



**MAXWELL·HENDRY·SIMMONS**  
real estate appraisers & consultants

June 2017

[MHSappraisal.com](http://MHSappraisal.com)

## MARKET SNAPSHOT

# Photovoltaic Panel Valuation

One of the most common questions we're asked as appraisers is, "What's this (insert item) worth?" Usually it's a mechanical component that was recently replaced, a remodeled kitchen or bath, or a specific feature like an outdoor kitchen or fireplace. The homeowner, of course, is looking for an answer in the form of a specific dollar amount, but it's not always that easy. In fact, it usually isn't. Most features or condition-related items are weighed in the context of a home's overall quality rating or effective age and are individually 'valued' within a large set of calculations, making it difficult to pinpoint the value of any specific component. So the honest answer is often, "It depends". That's never a popular response.

So this month we decided to demystify the potential contributory value of at least one emerging residential feature, photovoltaic panels. PV panels have grown in popularity over the past 15 years and the cost and quality curve continues to bend (think TV's over the past 20 years). But the decision to add PV panels or not still comes back to that same question, "What's it worth?" A study released in early 2015 from the U.S. Department of Energy's Lawrence Berkeley National Laboratory has become one of the go-to resources on substantiating PV panel value. The study, "Selling Into the Sun: Price Premium Analysis of a Multi-State



Dataset of Solar Homes" was conducted from 2002-2013 and included analysis of 22,822 homes (3,951 with PV systems) across eight states. The results?

New home premiums were \$3.58 per watt and existing home premiums showed a value of \$4.51 per watt. The study authors found the disparity to be negligible and have concluded that PV panels add roughly \$4.00 per watt. So for a standard 3.6kW system, that would equate to a little less than \$15,000 in value. The study also showed that there were really no differences among states, housing markets, or types of housing relative to PV panel

contributory value.

Another conclusion from the study was that markets appear to depreciate the value of PV systems in their first 10 years at a higher rate than their PV efficiency losses. While the cause of that dynamic is unclear, one explanation could be that the market understands that the continual improvements to the PV technology swiftly makes older systems obsolete. Again, think TV's.

With improvements to technology, increasing energy costs, and a culture shift toward environmental stewardship and conservation, real estate practitioners will have to understand how green features like PV panels specifically impact value. And while many questions of "What's it worth?" can only be answered with "It depends", you can now answer this one with specifics and a source.



**MAXWELL·HENDRY·SIMMONS**  
real estate appraisers & consultants

- ◆ Commercial and Residential
- ◆ Litigation Support/Eminent Domain
- ◆ Subdivision/Development Analysis
- ◆ Insurable Value
- ◆ Estate/Taxation Appraisals
- ◆ Ad Valorem Issues
- ◆ Rental Studies/Lease Analysis
- ◆ General Consulting

(239) 337-0555 • [www.MHSappraisal.com](http://www.MHSappraisal.com)

12600 World Plaza Lane, Building #63 • Fort Myers, FL 33907



**For more information, contact us at: [info@mhsappraisal.com](mailto:info@mhsappraisal.com)**

Maxwell, Hendry & Simmons, LLC accepts no liability for the content of the Market Snapshots or for the consequences of any actions taken on the basis of the information provided. The trends, conclusions, and analysis found in Market Snapshots are not assignment specific and individual assignment conclusions may vary.