

Bladensburg Collaborative Case Study

Since 2012, a collaborative of local governments in Maryland's Prince George's County has leveraged the EmPOWER Clean Energy Communities Low-to-Moderate Income (LMI) Grant Program to complete energy efficiency retrofits for homeowners in need of assistance. Beginning with the town of Bladensburg, the collaborative grew to serve 17 towns in 2014.

The Maryland Energy Administration's (MEA) LMI Program provided \$600,000 of energy efficiency upgrades to 154 Prince George's County homes in 2014, which was supplemented with \$150,000 from the [Department of Housing and Community Development](#) and \$170,000 from [Maryland electric utilities](#) for other essential upgrades. Maryland homeowners served through the program are enjoying an estimated average savings of 20 percent of their utility bills—more than \$61,000 in estimated annual energy savings all told.

Energy retrofits funded through the grant follow the requirements of the [Home Performance with ENERGY STAR](#) program, which embraces a whole house model. Applicants who meet the program's income requirements are scheduled for a home energy audit, during which a [Building Performance Institute \(BPI\)](#) certified energy auditor assesses the house as a system of interacting parts. This comprehensive assessment identifies needed weatherization measures, such as air sealing and insulation, as well as other needed improvements in areas such as HVAC and appliance efficiency levels. Homes made more air tight through air sealing and improved insulation can potentially become candidates for further energy savings through the installation of a smaller heating and cooling system that costs less to operate. Month after month, lower utility bills reward the homeowner with more available income for other necessities.

The LMI grants allow the Prince George's County Municipal Collaboration to bundle energy retrofit measures so that a number of energy improvements can be implemented together and still meet an acceptable payback target. Implemented measures often include improvements such as high efficiency lighting, appliances, HVAC systems and water heaters, insulated attics and crawl spaces, and sealed air leaks in the building shell and duct work.

The Collaborative successfully leveraged utility company rebate programs available through EmPOWER Maryland to stretch its budget. The reduced insulation and air sealing costs made possible through the rebates enabled the Collaborative to improve up to 30 more homes than would otherwise have been possible. The Collaborative also took advantage of the Maryland Department of Housing and Community Development's [Community Legacy](#) program to cover the cost of basic repairs to some homes before conducting an energy retrofit.

Program participants are happy not only about the energy savings, but also about improved home comfort. The retrofits have resulted in safer and less drafty homes with more stable temperatures.

PG County Collaborative Project Summary	
Total Cost	\$600,000
Estimated Annual Energy Cost Savings	\$61,595
Average Savings/Home	\$400
Estimated Annual kWh Savings	185,676
Estimated Annual Therms Savings	32,900
Estimated Simple Payback	9.74 years 9.16 years (Net project without administrative costs)

Table 1: Total Estimated Savings through the FY2014 LMI Program

Recommended Measures	Estimated Electric Savings (kWh)	Estimated Fuel Savings (MMBtu)	Estimated Annual Electric Cost Savings	Estimated Annual Fuel Cost Savings	Estimated Annual Total Cost Savings
Air Sealing	34,903	460	\$4,701	\$5,118	\$9,819
Appliances	6,114	8	\$824	\$84	\$908
HVAC	11,170	356	\$1,505	\$3,963	\$5,467
Insulation	25,521	1,798	\$3,438	\$19,992	\$23,430
Lighting	45,563	0	\$6,137	\$0	\$6,137
Other	62,405	668	\$8,406	\$7,427	\$15,833
Total	185,676	3,290	\$25,011	\$36,584	\$61,595

