



LEED Adoption Factors in the USA

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LEED's Top 10 Comparison

Northeast Region

The following texts are from a report by the USGBC*

Massachusetts

Boston's Zoning Adm. Started 10 years ago in 2007. When enacted, it made Boston the first city in the nation to require private developers of projects over 50,000 square feet to adhere to LEED standards.

Established in 2007, Massachusetts' Leadership by Example program encourages state agencies and public colleges and universities to adopt new practices to reduce their impact on the environment. It sets goals for reducing greenhouse gas emissions, using energy more efficiently, using renewable energy, conserving water and creating greener buildings.

New York

New York City has set a new standard. One City Built to Last, which seeks to reduce building-based emissions by 30 percent by 2050 from a 2005 baseline. Before the action, one of the city's major initiatives was lead by example in reducing emissions in its buildings by 35 percent within the same time frame. These commitments are part of the city's larger goal to achieve an 80 percent reduction by 2050 from a 2005 baseline.



Midwestern Region

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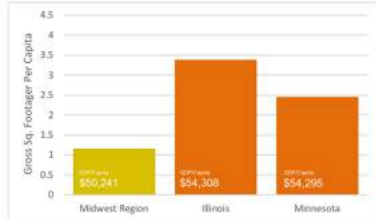
Illinois

One of the city of Chicago's nation-leading sustainability policy initiatives is to obtain LEED Silver certification for new construction of city facilities and LEED Operations and Maintenance and/or LEED Silver under Interior Design and Construction for major renovations of city facilities.

The Chicago Sustainable Development Policy requires development projects that receive financial assistance or special approvals from the city to include sustainable elements, including LEED certification.

Minnesota

In 2009, the St. Paul City Council adopted Resolution 09-1077 to implement the St. Paul Sustainable Building Policy. As part of this, new projects receiving more than \$200,000 in funding from the city or the Housing and Redevelopment Authority must meet minimum certification requirements within one of the approved green building rating systems, including LEED.



Southern Region

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Maryland

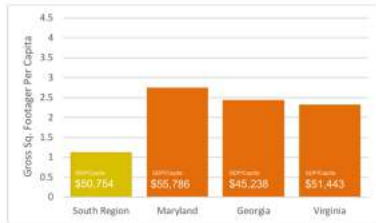
Maryland has long been a leader in green building policymaking. At the state level, agencies, including schools, have committed to green construction using LEED. Governmental jurisdictions, including Baltimore City and County, promote green building practices.

Georgia

In 2007, the city continued to raise the bar by updating its High Performance Building Ordinance. This policy not only requires new city buildings to comply with LEED Silver standards, but also requires existing buildings to comply under LEED v4-DM on a rotating basis.

Virginia

In 2014, Virginia updated its Qualified Allocation Plan for affordable housing projects, creating requests for developers that achieve LEED certification. Developers that achieve LEED at various levels receive a number of benefits, which are combined with other funding and affordability factors and added up to determine which projects will receive funding.



Western Region

The following texts are from a report by the USGBC*

Hawaii

Hawaii requires each county agency that issues building construction or development-related permits to establish a procedure for priority processing of permit applications for projects incorporating energy and environmental design standards for buildings, including projects receiving LEED Silver certification or higher.

California

California created the first statewide green building code in the U.S., with the California Green Building Standards Code, also known as CALGreen. Since launching in 2011, the code has further propelled California as a national and global leader in the green building market, helping to improve public health and safety while saving residents and businesses money.

Colorado

In 2015, Governor Hickenlooper signed Executive Order D 2015-013, establishing one- and five-year goals in the areas of energy and water efficiency, greenhouse gas emissions reduction and environmentally preferable purchasing.



Leaders in Energy & Environmental Design

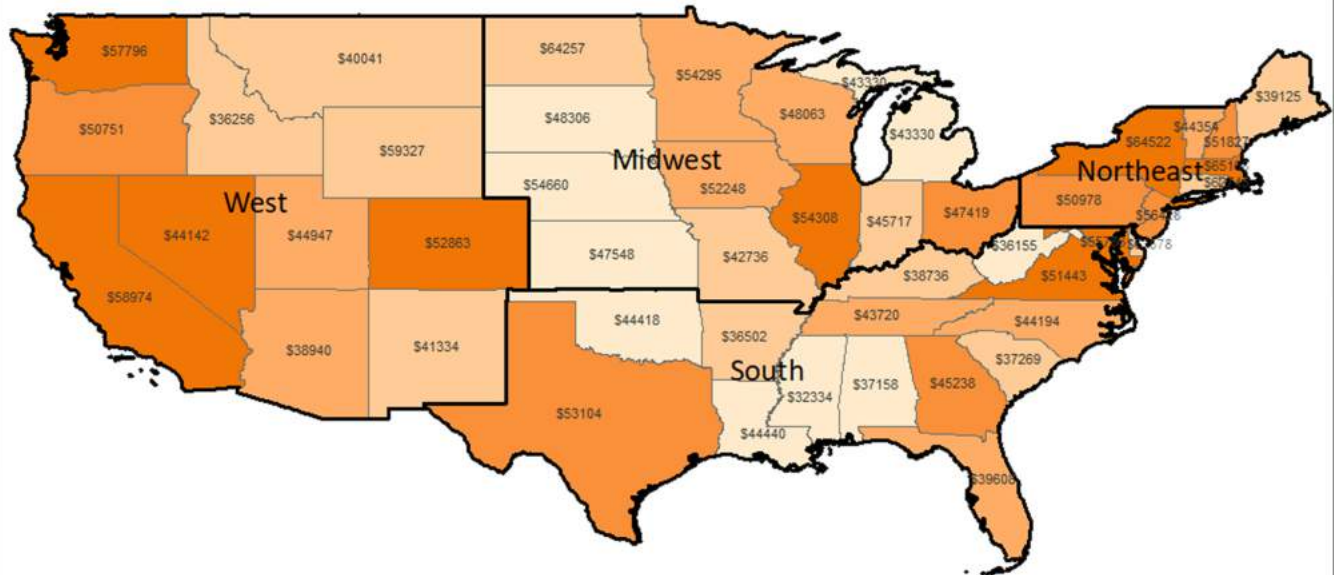
Leadership in Energy and Environmental Design, or LEED, is a tool to rate the environmental performance of a building. Created by the US Green Building Council (USGBC) in 2000, LEED offers a progressive rating system (certified, silver, gold, and platinum) for projects that can be carried out at any stage of a buildings life.

As LEED becomes increasingly popular in the United States, there are many factors that must be considered to better understand why certain states and regions have higher rates of certified gross square footage (GSF) of all certified projects per capita than others. When looking at income, there is a visible positive correlation between the values. We will use the USGBC's Top 10* States and compare GSF per Capita to GDP per Capita. to find positive correlation in the year 2016.

Conclusions

LEED can be an expensive process and is often the first barrier to possible adopters. As can be seen in LEED's explanation of the top 10 and the charts to the side, states with the greatest GSF often also have a larger GDP. This can also be seen in comparing regions to one another. The West has a GDP that exceeds the midwest by 400 billion and has nearly double the GSF.

There also appears to be a correlation between the consistency of LEED GSF per capita and the presence of a larger metropolitan area. As there is greater demand by the urban industries for these services (and greater wealth) LEED would naturally follow this pattern seen below. Rural areas, especially the patch in the midwest, illustrate the antithesis of this effect. When there is a higher rate of rural population, there is less demand (and resources) for LEED.



Map illustrating Gross Square Footage of LEED projects per capita labeled with GDP per capita per the contiguous 48 states

*State, Arizona: "Defining Projects and Prizes of the 2017 Top 10 States"; U.S. Green Building Council, 12 Feb. 2018, www.usgbc.org/press/defining-projects-and-prizes-2017-top-10-states.