

## USAA REAL ESTATE: BUILDING UPGRADE VALUE CALCULATOR

### SOLUTION OVERVIEW

Funding for building energy efficiency projects is often elusive. Like most real estate and business owners, money for “good news” property improvements like tenant improvements and leasing commissions always takes priority in capital allocation. Project proposals can be rejected for numerous reasons, including: payback times that exceed industry standards; a perception that energy retrofits are too complicated; or simply because the capital expenditure for energy retrofits was not underwritten when an asset was purchased or developed, and thus spending capital lowers investor dividends and yield.

USAA Real Estate teams believed they could better justify and support investments in efficiency projects if they could convert the expected results of the improvements and retrofits into meaningful metrics for financial decision makers.

For this reason, USAA Real Estate created an Excel-based analysis tool to help their property managers evaluate the financial returns of energy performance projects in investor-owned real estate. They partnered with the U.S. Environmental Protection Agency’s (EPA) ENERGY STAR<sup>®</sup> program to further enhance the tool and share the approach to financial analysis with the broader industry. The resulting product, the Building Upgrade Value Calculator (BUVC), is available to the general public for free via the ENERGY STAR website, and the BUVC has been integrated into the Building Owners and Managers Association International (BOMA) Energy Efficiency Program (BEEP), which is routinely attended by commercial real estate practitioners. USAA Real Estate continues to utilize the BUVC as part of its process for assessing and seeking approval for energy efficiency investments.

### ORGANIZATION TYPE

Commercial Real Estate

### BARRIER

Difficulty garnering approval for investments in building energy efficiency due to incomplete understanding of financial and other benefits

### SOLUTION

Developed a tool to convert the results of energy efficiency upgrades into metrics that are meaningful for financial decision makers

## **OUTCOME**

More projects funded leading to increased portfolio-wide energy savings; improved energy efficiency more closely connected to increased asset value, net operating income, and tenant satisfaction

## **POLICIES**

USAA Real Estate encourages, but does not require, managers to use the calculator when developing energy efficiency project proposals, and to include the generated narrative summary in the final project recommendation package. In addition, USAA Real Estate includes energy efficiency, sustainability, and retrofit assessments as part of normal underwriting when making investments in properties.

## **PROCESS**

The Energy Team at USAA Real Estate needed to develop a better process for evaluating and communicating the financial benefits of capital investments in energy efficiency projects. An Excel-based tool was developed to help engineers and property managers analyze and communicate the financial implications of efficiency measures in terms that resonate with the real estate decision makers approving capital projects. In collaboration with EPA , this tool was further refined to become the publicly-available Building Upgrade Value Calculator.

Users enter basic project information, including: building square footage; anticipated project cost; expected energy and cost savings; as well as information on interest rates and available rebates and incentives.

[Sample screenshot of the BUVC data input page](#)

The BUVC tool then generates a report outlining key financial metrics for the projects including: operating cost savings per square foot; return on investment (ROI); internal rate of return (IRR); net present value (NPV); potential impact on net operating income (NOI); and potential impact on asset value.

[Sample screenshot of the BUVC results output page](#)

Finally, the tool allows users to generate a letter that is automatically populated with the calculator results, allowing the user to create a high-level overview of the financial and other benefits of the proposed energy efficiency upgrade. The letter can be included in project recommendations or other communications in support of a project, and can be edited to create a tailored message.

[Example of customized letter using outputs from the BUVC](#)

## **OUTREACH**

Internally, the USAA Real Estate Energy Team promotes the BUVC to property and asset

managers, and regularly works with them to tailor the tool to meet specific company or investment criteria.

Externally, USAA Real Estate saw the value this tool could have to justify energy efficiency projects across the greater real estate community. The partnership with EPA took the tool from its original, proprietary format to a public version hosted on the ENERGY STAR website. The EPA also improved the tool to include key financial metrics such as return on investment (ROI), internal rate of return (IRR) and net present value (NPV), as well as the ability to estimate the impact of proposed retrofits on a property's ENERGY STAR rating. The partnership with BOMA International further raised awareness about the tool in the commercial building community. BOMA maintains a link to the calculator on its website, and information on the BUVC is included in BOMA training offerings, such as the BOMA Energy Efficiency Program (BEEP).

## **MEASURING SUCCESS**

Thanks to perspective provided by the Building Upgrade Value Calculator, financial decision makers at USAA Real Estate can better understand all of the financial and sustainability benefits of a proposed project, rather than simply looking at energy efficiency retrofits as a capital cost that will only benefit tenants via lower energy bills.

With support from the tool to get more projects approved, USAA Real Estate has steadily improved its energy efficiency as measured by the following:

- Asset Level ENERGY STAR Rating
- Asset Level Energy Consumption
- Portfolio Level ENERGY STAR Rating
- Portfolio Level Energy Consumption
- Quantity of ENERGY STAR Labels

