

## Energy Use in Bank Branches

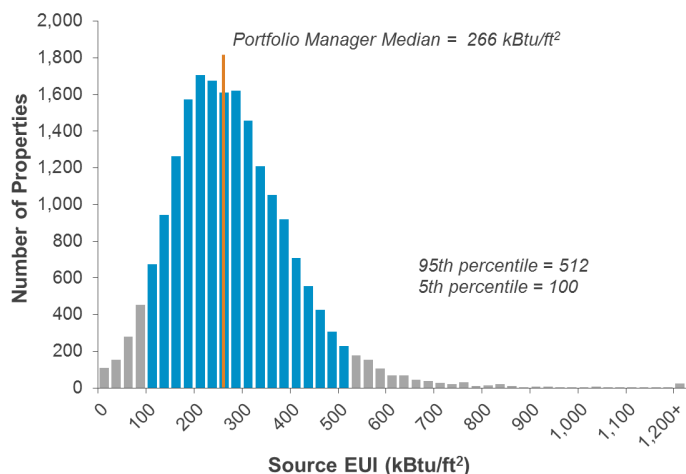
### Bank Branches Using Portfolio Manager

-  26,465 Properties
-  174 Million ft<sup>2</sup>
-  47 Average ENERGY STAR Score

The U.S. Environmental Protection Agency's (EPA) ENERGY STAR Portfolio Manager is changing the way organizations track and manage energy. Because of this widespread market adoption, EPA has prepared the DataTrends series to examine benchmarking and trends in energy and water consumption in Portfolio Manager. To learn more, visit [www.energystar.gov/DataTrends](http://www.energystar.gov/DataTrends).

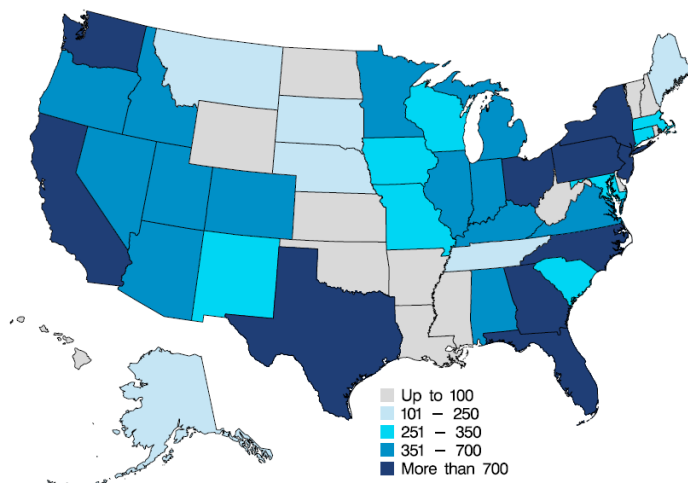
### What is a typical operating profile?







Energy use intensity (EUI) ranges from less than 100 to more than 1,200 kBtu/ft<sup>2</sup> across all bank branches, with those at the 95th percentile using more than 5 times the energy of those at the 5th percentile. The distribution has a negative skew, which means the most energy intensive properties are further away from the median than the most efficient. Properties may use more or less energy for many reasons, including variable equipment efficiency and energy management practices, as well as variations in climate and business activities.



The median bank branch in Portfolio Manager is approximately 4,000 square feet and operates 50 hours per week. But the typical property use patterns observed in Portfolio Manager vary just as much as energy. As you can see, there are bank branches of all shapes and sizes benchmarking in Portfolio Manager.

### Benchmarking by State Number of Bank Branches



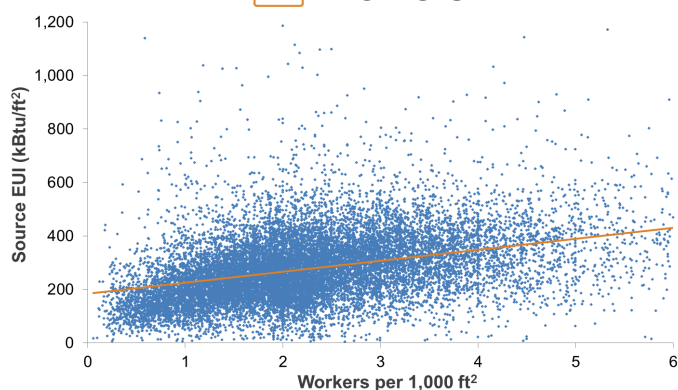
Property Characteristic	Range of Values		
	5th percentile	Median	95th percentile
 Square Feet	2,000	4,066	16,403
 Operating Hours	41	50	77
 Workers per 1,000 ft <sup>2</sup>	0.8	2.3	4.3
 Computers per 1,000 ft <sup>2</sup>	0.7	2.0	5.0
 Heating Degree Days	421	4,334	7,117
 Cooling Degree Days	346	1,152	3,648

**What is Source Energy?** Source energy is the amount of raw fuel required to operate your property. In addition to what you use on site, source energy includes losses from generation, transmission, and distribution of energy. Source energy enables the most complete and equitable energy assessment. Learn more at: [www.energystar.gov/SourceEnergy](http://www.energystar.gov/SourceEnergy).

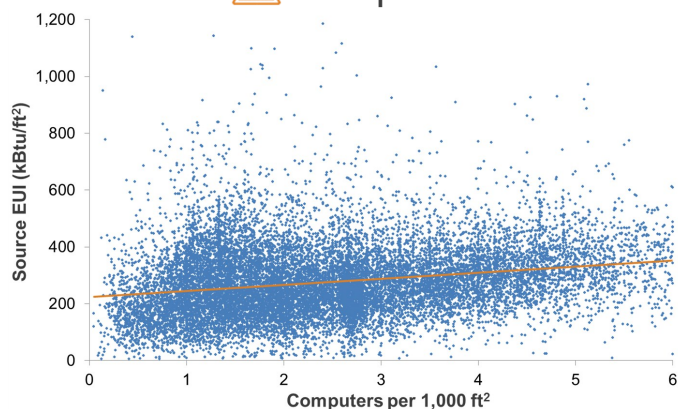
# What characteristics affect energy use in bank branches?

Business activity and climate are often correlated with energy consumption. For example, bank branches that have more workers per square foot, more computers per square foot, and/or experience more cooling degree days (CDD) use more energy, on average. The orange trend lines in the graphs below show the impact of each characteristic on energy use. The steeper the line, the bigger the impact. While these trends hold true on average, the blue dots demonstrate that for any given value of workers, computers, and CDD, a broad range in energy use is observed. Similar trends can be seen for other indicators of business activity, such as weekly operating hours.

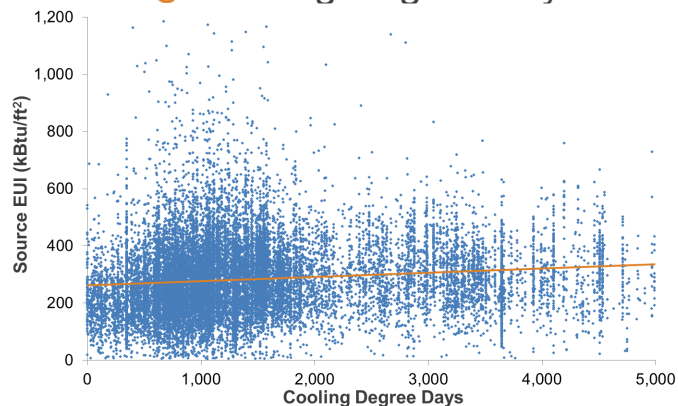
## Workers



## Computers



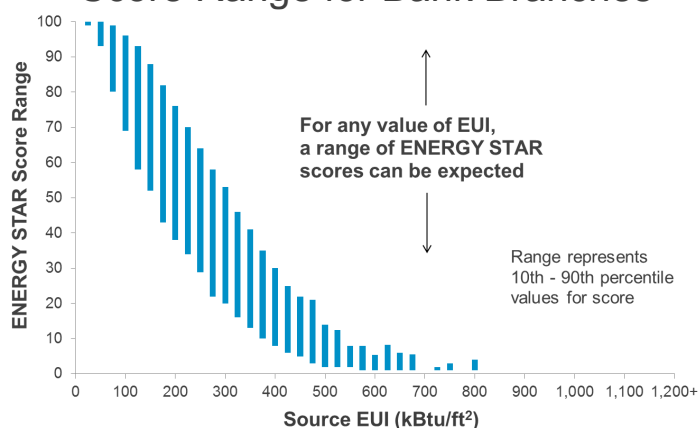
## Cooling Degree Days



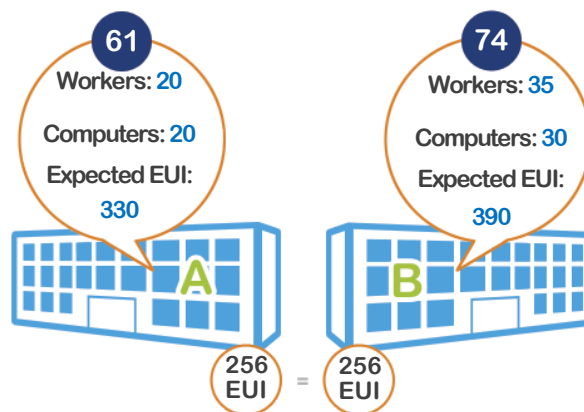
# How does EPA's ENERGY STAR score vary with energy use?

EPA's ENERGY STAR score normalizes for the effects of operation. While properties with lower EUI generally earn higher scores on the 1-100 scale, an individual property's result depends on its business activities. For any given EUI, a range of scores is possible.

## Score Range for Bank Branches



Let's look at two bank branches, Bank A and Bank B. They have the same EUI of 256 kBtu per square foot, and are identical except that Bank B has more workers per square foot and more computers per square foot. Because Bank B has more intensive activities, it is expected to have a higher EUI than Bank A, based on ENERGY STAR scoring models. Since Bank B is *expected* to use more energy, but *actually* uses the same energy, it earns a higher score.



**Note:** Total number and floor area of properties benchmarked reflects cumulative data through 2013. Analysis of energy use and property characteristics includes 19,792 properties benchmarked in the most recent 5 years. The data is self reported and has been filtered to exclude outliers, incomplete records, and test facilities. Portfolio Manager is not a randomly selected sample and is not the basis of the ENERGY STAR score. To learn more, visit: [www.energystar.gov/DataTrends](http://www.energystar.gov/DataTrends).