



Floodplain Manager's Notebook

By Patricia Staebler, SRA and Rebecca Quinn, CFM

A few months ago **Patricia Staebler**, an appraiser from southwest Florida, got in touch and offered to share her take on determining market value for use in making substantial improvement and substantial damage determinations. Patricia's credentials include State Certified General Appraiser (Florida), SRA (Appraisal Institute Designation) and Reserve Specialist. I think she makes a compelling case for broader use of actual cash value (depreciated) rather than what I'm guessing may be the more common "professional appraisal." Take it away, Patricia!



Not long ago I received a call from a building official of a small beach community in Florida who is familiar with my appraisal work. He asked for help in a case involving a market value appraisal¹ with a market value that worked to a very high \$600 per square foot. On an island in his community a couple of homes built in the 40s and 50s, including the one in question, had withstood many storms and floods. Most of the homes are very simple wood frame buildings raised a little off the ground on piers. They look like the first spring storm would blow them away, and yet, here they are. And, of course, being in the floodplain they're subject to the substantial improvement and substantial damage requirements, sometimes called the "50% FEMA Rule."

I will use this case as an example to clarify the difference between a market value appraisal and determining market value by developing the construction-based cost or actual cash value or ACV. FEMA's [Substantial Improvement / Substantial Damage Desk Reference](#) (FEMA P-758) identifies ACV, depreciated, as one method to estimate market value. Another method used by professional appraisers is the market value appraisal consisting of the sales approach (3-5 comparables), the cost approach (not comparable to the ACV approach) and possibly an income approach, but FEMA explicitly does not recognize the income approach because it is based on how a property is used. When I'm finished, I think you'll see why I recommend ACV.

The current owner purchased the property for \$1,250,000, well above the county's assessed value. The owner most likely based the purchasing decision on a market value appraisal.

The [Appraisal Institute](#) defines market value as "the most probable price, as of a specified date, in cash, or in terms equivalent to cash, or in other precisely revealed terms, for which the specified property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale,

¹For simplicity, I'll use the term "market value appraisal" to mean the complete method that includes identifying sales of 3-5 comparable properties and also a "cost approach" that differs from ACV. Some banks require a simplified "cost approach" that involves filling in just a few lines – definitely not equivalent to an ACV.

with the buyer and seller each acting prudently, knowledgeably, and for self-interest, and assuming that neither is under undue duress.”

Now let’s take a look at what’s involved in developing ACV. ACV looks specifically at the structure without the site value, and without the site improvements. As explained in the SI/SD Desk Reference, “actual cash value is the cost to replace a building on the same parcel with a new building of like-kind and quality, minus depreciation due to age, use and neglect. ACV does not consider loss in value simply due to outmoded design or location factors. The concept of ACV is used in the insurance and construction industries. In most situations, ACV is a reasonable approximation of market value.”

In the mid-70s, FEMA first defined substantial improvement (and subsequently substantial damage) referring to market value.² In much of the country at the time, vacant land sales were abundant and it probably was easy to determine and deduct land value from the total value determined by market value appraisals. In today’s markets, doing that becomes more and more difficult, especially in densely populated areas with fewer vacant lot sales.

And another thing has changed: the value of land compared to total property value used to be closer to 50:50 for typical urban and suburban lots. But in today’s market the land can be 80-90% of the total property value. This is often the case with older homes in valuable waterfront communities. In the case of my example property, the ratio is even higher, with land assessed at \$860,000 and the building assessed at \$30,000 – just about 3% of total value. Take a moment to process that and what an appraiser has to do, to deduct that land value. It would be easier to deduct the minor value of the structure from the whole.

Look at the table on the next page and let’s compare the multiple steps needed to develop the “cost approach” that is part of a complete market value appraisal (left column) and the straightforward ACV approach (right column).

² RCQ’s history note: In the early years of the NFIP, the definition referred to actual cash value. Despite having several dozen Federal Registers since the origin of the NFIP, I haven’t found the one that explains the change to market value.

Comparison of Steps in the Cost Approach Application	
Market Value Cost Approach	ACV Cost Approach
Opinion of Site Value	n/a
Add Cost/SF Residence	Value Structure as a whole with application of the appropriate occupancies with attention to interior finishes
Add Cost/SF Garage	
Total Cost New	
Minus Depreciation	Physical Depreciation looking at age, wear and tear, deferred maintenance
Physical Depreciation	
Functional Obsolescence	
External Obsolescence	n/a
Total Cost Depreciated	Final ACV Value
Add Site Improvements	n/a
Total Value	n/a

So, instead of seven steps in the market value appraisal, the ACV has only three simple steps. The more steps an appraisal has, the more potential for uncertainties. For example, let's take a look at the step that requires an opinion of site value. As mentioned, many coastal areas are densely populated and sales of vacant lots are difficult to find, which means the appraiser has to use the "method of extraction" to estimate the site value. Again, the appraiser has to look to comparable sales, find the depreciated construction value of each building, and deduct it from the total property value to arrive at the site or lot value. In essence, it's a reversed cost approach. The outcome of these extracted, comparable, land sales are then used in the market value appraisal. The extraction method contains a lot of assumptions and opinions of the appraiser. In the case of my example property, the original appraiser must have gone to great lengths to keep the land value as low as possible in order to deduct less from the overall value to arrive at a higher depreciated value for the structure.

As a reminder, current market value of the property is \$1,250,000 (at least that's what it sold for recently). The structure, a 960-square-foot wood frame building on piers, was valued by the original appraiser at \$600/SF, resulting in a building value of \$576,000. Subtract that from the sales price and the site value is \$674,000. The assessed value (and we all know this value is about 15% below "true" market value) states \$860,000 for the site (add 15% = \$989,000). This means, the appraiser may have understated the land value by \$315,000. What an exercise!

This case is extreme, and it didn't take much for the building official (also a CFM) to realize that something was off. But think for a moment. Let's say the appraiser understated the value of the land by only \$100,000. Would you notice it? Could you prove a mistake? Large municipalities might have a review appraiser on staff trained to review market value appraisal reports. But small counties and cities have no way to correctly evaluate and review reports like this. So why not go the easy way and utilize the ACV approach more?

Ever since my practice has concentrated on the valuation of construction, I've asked myself what market value has to do with the depreciated value of the sticks and bricks. Sorry FEMA, but the term "market value" needs to go away, and if that can't be done, FEMA should reverse the implied order of preference

in the *SI/SD Desk Reference*. The ACV approach clearly deserves the top spot, along with a better explanation as to why it should be preferred.

Let's talk a little more about the ACV approach and common mistakes I see in reviewing appraisal reports prepared by others:

- Lack of construction knowledge and lack of identification of the construction class (ISO construction-type classes).
- Cost per square foot is taken from national cost books, without accounting for regional cost and locational factors, such as wind extremes; island, resort, or remote location; seaward of coastal setbacks, etc.
- Valuing the building as though it is up-to-code, and not as-built in current condition. Many appraisers forget "we have to appraise what is there" and not what should be there. This leads to exaggerated values. When comparing appraisal outcomes to the market by means of contractor interview, the appraiser has to ask the right question to receive the right answer. If we ask a contractor what it would cost to build today, we will get an up-to-code answer. Wrong question. We should ask for the cost to replace in current, as-built, condition.
- Wrong application of depreciation. ACV starts with what it costs to build new (like-kind and quality), but then must be depreciated. FEMA clearly describes that functional obsolescence (outmoded design) does not have to be included in depreciation. Therefore, only deferred maintenance, wear and tear, and the general effective age are applicable.
- Unsupported depreciation percentage: In many appraisal reports, I find a depreciation percentage dropping out of thin air, with no support, explanation or source. So how did the appraiser come up with the number?
- Lack of attention to interior build-out and certain interior features integral to the building that can be included, such as upgraded appliances, built-in sound systems, built-in cabinets, wall and ceiling wood paneling, etc.

Reviewing ACV reports that contain adequate documentation and explanation should be much easier for CFMs and building officials than the task of reviewing market value appraisals. The data and documentation are easy to understand, specifically because they resonate with the building professional's knowledge and expertise.

So far, I have spoken about residential properties. When it comes to commercial and industrial properties, I think we need even more emphasis on ACV. The *SI/SD Desk Reference* states that "using the income capitalization approach is not acceptable because it is based on how the property is used." What FEMA is not addressing is the fact that even using comparable sales for income producing properties includes, to some extent, consideration of income. Please recall the first footnote above explaining "market value appraisal"—the final value provided in a market value appraisal report is a reconciliation of three approaches or at least the sales comparable approaches, and the income approach when a property is too old for a cost approach. Therefore, the final, reconciled value will always contain at least some consideration of income.

In whatever ways we look at the valuation effort, from the residential angle or the commercial/industrial, all facts point to the advantage of ACV over market value appraisals. I encourage CFMs and building officials to take a good look at appraisal work coming over their desks. Then give preference to market values developed using ACV, educate your staff, and tell appraisers in your community how you want them done. It works in a lot of communities I've work in, and it made life a lot easier in local building departments.

And the outcome of the case I was asked to review? My ACV analysis resulted in rounded \$150/SF, including depreciation. It probably won't surprise you that the case is pending mediation.

Contact Patricia at patricia@staeblerappraisal.com. She's a commercial appraiser and construction consultant in Florida, specializing in the valuation of construction, with emphasis on insurable value and the 50% FEMA Rule appraisal. She works mostly for general contractors familiar with FEMA regulations, but also consults with municipalities looking for support on FEMA valuation issues.

Submit your own items or suggestions for future topics to column editor Rebecca Quinn, CFM, at rcquinn@earthlink.net. Comments welcomed! Explore back issues of the [Floodplain Manager's Notebook](#).

We have very sad news to report.



We have very sad news to report out of our home office. **Jim Dunham**, our member services coordinator, passed away Monday night. We are all shocked by his sudden passing, and will be doing all we can to help his wife **Nancy Dunham**, our certification program assistant, through this very difficult time. If you would like to share a memory you have of Jim, you can email it to editor@floods.org and we'll make sure Nancy gets it. You can also send a card to Nancy here at the office: 8301 Excelsior Dr., Madison, WI 53717.

New ASFPM employee, Jen Niles. Welcome aboard!

Jennifer (Jen) Niles, our new web developer, specialized in design and front-end development in WordPress for the past 16 years. She also has experience in custom CMS BLOX, Joomla and limited experience in Drupal, WIX, Weebly and Google analytics in addition to integrating with applications such as MailChimp, Constant Contact, PayPal, WooCommerce, YouTube and Vimeo.



Prior to her web development experience, she worked for various companies such as Minuteman Press, Capital Newspapers, and more recently, the Wisconsin Department of Natural Resources. Jen enjoys being involved at different stages of a project from initial requirements gathering and scoping to redesign and development.

She lives near Prairie du Sac with her husband and has two sons who live in the Madison area. Jen and her husband enjoy cruising in restored Mustangs as well as attending live music venues, hiking, traveling and spending time with family and friends. She also has a passion for gardening, arts and crafts, photography, and hanging out with their cat and two dogs.

Jen is very excited to join ASFPM and be part of an organization that impacts so many people and continues to grow. This is an exciting time for ASFPM as we're strengthening in a technical area that has the potential to be very impactful in years to come!