dictionary defines granularity as, *“Level of detail (fineness) considered in a model or decision making process. The greater the granularity, deeper the level of detail (fineness of data).* In the Missoula, Montana market, the Office of Federal Housing Enterprise Oversight (OFHEO) produces the House Price Index (HPI) for the Missoula MSA. The HPI is a weighted, repeat-sales index, meaning that it measures average price changes in repeat sales and refinancings on the same properties. Citing this index satisfies some of the guidelines issued by lenders in response asking for statistical support for whether prices are stable, increasing or declining. Since the Standard & Poor’s/Case-Schiller monthly home price indices are only published for 20 metropolitan areas, this index is not relevant in Montana. The challenge facing appraisers is that these published indices in most cases don’t reflect what is happening on the ground in specific neighborhoods. All appraising is local and the chief benefit to any client for using an appraiser is that the appraiser enjoys geographic competency. The market as a whole may be acting in one way but for very individual reasons, a specific neighborhood may be acting in the opposite direction. In the same way that

price indices may vary for individual neighborhoods, so does the number of properties offered for sale vary. By studying the market area and those directly competitive a more accurate picture emerges. Hence, the level of granularity becomes the key to a more accurate analysis of the properties listed for sale.

Vapor Listings

Lenders and the press treat listings or the inventory of homes offered for sale as a reasonable statistic for gauging the health of the market. There is a sense that market onlookers regard listings as “surplus” properties. The more listings there are and the longer properties are on the market points, the more unhealthy the market. Listings are assumed to have the same characteristics and the sellers are assumed to have the same intentions or motivations. No accounting is made for the changes in motivations or intentions over time. In the Missoula market, developers are allowed to list in the local multiple listing service (MLS) land parcels on which the developer will build a certain model. All that exists is a platted parcel and a blueprint. In one local community within Missoula County, these “vapor listings” make up 40% of the listings. In the Missoula MLS, these properties are listed as to be developed (TBD) and rightfully in any inventory analysis should be subtracted from the total.

Competitive Set

Most MLS services allow for segmenting properties into broad categories such as single family units on lots or acreage or manufactured homes on lots or on acreage. Condominiums and townhouses might be another type of property lumped into a MLS neighborhood. While the total market within a neighborhood may provide an overall picture of the condition of the market, analyzing the market segment in which the property is found is more relevant. This extends to property attributes such as number of bedrooms and baths etc. One Company, Rels, the appraisal management company arm of Wells Fargo, requires appraisers to adopt a “Reasonable Substitute” analysis based on the asking price alone. In this analysis, the appraiser estimates the price point of the subject and analyzes the properties that are considered reasonable substitutes for the property being appraised. A property that is considered a reasonable substitute is considered to be an offered property that is priced within a range 20% below and 20% above the estimated value of the subject. To correctly determine how the property being appraised fits into the market, listings must be analyzed in the context of both the neighborhood and the specific competitive set that applies to the property. The appraiser must initially identify and evaluate the property’s characteristics. This in turn allows the appraiser to identify the makeup of the pool of buyers for the property. Only then can the appraiser create a search mechanism for properties that are competitive to the subject.

True Listings

It takes some close reading of listings one-by-one but understanding the make up of listings is an important exercise to understand the market. Most MLS listings do not readily identify properties that are vacant. Some identify properties if they have tenants in order to alert real estate agents that extra steps may have to be undertaken to show the property. By carefully reading the listings, looking to see if the occupant is listed with whom to make an appointment to show are indications of the property status. In the Missoula market, about 25% of the properties are vacant and less than 2% are tenant occupied. Keeping track of this ratio provides a measure of the seriousness of sellers. If sellers have vacated the property and have moved on, rising ratios may signal increasing weakness in the market. Most MLS listings are not helpful for determining how many properties are in foreclosure. These statistics are mostly drawn from courthouse records. Records are kept for notices of foreclosures and actual foreclosures. One helpful website is forlosures.com. This website lists the foreclosure laws for each state and link to applicable state laws. Another site, foreclosure.com lists in detail foreclosure statistics, sheriff sales and bankruptcies. By placing the cursor, the statistics for the county are shown. Both of these sites to view the actual properties require a subscription.

The Collapse of the Greater Fool Theory

The make up of the properties that are offered for sale changes over time. Presently there are a higher number of properties that are Real Estate Owned (REO) properties. One emerging category of listings is properties that are being offered by non-serious sellers. These sellers are different from the so called “upside down” sellers who have too much owing on their property to offer a realistic price. These are sellers who have been coaxed by real estate agents with too much time on their hands to list their property in hopes someone will come along and pay more than the going price for the property. In Montana, many benefited from this strategy because compared to markets outside Montana, Montana real estate seemed to be priced at bargain levels. Some listings are a result of the greater fool theory playing out. Many erstwhile investors purchased properties expecting another buyer, (the greater fool) to come along and pay an even higher price for the property. There is clear evidence in the present market, that rising prices on which the greater fool theory was based were ultimately unsustainable and someone had to be left holding the bag. The current property owner is turning out to be the greater fool. Again, a careful reading of listings is required to come to some sort of determination as to how many properties are listed that are virtually “unsellable” by current market standards. One other avenue of assistance is to track listings over time. “Unsellable” listings tend to become evident once the average marketing time is exceeded. Prior to this, appraisers may use as their best indicator a simple square foot measure, the offered selling price divided by the GLA. With some parameters set, this simple measure can provide not the most reliable indicator of properties that are priced unrealistically but at least some measure of properties that are not competitive properties.

Capture Rate

The estimated percentage of the total potential market for a specific type of property that is currently absorbed by existing like properties or is forecast to be absorbed by proposed properties is referred to as the capture rate. By tracking listings of properties over time, and performing a detailed inventory analysis in both good years and bad years, appraiser can more accurately define both the present condition of the market and isolate trends in the market’s direction. The capture rate provides a base line for determining whether the market is normalizing or is continuing in a downward trend. This analysis, however, cannot be confined to the number of properties offered for sale but must be expanded to a closer look at the qualitative factors that make up the properties listed for sale.

Have Something to Contribute?

Do you have an idea for an article you’d like to contribute to the next newsletter? A news item to cover, topic to suggest, pictures from a Montana event? Send them our way! E-mail content and ideas to Douglas G. Smith, SRA at hotelman@montana.com.



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